

**DEVELOPING COLLABORATIVE LEADERSHIP PRACTICES IN
THE SINGAPORE EARLY CHILDHOOD EDUCATION (ECE)
CONTEXT THROUGH PROFESSIONAL LEARNING
COMMUNITIES (PLCs)**

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ABSTRACT

Leadership in early childhood education (ECE) has been promoted as a collaborative process in which all teachers, rather than just the positional leader, are involved (Thornton, 2010). Collaborative leadership practices are not well understood within the Singapore ECE context. Beyond mandatory leadership training, little is known how leaders are supported to strengthen their leadership practices and involve others in leadership activities. School-based literature suggests that learning through professional learning communities (PLCs) expands the collective capacity of organisations, however, literature on PLCs in ECE is limited. Located within an interpretive paradigm, this study employed a primarily qualitative approach with a supplementary quantitative strand. This mixed method design, encapsulated within a single embedded exploratory case study, embedded both face-to-face and online PLC processes over a period of 8 months. Qualitative data included both face-to-face and online activities whereas for the quantitative data the study used an adapted version of the PLCA-R survey designed by Olivier, Hipp and Huffman (2010).

Participants in two PLCs established as part of this study were six principals from an anchor group childcare provider and five principals from private childcare centres in Singapore. Two teachers working with each of the respective principals were also involved in focus group interviews to ascertain if there were changes in their principals' leadership practices. Data were collected from PLC meetings, online reflections, pre- and post-PLC interviews with the principals and follow-up focus group discussions with the teachers. Key findings suggest that praxis as a result of participation in their PLC led to some shifts in principals' thinking about collaborative leadership practices and resulted in changes to their leadership approaches, sharing of practices, distribution of leadership and improved collegiality and collaborative learning for teachers. Principals who participated in the study also indicated that the collaborative learning culture fostered through their PLC reduced their professional isolation and helped them to integrate ideas into practice. The study contributes to an understanding that considering and implementing collaborative leadership practices through PLCs, a collaborative learning model contextualised in Anglo-American settings, in the Singapore ECE context requires sensitivity towards Asian Singapore socio-cultural values related to hierarchy and economic pragmatism.

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“Every block of stone has a statue inside it and it is the task of the sculptor to discover it”

~Michelangelo.

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CHAPTER 1: Introduction

1.1 Chapter Overview

This chapter provides background to this research study on developing collaborative leadership in the Singapore early childhood education (ECE) sector through professional learning communities (PLCs). The first section discusses the context of ECE in Singapore and includes key policy reforms impacting on ECE services and initiatives on leadership development within the sector. The next section situates the research, clarifies the research problem, and provides the aims and research questions intended for investigation. The chapter concludes with an overview of the thesis chapters. The terms ECE or preschool education (PSE) refer to both kindergarten and childcare services in Singapore and are interchangeably used wherever applicable throughout the thesis.

1.2 Context of ECE in Singapore

Singapore is a small city-state in Southeast Asia with a total land area of 722.5 square kilometers, characterized by rich racial and cultural diversity. The total population stands at 5.64 million with 3.99 million residents and 1.64 million non-residents. The resident population comprises 74.3% Chinese, 13.4% Malays, 9.1% Indians and 3.2% other ethnic groups (Singapore Department of Statistics, 2018). With no natural resources, the economic development of Singapore is dependent on an educated workforce and education is highly valued. Formal education begins at Primary One and it is compulsory for all children to start formal schooling when they turn seven (Lim & Torr, 2008).

Singapore's education success is often attributed to its meritocratic and rigorous education system (Tan & Dimmock, 2015). The central tenet of meritocracy emphasizes greater equity and socioeconomic mobility is made possible for all Singaporeans to succeed through hard work and ability regardless of one's ethnic differences (Mukhopadhyaya, 2003). Since independence in 1965 the constitution of Singapore has emphasized that all Singaporeans are equal before the law regardless of race, language or religion (Public Service Division, 2015). Chan (2013) also argues that multiculturalism, meritocracy and secularism are the three principles that bind through the socio-political landscape of Singapore for all ethnic groups to work harmoniously without any cultural differences. In addition, Mr Lee, the Prime Minister of Singapore, noted that "the last 50 years of nation building have strengthened the Singapore identity...we would therefore call ourselves

Singaporean first, before identifying ourselves by our race." (Singapore's approach, 2017, para 27). Although diverse in its cultural context, Singaporeans value and believe in meritocracy and opportunities for all (Public Service Division, 2015). However, new immigration policy to attract skilled workers to Singapore has resulted in an influx of teachers from other Asian countries (Pang & Chow, 2019), inclusive of the ECE sector (Teng, 2018). These new immigrants may not share the sentiments of the collective ethnic cultural values embedded in the work culture of Singapore. The changing demographic may have an impact on shifting mindsets and possibly include other cultural differences and work attitudes in Singapore (Kathiravelu, 2019).

1.3 Overview of Singapore ECE context and policies

ECE in Singapore includes both kindergarten and childcare services (Ng, 2011). Kindertgartens provide education for 4 – 6 years old and are registered with the Ministry of Education (MOE). On the other hand, childcare centres, which are licensed by the Ministry of Social and Family Development (MSF)¹ provide care and education for children from 2 months - 6 years old (ECDA, 2012). In 2016, MSF reported that in the previous three years over 90% of Singaporean children aged 5 – 6-years old were enrolled in preschools. By age 6 almost 99% of Singaporean children would have had some preschool experience, either in childcare or kindergarten (Wong, 2012). However, ECE in Singapore is not compulsory and does not form part of the official education system, and the government has been cautious not to nationalise ECE to avoid subjecting children to didactic pedagogical approaches in the early years (Ng, 2011). Furthermore, the government has recognised that imposing a standard model of preschool education would deprive parents of the ability to choose options from the diverse landscape of preschool models that best met their children's needs (Goy, 2017a).

Due to the government's "light-touch" (p.4) approach to ECE, the provision of services has been primarily dominated by private organisations which includes community foundations, religious bodies and business enterprises (Tan, 2017). Nevertheless, the government through the work of the two main ministries, MOE and Ministry of Community Development, Youth and Sports (MCYS, now known as MSF) plays a regulatory role, supporting the provision of ECE services for young children through several policy

¹ Ministry of Social and Family Development (MSF) started out as a social welfare department during the Japanese occupation in Singapore. Since then the Ministry has gone through several major portfolio changes and since 2012 has been known as the Ministry of Social and Family Development (MSF) (MSF, 2014)

initiatives focused on key leverage areas to raise the overall quality of ECE services (Zulkifli, 2010).

Historically, kindergartens and childcare systems in Singapore were established with different purposes. Kindergartens aimed to prepare preschoolers with social and academic skills for formal schooling whereas childcare centres were influenced by social welfare policies to meet the needs of low-income families (Khoo, 2010). However, the onset of the industrialisation era in the 1960s and 1970s resulted in an increase in female workforce participation in Singapore (Chu, 2002). Enabling female workforce participation through the provision of ECE services became a key economic policy agenda for the government (Khoo, 2010).

Growth in the provision of childcare in Singapore occurred in the 1980s and increased through the 1990s as a result of a national policy encouraging women's participation in the labour force (Lim & Lim, 2017). According to Tan (2007), with the dramatic increase in childcare centres, the then Ministry of Community Development (MCD), was given the power to control, supervise and license childcare centres. The Child Care Centres Act (Cap 37A) and the Child Care Centres Regulations Act (Sec 19, Cap 37A), passed in 1988, established regulations for childcare operations and subsidy schemes for working mothers while kindergartens were regulated under the Education Act (1958), providing subsidies and grants through affordable preschool programmes (Child care link, 2012).

There were major policy reviews in 2000, 2008 and 2012 aimed at improving the quality of the ECE services in Singapore (Tan, 2017). As a result of the government's involvement and policy reforms, the Singapore ECE landscape has gone through many changes. Various initiatives have included: defining desired outcomes of PSE; improving the curriculum framework; establishing systems and structures for teacher training; enhancing the affordability and accessibility of preschool services, especially for children from low income families; and implementing an accreditation system to improve the programme quality of ECE centres (Lim, 2017).

1.3.1 Challenges and gaps in ECE services

Despite the government's efforts, the provision of ECE services in Singapore was criticised by an international ranking report published in 2012. The 'Starting Well Index', a report by the Economic Intelligence Unit commissioned by the Singapore-based Lien Foundation, devised an "index to rank preschool provision across 45 countries" (Vadaketh, 2012, p.5). The report assessed the extent to which governments provided a good, inclusive

ECE environment for children between the ages of 3 and 6 years. In particular, it considered the aspects of “availability, affordability and quality” of such ECE environments (p.6). Singapore was ranked 29th out of 45 countries. The report ranked Singapore low in terms of: quality due to high teacher-student ratios; relatively low average wages; low entry qualification requirements for preschool teachers; lack of effective transition strategies between preschool and primary school; and the relatively low level of parental involvement (Watson, 2012).

Singapore’s poor showing provoked debates between the government and ECE professionals. The outcomes of these debates suggested improving the quality of preschool provision required increasing incentives for teachers, better parental involvement programmes and closing the gap between preschool and primary school transition (Zaccheus, 2012). Following the Starting Well Index report, the release of a study commissioned by the Lien Foundation, entitled ‘Vital Voices for Vital Years’, reviewed the challenges faced by the preschool sector. The study revealed that the initiatives taken by policymakers to improve the quality of provision were encouraging; however, there were gaps in services. These included:

a shortage of qualified preschool teachers; high turnover in the workforce; inequalities in terms of affordability and accessibility of quality preschool services; the lack of governance between the two ministries; and the need for a lead ministry to focus on overseeing the coordination and regulation of the sector combining childcare and kindergarten (Ang, 2012, p.16).

1.3.2 Key ECE reforms in recent years

As a result of the Starting Well Index report and governmental policy initiatives, significant initiatives have impacted on the ECE sector in Singapore including integrating the approaches of MSF and MOE on issues related to care and education in ECE (MSF, 2013). The Early Childhood Development Agency (ECDA) was established as an autonomous agency jointly overseen by MOE and MSF, and administratively hosted by MSF. ECDA commenced its operation on 1 April, 2013 with a mandate to oversee the regulation and development of kindergarten and child/ infant care programmes for children below the age of 7 (MOE, 2010). In order to further unify childcare centres and kindergartens, ECE centres are to be regulated under a newly approved Early Childhood Development Centres (ECDC) Act from 2019 to ensure a higher standard of quality across the preschool sector. Excluding the government-run

MOE kindergartens, this enhanced regulatory framework gives ECDA more oversight of the 1800 childcare centres and kindergartens regulated under the Child Care Centre and Education Acts (Goy, 2017a).

The ECDC Act is intended to support government's overall effort to enhance the affordability, accessibility and quality of preschools in Singapore (ECDA, 2017). In addition, the government pledged to double its annual spending on the preschool sector to S\$1.7 billion to improve the quality of the sector (Goy, 2017b). This includes 40,000 more childcare places by the year 2022 to meet the shortage in provision. Similarly, the MOE will increase the number of kindergartens located in primary schools from 15 to 50 by 2023 to enhance children's transition to Primary One, through quality and affordable preschool programmes. A new national training institute for early childhood educators will be established in 2019 to improve the quality of foundational training and teachers' continuing professional development in order to upgrade the profile of ECE professionals. The National Institute of Early Childhood Development (NIEC) will be the centralised preschool training institute under the purview of the National Institute of Education (NIE), which is responsible for teacher preparation programmes in Singapore (Goy & Yuen 2017). Alongside these policy changes, three frameworks for the ECE sector have been developed and are discussed below.

The Nurturing Early Learners (NEL) Curriculum framework was developed, reviewed and enhanced over a period of 9 years. In 2003, the MOE launched a new play-based curriculum; however, teachers found it challenging adjusting to play-based pedagogical approaches whilst coping with parental expectations for an academic curriculum, influenced by the merit-based educational system (Jing, 2017). This curriculum framework was therefore revised and extended to accommodate the local educational context and to support teachers to engage children in "purposeful play" thus ensuring clear objectives and outcomes in the activities planned for the children (MOE, 2012a, p.35). The revised Nurturing Early Learner: A Framework for Kindergarten Curriculum in Singapore (the NEL Framework) published in 2012 provided key outcomes for both kindergartens and childcare and is non-prescriptive. The framework spells out broad principles to guide teaching and learning targeted at children aged 4–6 years, delineates learning areas in PSE and identifies learning dispositions that children should develop. Further, the revised curriculum framework has been complemented with an educators' and parents' guide supporting preschool teachers with relevant teaching strategies to help parents understand how children learn and develop, and what children should be equipped with at the end of their PSE (MOE, 2012b).

The Early Years Development Framework (EYDF) was developed in 2011 by the then MCYS to enhance the holistic development of young children in centre based child care. While the NEL framework provides guidance for nursery and kindergarten programmes for 4–6 years old, the EYDF initiative is to set standards for quality care and learning of young children aged 2 months - 3 years of age (MCYS, 2011).

Singapore Preschool Accreditation Framework (SPARK) is a quality assurance framework introduced by the MOE to raise the quality of preschools in Singapore. The framework supports ECE leaders to benchmark their education outcomes through self-appraisal and external assessment. Preschools that meet specified standards can then apply to receive accreditation status (MOE, 2010). The framework consists of a quality rating scale (QRS):

This scale enables the evaluation of preschool education programmes catering to 4 to 6 year- old children in both kindergartens and child care centres. The accreditation framework includes six criteria: Leadership, Planning and Administration, Staff Management, Resources, Curriculum and Pedagogy (SPARK, 2017, p. 5).

1.4 Early childhood leadership development and training in Singapore

Alongside the ongoing aforesaid changes in the sector, Ang's (2012) study also highlighted the lack of policy initiatives and support for leadership development in the ECE sector. ECE professionals who participated in the study identified a lack of clarity around how leadership was conceptualized in the Singapore ECE context. Empirical works and literature in ECE highlight that leadership performance is a key indicator that impacts on developing and implementing innovative services for children and families (Clarkins-Phillips, 2007; Ebbeck & Waniganayake, 2003; Rodd, 2013; Siraj-Blatchford & Manni, 2007). The policy framework for leadership training in Singapore established by the Preschool Qualification Accreditation Committee (PQAC), a joint ministerial body between the MOE and MSF, in 2001, required ECE supervisors/leaders to be trained with a Diploma in Early Childhood Care and Education-Leadership (DECCE-L) and offered continuous professional development (CPD) (MCYS, 2008). However, the PQAC was dissolved with the formation of ECDA in 2013 and presently ECDA offers an Advanced Diploma in Early Childhood Leadership (ADECL), a 3-year programme which includes acquiring three post-diploma certificates (PDCs) in fundamentals of early childhood leadership, curriculum leadership and management in early childhood leadership (ECDA, 2017a).

ECDA also provides continuous professional programmes, namely: the ECDA Fellows programme and Professional development programmes for leaders (PDP-L). These ECDA Fellows work closely with ECDA to drive quality improvements to the sector, develop sector-wide resources and contribute to the professional growth of leaders. The PDP-L is a three-year, 180-hour structured professional development programme which supports ECE leaders' career progression and provides opportunities to broaden perspectives, deepen knowledge and hone competencies in areas of professional interest (ECDA, 2017b). Beyond this mandatory leadership training and continuous professional programmes, it is not known how ECE leaders in general are further supported to develop or strengthen their leadership practices, including whether formal or informal support networks exist for ECE leadership practices in Singapore. There is a dearth of research concerning the roles of ECE leaders, leadership practices and leadership development in Singapore.

1.5 Researcher background

My foray into teaching into the ECE leadership training programme started around 2006, when the MOE reviewed their policy on ECE leadership training, resulting in the addition of a collaborative action research (AR) module for EC leaders on improving leadership practices at work. I was fortunate to lead the delivery of this module which involved supervising and mentoring EC leaders during their AR inquiry. This provided me with opportunities to observe EC leaders during training and at their work settings. I noticed inconsistency between the discourse and their practice of leadership including some ineffective leadership practices. Despite the collaborative nature believed to be practised in the ECE system, top-down hierarchical leadership practices were prevalent in most early years' centres. Some centres lacked collegiality and leaders were isolated and little was known how leaders solved their challenges and issues at work. Earlier leadership training programmes had concentrated on administrative and management tasks, supervisory skills and leadership theories, with less coverage on curriculum and relational leadership.

My professional relationships and prolonged involvement in the ECE sector enabled me to understand that leaders lacked information on: strategic planning for appropriate pedagogical practices; developing teachers through shared and supportive leadership practices; building relationships for teachers' collaborative learning; setting directions for shared values and vision with teachers on curriculum matters; embedding changes for inclusive services for all children; and forging partnership with parents and the local community. My beliefs about leadership have been shaped by my experiences and collaborative work with others in the ECE sector. In my

experience, the culture of working collaboratively supported by leadership enhances professional practice, provides mutual support and helps cultivate innovative ways of resolving challenges and issues relevant to the ECE sector in Singapore. However, the lack of government involvement and the privatisation of the early childhood landscape in Singapore has had a significant influence, prioritising business interest over the interests and needs of children, families, and training of professionals for the sector (Lim, 2017). Lim also highlights that one impact of marketisation is the lack of critical reflection and leadership growth amongst EC professionals. Furthermore, little is known about professional support that advocates collaborative leadership practices amongst EC leaders in the Singapore ECE context. Research from international perspectives both in the school (Carpenter, 2015; Leithwood & Azah, 2016) and ECE (Clarkins-Phillips, 2011; Heikka & Hujala, 2013; Siraj-Blatchford & Manni, 2007) sectors reveals a move towards collaborative leadership in educational contexts for effective leadership practices. The notion of collaborative leadership is an unexplored area in the Singapore ECE context; however, with the proliferation of empirical research in collaborative leadership studies in the educational context there is an impetus to explore how collaborative leadership can support leaders in the Singapore ECE context.

1.6 Research Problem

Ang (2012a) noted that effective leadership is crucial in driving the ECE sector forward in a clear strategic direction to promote greater “ownership, transparency and advocacy of high quality services for children and families” (p. 89). However, given the dearth of scholarly research in this area little is known about leadership practices and how leaders in ECE address issues and challenge in the Singapore ECE context. Furthermore, the lack of ongoing leadership support poses an impediment to understanding effective leadership practices in this context. Despite the availability of professional programmes (as discussed in section 1.4), little is known about their impact on leadership practices. Research in the Singapore school system (Hairon & Dimmock, 2012; Hairon, Goh & Lin, 2014; Hairon & Tan, 2017) and New Zealand ECE context (Cherrington & Thornton, 2013; 2015; Thornton & Cherrington, 2014; 2018; Thornton & Wansbrough, 2012) has shown the growth of collaborative professional learning through the use of PLCs has provided a source of support to improve leadership, teacher professional learning and student outcomes. However, little is known about the impact of PLCs on leadership practice in the Singapore ECE context.

Stoll, Bolam, McMahon, Wallace, and Thomas, (2006) describe PLCs as “a group of people sharing and critically interrogating their practice in an on-going, reflective, collaborative, inclusive, learning oriented growth-promoting way; operating as a collective enterprise” (p. 223). A collaborative leadership model that draws on approaches such as those used in PLCs (see sections 2.3 & 2.4 for further discussion on PLCs) may provide a framework for strengthening participants’ current leadership practices. Furthermore, an initiative to implement PLCs as form of professional learning amongst ECE professionals enables exploration of how PLCs may serve to improve leadership practices in the Singapore ECE context.

1.7 Aims of the study

The main aim of the study is to examine how collaborative leadership practices can support leadership development in the Singapore ECE context through the use of PLCs.

The overarching research question for this study is:

In what ways do PLCs support the development of collaborative leadership practices in the Singapore ECE context?

The following sub-questions have been developed:

- 1. How does leaders’ engagement in a PLC process shift leadership thinking and practices?**
- 2. What are teachers’ perceptions about the impact/influence of the PLC process on their centre leader’s practices?**
- 3. What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?**

1.8 Overview of the thesis

This thesis is organised into seven chapters. This chapter has introduced the thesis topic, and described the context of ECE in Singapore together with relevant policy initiatives. I then situated my stance as a researcher, presented the research problem, clarified the aims of the study and outlined the research questions. Chapter 2 reviews relevant literature which provides the broader theoretical and empirical background to leadership in educational contexts. The chapter is organised into five sections, the first of which discusses notions of educational leadership, the effectiveness of collaborative leadership, the role of cultural

context in educational leadership and the significance of cross-cultural perspectives in school leadership. The second section examines leadership in ECE and the nature of collaborative and cross-cultural perspectives in ECE leadership. It also outlines the role of formal leaders in a collaborative leadership model. Section three comprises literature on PLCs, characteristics of collaborative professional learning, and cross-cultural perspectives in PLC literature. Section 4 reviews literature related to the development of leadership through learning communities employing a blended learning approach in school and ECE setting. Finally, section 5 concludes with the theoretical framework that examines participants' transformative learning about collaborative leadership practices. The literature review closes with an identification of the gaps in the research.

Chapter 3 presents the philosophical underpinnings of choosing an interpretive paradigm for the study, followed by discussion of the research design, selection of cases, sources of data, and ethical aspects. This is followed with details on data coding, analysis and interpretation and includes issues of validity. The chapter concludes by outlining the composition of research groups, research procedures and the PLC programme design. Chapters 4 and 5 present the findings relating to the two PLCs investigated within the research. Results within both chapters are presented in the same format and organised by the three sub-research questions. Chapter 6 discusses the results of the study and includes a cross-case analysis with the discussion following the same format used in Chapters 4 and 5. Finally, Chapter 7 presents the implications of the study, identifies the limitations of the research and concludes with directions for future research.

1.9 Chapter summary

This introductory chapter has provided the context for the study on developing collaborative leadership in the Singapore ECE context through PLCs. It provided an overview of the Singapore ECE context and significant policy initiatives that have influenced the sector. It also examined the shortcomings of ECE services and outlined the government efforts to address these issues through policy reforms. My background as the researcher, the significance of the study, the research problem with the aims of the study and research questions have been presented. The chapter concludes by providing an overview of the thesis structure.

Chapter 2: Literature Review

2.1 Chapter Overview

This chapter reviews the literature in areas related to this study focusing on collaborative leadership development and PLCs in the ECE sector. Due to the dearth of empirical studies in ECE, this review has drawn from the wider school literature relevant to the early years' context. The chapter has five sections. The first section discusses notions of leadership in educational settings and includes sub-sections on different terminology, collaborative forms of leadership, the influence of context and cross-cultural perspectives. The second section draws on research from ECE contexts related to collaborative leadership and the influence of cross-cultural perspectives in ECE leadership. The third section outlines the concept of PLCs and associated characteristics supported by empirical works from Western and Asian school contexts. This is followed by a review of studies related to the development of leadership through learning communities employing a blended learning approach in school and ECE settings. The chapter concludes by presenting the theoretical framework to explore how ECE leaders' engagement in PLC process could help shift their thinking and practices about collaborative leadership in the Singapore ECE context.

2.2 Notions of leadership in education

This study explores collaborative leadership in ECE. However, in order to understand collaborative leadership in this context, it is necessary to first consider literature on leadership in education more broadly. Academic literature abounds with different definitions of educational leadership, and it has been suggested that there is a lack of a widely accepted definition (Leithwood, Jantzi & Steinbach, 1999). Duignan (2012) describes leadership as an influence process, identifying the notion of mutual and dynamic exchanges between leaders and followers within a shared school context. Additionally, Bush, Bell and Middlewood (2010) argue that leadership in the educational context involves establishing direction through unifying people around key values and collaboratively building a clear vision to achieve desired outcomes. Based on the insights of Bush (2011), three underlying dimensions - influence, values and vision - help to explain the nature of leadership. These underlying dimensions are succinctly articulated in the following definition:

Leadership is a process of influence leading to the achievement of desired purposes. Successful leaders develop a vision for their schools based on their

personal and professional values. They articulate this vision at every opportunity and influence their staff and other stakeholders to share the vision (Bush & Glover, 2003, p. 8).

Different terms in addition to educational leadership are used to describe notions of leadership relevant to educational contexts including: pedagogical leadership; instructional leadership; distributed leadership; and collaborative leadership. These terms will be further discussed in the following sections.

2.2.1 Educational leadership and associated terms

Gunter (2004) suggests that the terminology related to school leadership has evolved from educational administration to educational management and currently to educational leadership. Bush (2007) argues that the wide interest in educational leadership is due to the belief that the quality of leadership is the prime factor in improving school effectiveness. Donaldson (2006) posits that leadership is a relationship process that organizes people to act collectively in achieving the goals of education. He further explains that “a relationship that fosters leadership is characterised by mutual openness, trust and affirmation” (p. 48). It has been suggested that educational leadership is a synergistic interaction between leaders, followers and the context (Spillane, Halverson & Diamond 2001). These authors highlight not only the interaction between people but the interdependence between the people and their context

At this point, it is important to note that there has been some confusion between different terms with similarities to educational leadership such as instructional and pedagogical leadership. Heikka (2014) points out that in the broader educational literature “a variety of relative concepts such as pedagogical or instructional leadership are used interchangeably, and the differences and connections between these concepts are rarely clarified or observed” (p. 36). In line with her observation, other studies also suggest that these terms are not mutually exclusive and could be used interchangeably (Day & Sammons 2013; Lahtero & Kuusilehto-Awale, 2015). On the other hand, Macneill, Cavanagh and Silcox (2005, p. 5) contend that there are “clear differences between instructional leadership and pedagogical leadership”. These authors maintain that pedagogical leadership focuses on students’ learning while teachers’ instruction is the main focus in instructional leadership. However, drawing from the work of Du Plessis (2013), it is understood that instructional leadership is related to teaching and learning and also refers to all functions that contribute to student learning, teachers’ professional development, management and school culture.

Similarly, Alava, Haltunnen and Risku (2012) suggest that pedagogical leadership involves advancing the curriculum implementation, which involves the principal's supervision of teachers' expertise and learning and supporting development processes which enhance staff expertise and the learning of the entire school community. Researchers of instructional leadership stress that distribution of practices and both direct and indirect effects of leadership on building teachers' capacity influence student outcomes (Goddard, Goddard, Kim & Miller, 2015; Robinson, Hohepa & Lloyd, 2009). Conceptual similarities between the two constructs mean that the terms instructional and pedagogical leadership are used interchangeably in educational literature. The term transformational leadership is also used in the school leadership literature. Transformational leaders are those who motivate, empower and inspire their followers with a vision, and influence "them to work collaboratively towards a common good" (Robinson et al., 2009, p. 85). There is much discussion in the educational literature, both supportive (Hallinger & Heck 2010) and critical (Hsiao & Chang, 2011; Nir & Hameiri, 2014) of transformational leadership. The next section 2.2.2 will review collaborative forms in educational leadership practices.

2.2.2 Collaborative forms of educational leadership

The notion of leadership has evolved over time and studies show a shift from top-down hierarchical approaches of singular leadership to more collective and decentralised approaches in educational contexts (Bush, 2011). Scholars have proposed different terms to describe leadership that is not individual, such as distributed (Harris, 2003; Spillane, 2006), shared (Pearce & Conger, 2003), participative (Gyasi, 2015; Somech, 2005) or collaborative (Hallinger & Heck 2010; Waldron & Mclesky, 2010). These adjectives are not necessarily interchangeable; however, they imply a collaborative, shared notion of power and authority between formal and informal leaders in the setting. According to Spillane (2006), a distributed approach encourages a shift in focus from the traits and characteristics of leaders to leadership practices that take place in interactions between people and situations. He also identified interdependency as the major feature of distributed leadership. Compared to the top-down hierarchical leadership model, distributed leadership is linked to group leadership. Spillane, Harverson and Diamond (2001) reaffirm that distributed leadership is based on activity rather than position or task.

Within the shared leadership model, Marks and Printy (2003) believe that leadership functions through collective knowledge involving the active collaboration of principal and teachers on curriculum, instruction and assessment. In addition, Pearce and Conger (2003)

perceive shared leadership as “a dynamic interactive influence process among individuals and groups for which the objective is to lead one another to the achievement of group or organisational goals or both” (p. 1). Principals seek out the ideas, insights and expertise of teachers in these areas and work collaboratively for school improvement. Gyasi (2015) highlights that participative leadership entails the collaboration of principals, teachers, students and parents, supporting the belief that no individual is a repository of knowledge. In a similar vein, “leaders are required to lead by supporting group members to explore available opportunities and challenges in order to manage by sharing ideas” (Somech, 2005, p. 780). Collaborative leadership within the school context therefore “focuses on strategic school wide actions, directed towards improvement in student learning that are shared among teachers, administrators, and others” (Hallinger & Heck, 2010, p. 228). The concepts of distributed, shared, participative and collaborative leadership have an underlying common message that leadership is not the sole preserve of one person; rather, it is decentralised and shared across various stakeholders.

2.2.3 Effectiveness of educational leadership

A plethora of studies in educational leadership have examined whether different approaches such as transformational (Leithwood & Jantzi, 2005; Marks & Printy, 2003), instructional (Hallinger, 2010; Robinson et al., 2009), and distributed (Chang, 2011; Leithwood, Mascall, Strauss, Sacks, Memon & Yashkina, 2009; Mascall, Leithwood, Straus, & Sacks, 2008) contribute to school improvement and student achievement. Hallinger (2011) points out that research studies on school leadership show a relationship between leadership effectiveness and organisational improvement. Hence, he recommends employing the lens ‘leadership for learning’ integrating the features of instructional, transformational and distributed leadership models when investigating the effectiveness of educational leadership on school improvement and student outcomes. Hallinger stresses that the term *leadership for learning* implies that causal linkages exist between the actions of leaders and student learning outcomes and it will be used in this section of the review on educational leadership. The term highlights school leaders’ purpose of improving students’ learning; creating conditions in the school context to support effective teaching and learning; building capacity for professional development; and the impetus for sharing leadership with teachers, and parents on school decisions to effect school improvement. Claims have been made that empirical evidence about the effectiveness of transformational leadership in students’ learning is weak and limited (Robinson et al., 2009). Robinson and

her colleagues' work in the Best Evidence Synthesis meta-analysis investigated the effectiveness of different types of leadership on students' academic and non-academic outcomes. Findings of the study concluded that leadership of learning was significantly more influential than transformational leadership. Furthermore, Robinson (2010) points out that the impact of instructional leadership can be enhanced by linking with distributed leadership approaches. Distributed leadership involves the distribution of leaders' influence on instructional matters to other staff members within the school. The predominance of instructional leadership and the increasing role of distributed leadership in school contexts would thus suggest possible interactions between these two leadership constructs.

Leadership for learning creates a culture of collaborative practice and provides support through professional learning, leading teachers to be more open to discussing student success and improving instructional and professional practices (Carpenter, 2015; Wilson, 2016). Similar findings were concluded in the OECD (2016) Talis report on school leadership for learning. The study investigated school leadership activities across primary, lower and upper secondary schools in 38 countries. Key findings of the report showed that most principals engaged in instructional practices supporting teachers' collaborative practices and learning and improving teaching practices through collaborative learning communities. The study explored the concept of distributed leadership implemented by school leaders for instructional improvement and involving teachers and other stakeholders in the school community in decision-making processes. Those principals who integrated both distributed and instructional leadership supported a positive learning climate through learning communities, fostering teachers' reflective dialogue, de-privatised practices and shared leadership to improve student learning. Similar findings were confirmed in studies reviewed by Robinson et al., (2009) as part of their meta-analysis, highlighting links between instructional leadership and distributed leadership perspectives in improving instructional practices.

Empirical work emphasizes that schools with collaborative cultures of leadership involving teacher collaboration can indirectly affect student achievement and improve instructional practice (Goddard, Miller, Larson & Goddard, 2010; Gruenert, 2005). Scholars increasingly assert that schools with collaborative cultures of school leadership positively influence effective learning for both teachers and students (Leithwood et al., 2009; Robinson et al., 2009; Waldron & Mcleskey, 2010). Hallinger and Heck (2010) explain how the complex interaction of organisational strategies employed by school leaders

facilitates improved student outcomes. Their longitudinal study stressed the combination of instructional and transformational leadership models in fostering collaborative school cultures to influence student improvement. The study examined the effects of collaborative leadership on student reading achievement in 192 elementary schools in USA. Results showed the indirect effects of collaborative leadership practices implemented by principals in each school environment improved student learning. These included building academic capability through school wide PLCs and building capability in teachers, parents and students for school improvement.

In summary, the above studies firstly indicate that effective educational leadership is collaborative and can be viewed as functions of leadership distributed across multiple stakeholders (Spillane, 2006) within the school community. Second, leaders responsive to contextual factors mediate multiple and variable conditions within the school structure in setting direction and structures for teaching and learning (Johnson, Dempster & Wheeley, 2016). Employing the lens of '*leadership for learning*' has helped to deconstruct the leadership models that contribute to school improvement and student outcomes. This has relevance to this study which focuses on collaborative leadership practices within the Singapore ECE context. Although there are competing definitions of educational leadership, this study draws on Hallinger and Heck's (2010) perspectives in order to better understand collaborative leadership in ECE. According to Hallinger and Heck, collaborative leadership explores leadership approaches, conditions and strategic actions that are directed towards school improvement, shared by principals and other stakeholders in the school community. Furthermore, the notion of collaborative leadership involves leaders encouraging and promoting teachers' professionalism, participation in decision-making and fostering collaborative practices to strengthen leadership capacity.

At this point it is important to note that a growing body of mainstream research from Western cultural contexts show that effective practices of collaborative leadership support a non-hierarchical leadership process including participatory and democratic practices of teachers and other stakeholders in the school community (Dimmock & Walker, 2005; Waldron & Mcleskey, 2010). However, Hallinger (1995) in his earlier general leadership research proposed a useful point of departure, discussing the portability of Western knowledge to theorise leadership practices in non-Western cultural contexts, particularly in the Asian-Pacific region. Hallinger stressed the impact of cultural values as an antecedent when conceptualising educational leadership as they "shape the needs and

requirements of leadership within the organisation” (p.5). The influence of cultural context will be further discussed in Section 2.2.4.

2.2.4 Influence of context in educational leadership

When studying educational leadership, it is important to look beyond the leader, to the whole leadership landscape involving people, institutional structures and power relations (Chrispeels & Martin, 2002). These features may have implications for this study as I seek to explore ECE principals’ understanding of their leadership practices and the development of collaborative leadership practices within their organisational contexts. Over the last decade, the relevance of context to leadership has gained increased attention in the wider school literature and studies stress that context plays a significant role in defining school leadership practices and effectiveness (Dimmock & Walker 2005; Hallinger & Truong, 2015; Lee & Hallinger, 2012). A significant variable of the context is culture, which includes both societal and organisational factors (Dickson, Aditya & Chhokar, 2000). In an earlier work, Hallinger (1995) noted that leadership was a “cultural phenomenon” that reflects the values, norms, expectations and traditions that define a society (p. 5). Hallinger (2016) also referred to aspects such as institutional, political, economic and socio-cultural features that may impede or facilitate leadership practices in schools. Located within the Singapore-Asian context, the influence of the Asian cultural context may be a significant factor in my study related to collaborative leadership. Concepts of Asian cultural contexts that impact educational leadership will be further discussed in Section 2.2.5.

There has been a global trend of implementing educational reforms to improve school leadership for better school performance and student achievement (Leithwood & Jantzi, 2006; Sinay & Ryan, 2016). Walker (2014) stated that only over the past 20 years has there been a gradual emergence of cross-cultural perspectives in educational leadership. He opined that Western perspectives from North America, Australia, the United Kingdom and New Zealand have been broadly accepted as global literature for educational leadership reforms and these studies have identified core practices that facilitate student achievement. However, several scholars have critiqued this approach, arguing that when these leadership practices are applied without acknowledgement of cross-cultural models, the results may yield different effects on people and organisations (Hallinger & Bryant, 2013; Walker & Hallinger, 2015). Governments within East and South Asian countries such as Japan, South Korea, Vietnam, China, Hong Kong and Singapore have looked to Western educational models for solutions to improve their educational systems (Mok, 2006). However, research

on educational leadership in these countries has identified the limitations of implementing Western-oriented perspectives of educational leadership within contexts embedded in the cultural heritage of Confucian values (Hallinger, Walker & Bajunid, 2005).

Consequently, research has called for contextualised understanding of school leadership in Asian contexts, taking into account cultural, institutional and political dimensions (Bajunid, 1996; Cheng, 1995; Dimmock & Walker, 2000; Truong, Hallinger & Sanga, 2017). Several studies on school leadership within Asian contexts have identified how the cultural values of Confucian ideology have shaped school leadership practices (Hallinger, 2010; Hairon 2015; Walker & Kwan, 2010). Collard (2007) also asserts that Western models of educational interventions may devalue the rich cultural traditions and the indigenous perspectives embedded within a particular society. This cross-cultural perspective found within the Asian educational leadership literature may have significant implications in this study which explores collaborative leadership practices in the Singapore ECE context. The next section will review relevant literature with an overview of Confucian values including the socio-political ideology of economic pragmatism which impacts the educational context of Singapore.

2.2.5 Asian educational contexts

Over the past two decades several studies have argued for the need to consider cross-cultural perspectives to uncover the influence of societal culture in educational leadership (Cheng, 2000; Day & Leithwood, 2007; Walker & Dimmock, 2012). In addition, Pang and Wang (2012) suggest that exploring non-Western traditions and practices from diverse “Asian educational contexts may expand the global knowledge base in educational leadership and management exposing alternative ways of thinking and working” (p. 175). The Singapore educational system is influenced by Confucian values, and Kuah (2018) suggested that the Confucian ideology is seen as an important tool and an asset to promote economic development and modernization in Singapore. In addition, research studies have also found that Confucian ideologies of collectivism and power distance influence the Singapore education system (Hairon & Dimmock, 2012; Tan, 2012).

Within global research of culture and management, Hofstede’s studies have been influential in understanding dimensions of power distance (hierarchical relations) and collectivism studied within the context of Confucian societies (Hofstede, 2011). Hofstede’s typologies of organisational culture has been a major framework for understanding and measuring culture across different societies revealing each society may have different

values. Using data obtained from employee attitude surveys from IBM subsidiaries in 50 countries in 1980 and later an extended work with his colleagues in 2010, Hofstede showed how culture can be unpacked into six independent dimensions in accordance with specific values and expectations. Hofstede and his colleagues labelled these dimensions as: “power distance; individualism versus collectivism; masculinity versus femininity; uncertainty avoidance; short-term versus long-term orientation to life; and indulgent versus restraint” (Hofstede, 2011, p. 8).

Using Hofstede’s framework, scholars have described the influence of these cultural values and norms on workplace behaviour, leadership approaches and communication (Cortina, Arel & Darden, 2017; Truong et al., 2017). Hairon and Goh’s (2014) research unpacking the constructs of distributed leadership amongst Singapore school leaders identified the influence of Asian cultural values of “collectivism, power distance and Asian pragmatism” (p. 712) on distributed leadership. Dimensions introduced in Hofstede’s model such as power distance and collectivism and the Singaporean socio-political ideology of Asian economic pragmatism will be explored in detail in the next sub-sections to understand their influence on collaborative leadership practices in Singapore.

Power distance

Hofstede (2001) explained the cultural variations found in hierarchical relations and identified how power distance is exercised within a cultural context. The prevalence within this construct of power distance suggests that “the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede, Hofstede, & Minkov, 2010, p. 61). Schwartz (1999) posits that people are aware of the inequality that prevails with the hierarchical society. People who dwell in hierarchical societies comply with the obligations and rules associated to hierarchical roles and show deference to superiors. Power distance is perceived as the social inequality found in societies where leadership governance is made positional and centralised (Hofstede, 2001). Hairon and Dimmock’s (2012) argument on the hierarchical “command and control” (p. 407) system established in the Singaporean school system echoes the concept of Hofstede’s (2001) power-distance dimension. A top-down hierarchy with power distance and a dependency work culture has been deeply entrenched in school leaders and teachers’ relationships and professional work in Singapore (Hairon, Goh & Lin, 2014).

Collectivism

Collectivism is seen as the opposite of individualism (Hofstede et al., 2010) and pertains to “societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (p. 92). Collectivist culture represents a “tightly knit social framework” and promotes respect for authority and group consensus (Wheeler, Reis & Bond, 1989, p. 79). In the context of education, Cheng (1995) argues that collectivist Asian cultures value the needs of the community more than the interests or the needs of the individual. These concepts will be further explained in Section 2.2.6 through empirical works on leadership studies from a cross-cultural perspective.

Asian economic pragmatism

The socio-political ideology of Asian economic pragmatism was an approach initiated by the Singapore government for economic transformation in order to overcome the constraints that Singapore faced in the early phase of economic development (Tan & Bhaskaran, 2015). Central to the ideology of economic pragmatism is a hierarchical work culture “taking directives from the top for productive efficiency” (Hairon & Tan, 2017, p. 97). Hairon (2006) noted that the ideology of economic pragmatism was stressed by the first Prime Minister, Mr Lee Kuan Yew, in his speech to school principals in 1966. Hairon illustrated how the Prime Minister believed in the efficiency of a top down structure, “where the elites lead the nation, a middle strata of executives coordinate the ideas of elites, and the broad masses put into practice policies conceptualised by the elites” (as cited in Hairon & Dimmock, 2012, p. 35). This hierarchical administrative system influenced by economic pragmatism governs the education system of Singapore. Hairon, Goh and Lin (2014) stated that this ideology is pervasive within the school culture between leaders and teachers in Singapore:

Singapore school principals are expected to set clear formal and informal roles, and expectations for staff to work collaboratively towards a shared decision. Furthermore, the roles of formal and especially informal leadership in terms of how work is carried out and coordinated should be made clear. In so doing, pragmatism is preserved so as to attain task efficiency and effectiveness. (p. 381)

2.2.6 Cross-cultural perspectives on school leadership

As discussed earlier in Section 2.2.4, scholars exploring cultural models of successful educational leadership (Cheng, 1995; Walker & Dimmock, 2006) affirm that leadership theories from Western paradigms should take into account the cultural and contextual appropriateness of leaders' work, particularly in the Asian context. Ho and Tikly (2012) caution that investigating leadership practices using Western discourses may impose constraints for knowledge building in the Asian educational context. The International Successful School Principals Project (ISSPP) synthesized evidence from 63 leadership case studies from seven countries namely: Australia, China, Denmark, England, Norway, Sweden and United States of America. The study was conducted from 2001 to 2005 and investigated the beliefs, ideologies and conditions that influenced effective leadership practices in each country's context together with variations across these contexts. Leithwood (2005), in his review of the cases, concluded that a common set of basic leadership practices were prevalent across cultures including setting goals, developing a shared vision, direction setting, supporting collaborative school structures in building relationships and fostering teachers' decision making. Although practices were similar, they were "highly adapted and contingent" (p. 622) to each leader's specific context, illustrating how specific values in the society and organisation shaped leadership. Leithwood highlighted the examples of two Chinese studies in the project which illustrated how collaborative practices and distribution of leadership were promoted by their cultural values of collectivism and high power distance. This is similar to Hallinger's (2003) assertion that leadership in diverse cultures is underpinned by societal factors that influence leaders' behaviour and actions.

Examining cultural aspects of leadership issues expands the knowledge of leadership practices in diverse cultures (Cheng, 1995; Hallinger 1995). Walker and Kwan (2010) assert that contextual factors such as socio-cultural values, norms and beliefs of a society influence leadership which is exercised differently in diverse cultures. However, the influence of diverse contexts has been an under-researched area in the school leadership literature (Hallinger, 2016). Leadership in diverse cultures refers to contexts outside the Anglo-American perspective where leadership practices are conceptualised employing the cultural lens of values, norms and beliefs reflective of the specific society (Dimmock & Walker, 2005). Numerous scholars from wider educational contexts (Harris & DeFalaminis, 2016; Leithwood et al., 2004) suggest the positive benefits of decentralised school leadership practices. However, studies also show that the application of distributed

leadership approaches from Western perspectives in cross-cultural studies causes constraints and may yield modified practices that reflect the cultural values of the context (Collard, 2007; Hairon, Goh & Gopinathan, 2015; Ho & Ng, 2016). One such study conducted by Hairon and Goh (2015) examined the constructs of distributed leadership theory in the Singapore educational context. Due to the lack of quantitative methodological tools to measure distributed leadership, the authors' self-designed survey was administered to 1232 Singapore school leaders, including principals, vice-principals and heads of departments. Although the study revealed collaborative constructs of distributed leadership, principals' practices were culturally adapted to reflecting the "Asian cultural values of collectivism, hierarchy and economic pragmatism" (p. 712).

Results of this study reflected a command and control approach of hierarchical leadership practice providing direction to exercise shared leadership practices. This was contrary to the Western principles of distributed leadership described as "lateral leadership where leadership is shared amongst organisational members ... governed by the interaction of individuals rather than individual direction" (Harris, 2008, p. 172). Influenced by Asian cultural values, four adapted dimensions of distributed leadership practices were identified: "bounded empowerment, shared decisions, developing leadership and collective engagement" (Hairon & Goh, 2015, p. 707). Leadership practices under these dimensions were restrictive, subjected to accountability and were promoted with caution to monitor staff members' decision-making, discerning their involvement in tasks, collective efforts and initiatives. The study apparently adapted a 'cultural fit' between Western perspectives and Asian societal cultural values of power distance, hierarchy, collectivism, and pragmatic efficiency prevalent in Singaporean society (Hairon, 2015). Adaptation of Western leadership practices has occurred in both in school and in ECE leadership within Asian educational contexts (Ho & Tikly, 2012). The role of cultural contexts in ECE leadership studies will be further discussed in this review after discussing the broader notion of leadership in ECE.

2.3 Leadership in ECE

Leadership in ECE is described as a "people-oriented process" (Rodd, 2013, p. 12) in which all participants play an active role, collaborating and cultivating an open culture to achieve a collective vision. Shift is seen in the emphasis on the relational construct of leadership in ECE which is seen as a social and shared process (Dunlop, 2008; Thornton, 2006). Robson (2013) employs the term "leadership as practice" to emphasise more about

where, how and why leadership work is being organised and accomplished than is about who is offering visions for others to do the work” (p. 4). According to Schomberg (2008), ECE leadership is complex, partly due to the diversity of programmes for children. Hence, proposing a standard definition for ECE leadership, can be “highly contestable because of the diversity of organisational settings” (Waniganayake, Cheeseman, Fenech, Hadley & Shepherd, 2012, p. 7) and may contribute to a lack of understanding of what is involved in effective leadership practice. Models of leadership used in the ECE sector have been adopted from other settings, particularly the schooling sector, such as the models of pedagogical and distributed leadership (Waniganayake et al., 2012). Research suggests that leadership in ECE is multifaceted and evolves through relationships with others (Ebbeck & Waniganayake, 2003; Heikka & Hujala, 2013). The importance of acknowledging “the meaning and connection between societal contexts and leadership” rather than characteristics of individual leaders has been emphasized (Heikka & Hujala, 2013, p. 570). Male and Palaiologou (2015) suggest that leadership is best understood as praxis, rather than a model or activity, and advocate for leadership to be viewed as “a process that involves interpretation, understanding and application” (p. 216). Several studies indicate that research theorising leadership in ECE is limited (Rodd, 2013; Thornton, Wansbrough, Clarkin-Phillips, Aitken & Tamati, 2009; Waniganayake et al., 2012). In an earlier review of literature on ECE leadership, Muijs, Aubrey, Harris and Briggs (2004) also conclude that research in ECE “is dominated by a relatively small number of researchers” (p. 158). The authors assert that existing studies in ECE leadership rely on “purely normative prescriptions” (p. 163) rather than sound empirical evidence. Further, Muijs et al. (2004) identified the absence of leadership development programmes which may constrict the growth and importance of the ECE sector.

Kagan and Bowman (1997), in their earlier conceptual literature, presented a theoretical framework consisting of five distinct areas: administration, pedagogy, advocacy, community and conceptual leadership. This framework suggested that “leadership in early care and education actually has many functions or parts” (Kagan & Bowman, 1997, xii). Along similar lines, Ebbeck and Waniganayake (2004) proposed an integrated model delineating the roles, responsibilities, skills and dispositions categorised under the headings of management, administration and leadership. This model draws a distinction between the roles undertaken by a leader in an early childhood context under a single definition of leadership. Rodd (2013) posits that although leadership and management are different, they are intertwined due to the context of the relational working environment. Research points

out that leadership work in the early years' sectors places emphasis on being a manager, rather than a leader, but both roles are considered essential and must be coordinated for effective leadership practices (Siraj-Blatchford & Manni, 2007).

2.3.1 Effectiveness of leadership in ECE

Within ECE, empirical evidence measuring the effectiveness of leadership practices is limited when compared to mainstream school literature; however, many studies emphasise its importance. Effective ECE leadership is considered the key determinant in achieving organizational improvement and benefits such as lower staff turnover, enhanced children's development, effective programmes and quality provision (Ang, 2012b; Muijs et al., 2004; Siraj-Blatchford & Manni, 2007). Neugebauer (2003) suggests that "effective leadership is vital for successful organisations and critical for high quality early childhood programmes for young children prior to compulsory schooling" (p. 4). In contrast to school literature there is a lack of "longitudinal research on measuring the impact of effective leadership practices on children's learning" (Waniganayake, 2014, p. 69). A study on 'Effective Leadership in the Early Years Sector' (ELEYS), undertaken by Siraj-Blatchford and Manni (2007) in the UK was developed as an extension of the Researching Effective Pedagogy in the Early Years (REPEY) study (Siraj-Blatchford, Sylva, Muttock & Gilden, 2002).

A significant element in the ELEYS study was the exploration of leadership practices through a bottom-up approach to acquire information to understand leadership practices rather than just explore their beliefs and perceptions. Apart from data drawn from the REPEY study, the ELEYS study augmented its methodology with demographic information about managers, semi-structured interviews with managers, teachers, nursery nurses, parents and data from observation and field notes. The study provided empirical evidence for effective early years' leadership and the quality of provision in early years' settings. It revealed that strong leadership with relatively low staff turnover characterized effective preschool settings and that leaders and practitioners shared a clear vision of the setting's practices, especially in relation to pedagogy and curriculum. Furthermore, a trained and skilled leader or manager who was able to reflect upon, engage with changing contexts and who could communicate the service's vision had a direct impact on the overall quality of the setting. The authors asserted that:

there is no doubt that effective leadership and appropriate training for the leadership role is an increasingly important element in providing high-

quality provision for the early years, especially as we move to larger and sometimes more complex, multi-professional teams of staff. (p. 27)

Findings from this study showed also that early years' leadership was a collective effort, developed through a relational culture influencing and inspiring each other rather than the focus of one person carrying out tasks alone (Siraj-Blatchford & Manni, 2007). It also mirrored the conceptual tenets of distributed leadership where responsibilities were shared through interactional influences depending on the task at hand and according to an individual's expertise and situational factors (Heikka, Waniganayake & Hujala 2013; Spillane, Camburn & Pareja, 2007).

2.3.2 Cross-cultural perspectives in ECE leadership

According to Ho (2012) and Ho & Tikly, (2012), cross-cultural studies of leadership in ECE provide an opportunity to widen perceptions of how leadership is practised with reference to the values of different contexts. These studies examined effective leadership from the perspectives of various stakeholders in two preschool settings run by non-profit organisations in Hong Kong. With the advent of educational reforms in the ECE sector in Hong Kong, the government had been implementing policy initiatives based on Western perspectives to improve the quality of ECE. Hence, Ho (2012) investigated the constraints of implementing a Western stakeholders' decentralized model within a traditional context influenced by Asian values of high power distance and collectivism within the Hong Kong ECE sector. Results revealed the paradox of power exercised by the ECE leaders in the study when employing a horizontal model of leadership practices within a culture influenced by hierarchy. Western leadership perspectives were adapted to fit in with the model of empowering staff members however principals exercised top-down practices. One principal exercised greater control by delegating tasks and the other focussed on designating task responsibilities with some decision-making power to her staff. Principals' leadership practices were uncritically accepted by the teachers and parents due to their cultural deference for hierarchical compliance. Similarly, harmonious relationships established and maintained by the principals "functioned as a buffer to release the tensions and power conflicts embedded in the decision-making process" (Ho, 2011, p. 262). This study explains the dynamics of power relations in an Asian educational context and questions the implementation of decentralised leadership practices of decision-making amongst stakeholders in a context influenced by the cultural forces of hierarchy. Ho pointed out the lack of attention to cultural beliefs and values that influence practices in the Asian

ECE context and asserted that the implementation of Western methodologies must be adapted to the existing norms of the particular society when investigating leadership practices in diverse contexts.

In a review conducted by Ho and Tikly (2012), the implications of “applying the model of teacher leadership in the ECE sector in Hong Kong as research agenda for future work in this area” was explored (p. 402). The authors stressed the cultural forces of high power distance and collectivism prevalent in Asian educational sectors, and identified the implications of applying the concept of distributed leadership within a Chinese context. Ho and Tikly identified aspects of “change agency, collaboration, collegiality, power and authority” (p. 401) related to teacher leadership, which may culturally fit within the concept of collectivism to theorize teacher leadership in the Chinese context. Based on Confucian perspectives, the concept of collectivism brings people together to function in cohesive groups (Dimmock & Walker, 1998) and is characterised by maintaining relationships, belongingness, and interdependency (Sorenson & Oyserman, 2009). Through their study, Ho and Tikly asserted that the notion of collectivism could be employed as a concept to interpret relationship building. The study also attempted to showcase how a non-hierarchical distributed leadership model of collaboration and decision making can be culturally adapted to develop teacher leadership in an Asian hierarchical context. Compared to the wider scope of cross-cultural studies in school literature, research in ECE is limited with a few studies conducted in Hong Kong investigating the impact of Western leadership practices on ECE settings influenced by Confucian values (Ho, 2011; 2012). Furthermore, little is known through empirical research how these cultural factors govern leadership practices in the Singapore ECE sector which shares similar values of Confucian heritage. Discussing the influence of cultural perspectives on ECE leadership practices provides the lens to examine leadership practices from a different perspective with respect to the beliefs and values it embodies. Notwithstanding these claims, as my study focuses on the notion of collaborative leadership the next section will conceptualise how collaborative practices have been articulated within ECE leadership literature.

2.3.3 Collaborative practices in ECE leadership

Theoretical and empirical work examining leadership in ECE indicates a shift towards theorising leadership as a collaborative process rather than a positional one (Colmer, 2008; Rodd, 2013; Stamapoulous, 2012; Thornton, 2010). In relation to collaborative practices, Whalley and Allen (2011) suggest that leadership in EC is “not an isolated activity by a

single person” (p. 27), rather a collective process that contributes to effective leadership practices. Colmer (2008) conceptualizes the collaborative nature of work in ECE as devolved leadership, whereby leadership is distributed to all staff members in a meaningful way and teachers participate in on-going learning. Colmer suggests that this dynamic form of leadership offers “autonomy, control and considerable freedom for collaborative decision making which encourages staff members to reflect, challenge and inspire each other” (p. 111).

Empirical research within ECE on collaborative practices using a distributed leadership approach challenges the assumptions of understanding leadership through the actions and beliefs of a single leader, rather leadership is viewed as a practice shared amongst organisational members (Clarkins-Phillips, 2011; Halttunen, 2016; Heikka & Hujala, 2013, Thornton, 2005). These studies argue that distributed leadership is particularly relevant to ECE as multiple staff members undertake different roles in ECE centres, sharing responsibilities such as team teaching, collaborative planning of curriculum and sharing of administrative duties. These studies also emphasize that distributed leadership practices can increase positive outcomes for children, by sharing expertise and valuing everyone’s contribution. Heikka et al. (2013) conceptualised distributed leadership in the early years as an interactional influence stretched over diverse “stakeholders, situations and structures” (p. 40) rather than individual actions. Similarly, Rodd (2013) points out the significance of relational aspects of EC leadership that involves “complex webs of relationship, interaction and influence” (p. 49). She has asserted that employing a collaborative theoretical approach helps to demonstrate the leadership practices contributed by all members in the services. Furthermore, empirical research in ECE has explored leadership as a reciprocal and distributed social process between leader and followers (Siraj-Blatchford & Manni, 2007; Thornton, 2005).

Some studies have also explored the prospects distributive leadership supported through planful delegation of formal leadership practices. Nevertheless, these studies also reiterate that clarity can be compromised if structures and protocols are not established when sharing and extending boundaries of leadership (Leithwood et al., 2006; MacBeath, 2005) Empirical studies exploring the expression of distributed leadership in the Finnish ECE context have been carried out by Heikka and Hujala (2013), Haltunnen (2016), and Heikka (2014). These studies focus on the enactment of leadership practices investigating how stakeholders perceive leadership responsibilities within the ECE context. Participants in these studies recognized the importance of distributing leadership practices; however,

differentiated forms of distributed leadership were exercised within the boundary of hierarchical formal structure. All three studies identified nuances of distributed leadership practices that were prevalent within the Finnish ECE context. Haltunnen (2016) investigated leadership practices of two directors who supervised multiple day care facilities within their individual ECE organisation. Although findings showed interaction, collaborative activities and spontaneous involvement of multiple staff members in task performances, distributed leadership was found at the “lowest form” (p. 14). Tasks were delegated to staff members by directors expecting them to take greater responsibility. Leaders lacked influence to mobilise leadership activities and create conditions for distributed leadership to occur with deeper levels of interactions.

Heikka and Hujala’s study (2013) examined leadership as a contextual phenomenon and explored how leadership responsibilities were distributed between municipal ECE leaders, centre directors and teachers. Results emphasised the importance of ECE leaders’ pedagogical work for service quality; however, responsibilities for quality improvement were disseminated in a top-down fashion by municipal leaders without providing decision-making opportunities for centre directors and teachers. The notion of distributed leadership practices lacked shared understanding, interdependence and were disconnected amongst stakeholders. Heikka’s (2014) study with a larger number of stakeholders revealed diversity in leadership constructions. The study focused on pedagogical leadership distributed between the micro- and macro-level leadership and found similar results of disconnection and undeveloped distributed leadership practices amongst municipality leaders due to their lack of familiarity with the ECE contexts and national policies for ECE. However, there were marginal findings of distributed leadership emerging in some municipalities. Although hierarchical in structure, some centre leaders and staff members were coordinating distributed leadership practices for pedagogical development. These findings reflect the conceptual understanding that distributed leadership can be exercised within a formal hierarchical structure that embodies the relationship between both vertical and lateral functions (Harris, 2011). In conclusion all three studies in the Finnish context indicated the need for a clear structure and improved enactment of distributed leadership within a formal hierarchical structure.

2.3.4 Role of formal leaders in collaborative/distributed leadership practices

A widely accepted notion within educational contexts is that distributed leadership is about leadership practices rather than leadership roles (Spillane et al., 2007). Distributed models

may operate in collaborative forms such as teams, committees and informal groups within the hierarchical structures of the educational context. According to Thornton (2006), distributed forms of leadership does not imply a lack of formal leadership. Harris and Mujis (2004) suggest that formal leadership roles are integral in creating the conditions for distributed leadership to occur by building organisational capacity and developing the expertise of others. These principles were evident in a study by Aubrey, Godfrey and Harris (2013) in the UK exploring how leadership was organised and distributed in diverse ECE settings. The researchers surveyed almost 200 staff and governors, interviewed 12 early childhood leaders, conducted group interviews with other staff, and produced vignettes of leaders, based on diaries and video observations of their practices. Results showed that leadership was hierarchical in strategic decision-making but collaborative at the operational level where collegiality and teamwork were promoted between teachers and other staff members. Across settings, co-ordination of leadership functions and responsibilities fluctuated to meet the demands of the changing needs of the social settings. Interdependence between staff members and their enactments of leadership were integral in facilitating distributed leadership in diverse EC settings.

2.3.5 Collaborative leadership practices in ECE

Leaders involved in collaborative practices through learning communities in the school sector are thought to promote shared leadership and empower staff members in decision-making and problem-solving for improved student learning and school improvement (Stoll et al., 2006; Wahlstrom & Louis, 2008). With reference to the ECE sector, Rodd (2013) describes collaborative leadership “as a key strategy and resource for the provision of quality early childhood services” (p. 145). She suggests that collective leadership focuses on empowering ECE practitioners by sharing and delegating responsibilities. Siraj-Blatchford and Manni’s (2007) ELEYS study identified a broader understanding of collaborative leadership, especially the notion of building partnerships amongst members of staff. Leaders in the study played a pivotal role in the process of establishing a “learning community and a team culture” (p. 21). The authors suggest that a collaborative learning process includes staff working flexibly as a community of learners sharing expertise to provide quality provision of services for children. Effective leadership practices resulted in staff being continuously engaged in professional learning and development (Siraj-Blatchford & Manni, 2007). A small number of studies from Australia (Colmer, Waniganayake & Field, 2014; Waniganayake, 2014) and New Zealand (Clarkin-Phillips,

2011; Denee, 2017; Thornton, 2005; 2010) have all explored the development of collaborative practices in ECE through the lens of distributed leadership approaches.

A recent study by Kreig, Anne-Smith and Davis (2014) in Australia investigated perceptions of leadership from participants who attended a professional learning programme (PLP) focused on leadership development. Participants in this programme were from diverse settings which included ECE leaders, school leaders and practitioners from school management. The study purported to “develop participants’ recognition, understanding and valuing the importance of their leadership roles” (p. 73) and to develop an understanding of contemporary early childhood leadership practices found in diverse ECE settings in Australia. Findings concluded that participants appreciated the values of shared leadership in ECE contexts which promoted effective leadership practices of “shared decision making and shared responsibility, and the strength of learning from one another in less hierarchical model of leadership” (p. 79).

Earlier research studies conducted in New Zealand explored the feasibility of developing distributed leadership through research programmes (Thornton 2005; Jordan, 2008). These studies explored leadership practices in ECE centres which were designated as Centres of Innovation (COI) funded by the Ministry of Education to research innovative practices. Staff members in these centres were involved in innovative early childhood practices focused on developing distributed leadership practices. Thornton’s research found how leadership was developed with a shared vision and promoted a collaborative culture. Findings indicated variations in the leadership practices across the three centres in her study but in each teachers’ skills and expertise were valued, and they were also open to change embracing a “collaborative nature of leadership” (Thornton, 2005, p. 89). Further, teachers’ contributions were valued in these centres and, as a COI, everyone’s skills and expertise were considered important for further leadership opportunities. Likewise, Jordan found that the philosophy of distributed leadership practices was linked with the idea of working collaboratively within a community of practices model, based on collaboration, mutually agreed shared understandings and collegiality. Outcomes of the COI programme research implied that distributed leadership practices supported through professional development and collaborative professional learning would contribute to improved quality in ECE.

Similarly, Thornton’s (2009) doctoral study examined leadership development in the ECE context in New Zealand. Her findings demonstrated the use of a blended action learning process which included the use of information communication technology and face-to-face meetings to support leadership learning and development. Her action learning process

involved group of learners working on issues or problems they faced in their professional contexts with the support of the facilitator. This model of leadership development led to increased confidence in their leadership practice and support greater distribution of leadership practices within their professional context.

Further, the link between distributed leadership practices and a professional development programme was explored in a small-scale study by Clarkin-Phillips (2007) in New Zealand. The aim of this research was to ascertain whether teachers developed leadership skills after the programme which was focused on building 'leaderful centres' and their perceptions about their involvement in the programme. Individual interviews with 11 teachers from three different ECE centres provided information on their interest in the programme, the learning strategies and the leadership opportunities provided to improve centre-wide pedagogical improvement through shared leadership. Teachers were encouraged to develop and strengthen practices of shared leadership. These practices included: "utilising individual strengths, having a shared vision and shifting the balance of power to include children and families" (Clarkin-Phillips, 2011, p. 16).

To add to the repertoire of studies exploring the relationship between professional learning and distributed leadership, a recent New Zealand study (Denee, 2017) explored the perceptions and practices of distributed leadership and professional learning in ECE settings. Data collected for the study included a nation-wide survey, augmented with individual interviews with teachers and leaders of centres that were identified as of high quality. From her findings, Denee developed a framework of effective leadership practices which facilitated distributed leadership through professional learning. The benefits of such practices for the development of ECE teachers included: "inquiry and articulation of thinking; teachers enacting leadership; collaboration and dialogue; mentoring and coaching; fostering relational trust; and, creating vision and designing supportive structures" (pp. 82–89).

A study undertaken by Colmer, Waniganayake and Field (2014) in Australia echoed similar findings of linking distributed leadership practices to professional development and learning. However, the study acknowledged variations in how leadership was shared by positional leaders during professional development in two ECE centres and its impact on educators' professional learning. Although educators in both centres reported opportunities to work together during their professional development, the director in the first centre planned collaborative professional learning involving both formal and informal leaders and the leader herself maintained a close involvement in the learning to guide her staff

members. Conversely, in the second centre the director's leadership was shared with positional leaders and learning was dispersed to teachers in a directive manner by the nominated positional leaders with minimal intervention from the director. Quality in interactions, networking and providing feedback during professional learning varied in both centres based on teachers' qualifications. Comparatively, distribution of leadership was limited to positional leaders in the second centre when compared to the first one which was more collaborative. Findings of the study revealed that the directors' role was integral to create the conditions for distributed leadership practices when promoting professional learning for teachers. It also highlighted the nuances of distributed leadership articulated by the leaders in the study.

Findings of the above study is parallel with MacBeath's (2005) study on school leadership. MacBeath posits that there is no prescription for distributed leadership, rather it is a network of interacting individuals in an inter-dependent environment to achieve shared outcomes. He identified six forms of distributed leadership namely, "formal, pragmatic, strategic, incremental, opportunistic and cultural" (p. 6) and argued that the most appropriate form of distributed leadership is determined by the situation and different context of the school settings. Furthermore, MacBeath described distributed leadership as a developing process that requires the efforts of formal leaders to make it work, thus explaining the presence of formal leaders in executing leadership practices for collective learning and productive relationships. The empirical studies reported above indicate that ECE leadership characterised by involvement in collaborative learning through learning communities and collaborative professional development programmes may lead to improvement and quality provision of services in the early years. The concept of learning communities for professional collaboration has gained considerable global attention in the educational context. The next section will unpack the construct of PLCs from theoretical and empirical literature relevant to the focus of this investigation.

2.4 Professional learning communities

The concept of PLCs is widely used and understood in the literature on school effectiveness and improvement. Senge (1990) used the term 'learning organization' to apply a business model to schools for improvement. About the same time two anthropologists, Lave and Wenger (1991) began using the term, 'community of practice' suggesting learning as social participation in which "groups of people share a concern, a set of problems or a passion about a topic, deepening their knowledge and expertise by interacting on an ongoing basis"

(Wenger, McDermott, & Snyder, 2002, p. 4). Senge's ideas together with those of Lave and Wenger laid the groundwork for developing the notion of PLCs.

The idea of PLCs was popularised in educational contexts through the works of Hord (1997), DuFour and colleagues (DuFour & Eaker, 1998; DuFour, Eaker, & DuFour 2005) and other scholars (Hairon & Dimmock, 2011). Hord (1997) posits that it is a challenge to define a PLC because it is not a programme or model for educational improvement to be implemented, rather a framework for professionals to work collaboratively that results in continuous school improvement. Similarly, Stoll and Louis (2007) assert that transforming schools into PLCs means shifts from restructuring to reculturing process. It involves a cultural transformation resolving problems such as teacher isolation and individualism, creating opportunities to engage in ongoing, job-embedded and personalised professional development (DuFour, DuFour, Eaker & Many, 2006).

When creating PLCs, besides the key processes of establishing shared norms and values and shared decision-making, it is the notion of mutual trust that improves collegiality, reduces vulnerability amongst members and fosters collaborative networks and partnerships (Cranston, 2011; Stoll et al. 2006). In addition, Hellner (2008) adds that the focus of PLCs requires learners to work actively with new knowledge: "drawing on prior knowledge and experiences; discussing, sharing, reflecting with other learners; modifying and adjusting beliefs and practices; and applying them to the specific school setting" (p. 51). However, Stoll and Louis (2007) also point out that PLCs can be sustained only in a favourable school climate where leadership plays a significant role in supporting and developing trust that fosters relationships for collaborative professional learning (Bryk & Schneider, 2002). While there is no universal definition for a PLC (Stoll et al, 2006), consensus of opinion suggests that a PLC exists where a group of teachers motivated by a shared learning vision critically exchange their instructional practices in an ongoing, reflective, inclusive, learning-oriented process, through a continuous inquiry process for knowledge sharing and to improve student learning (Mitchell & Sackney, 2000; Huffman & Hipp, 2003).

2.4.1 Characteristics of PLCs

Understanding the characteristics helps to unpack the concept of PLCs. Characteristics of effective PLCs for professional learning include: establishing trust amongst group members; collective learning consisting of reflective inquiry and practice; shared personal practice, where professionals provide feedback through networks of collaboration and

share knowledge through interaction; peer collaboration creating productive relationships for change and improvement; shared values and vision which serve as guideposts helping professionals to stay focused on specific tasks; and working collectively to achieve success for student improvement (Hipp & Huffman, 2010; Stoll, 2011). A key aspect of developing PLCs is the involvement of shared leadership (Hord, 2004). Stoll (2011) points out that leadership actions are pivotal to implementing PLCs and indicates that PLCs involve “developmental processes that are connected and not mutually exclusive” (p. 108). Processes involved in leading PLCs include:

- *Sharing a student learning focus* - gaining consensual agreement on pedagogical issues and making collective decisions on innovative approaches for teaching and learning to improve student learning outcomes
- *Cultivating involvement and distributed leadership* - engaging members of the community in leadership practices to assume collective responsibilities
- *Nurturing trust and collaboration* – sharing school leadership with others and working collaboratively to build positive relationships and trust
- *Promoting collaborative enquiry that leads to deep learning* – challenging existing practices through collaborative forms of enquiry by exploring issues and reflecting on them
- *Seeking evidence about PLC processes and outcomes* – the need for members of PLCs to examine the benefits of the PLC outcomes to ensure positive change
- *Ensuring supportive structures* – Providing supporting structures such as time, and space which includes both physical and virtual space to facilitate professional exchanges, communication, and coordinate collaborative activities such as team teaching and joint reflection
- *Drawing on external facilitators and critical friends* - connecting PLCs with sources of external knowledge to explore assumptions and widen perspectives of thinking and action (Stoll, 2011, pp 108 -112).

Hord (1997; 2004) conducted extensive research surrounding PLCs that focused on school improvement efforts. Hord (1997), in her seminal study, identified five interrelated dimensions that are critical for the development of PLCs in schools. Since then, Hord (2004) has extended her research to reinforce the importance of PLCs in school improvement

processes. According to Hord and Sommers (2008), schools that describe themselves as a PLC should encompass these attributes: supportive and shared leadership, shared values and mission, collective learning and application of learning, shared personal practice and supportive conditions. Hord's work has been widely acknowledged and applied in different educational contexts (Stoll et al., 2006). For instance, Olivier, Hipp and Huffman (2010) adapted Hord's PLC dimensions and developed a questionnaire - the Professional Learning Communities Assessment-Revised (PLCA-R). Studies have been carried out employing this theoretical framework, seeking evidence to support the existence of the dimensions (Hipp & Huffman, 2010). A summary of the dimensions is provided below.

The first construct of PLCs is shared and supportive leadership which stresses that principals must accept, appreciate, and nurture change in their school (Hord & Sommers, 2008), allowing and fostering shared decision-making. Collaborative leadership facilitated by teachers and school leaders during PLCs establishes a school culture that supports student learning (Hipp & Huffman, 2010). Second, shared vision is considered a fundamental characteristic of PLCs by scholars (Stoll et al., 2006). This shared vision provides preconditions for schools' cultural change and sustained growth (Hord & Sommers, 2008). Third, collective learning and inquiry are crucial to the practice of PLCs (Hord, 2004). Researchers suggest that collective learning rather than traditional individual learning demonstrates the central idea of PLCs (Hairon & Dimmock 2012). Specifically, teachers are expected to share ideas and materials, jointly plan and investigate, collectively reflect and solve problems, and continuously improve teaching and learning practices in PLCs. Following this, is the fourth characteristic of shared personal practice. A core idea in shared practice is nurturing collegial relationships among teachers (Louis, Marks & Kruse, 1996). Strategies such as developing critical friends and subject teams to learn from each other and obtaining meaningful feedback are conducive to such relationships

The last characteristic of PLCs focuses on supportive conditions which are seen by Hord (1997) as essential for the development of PLCs. The effectiveness of practising PLCs in schools depends on several contextual factors. On the one hand, structural conditions of school organizations need to be optimized to facilitate PLCs. Specific supports include collaborative time and physical proximity and sufficient resources in terms of funding, materials, and facilities (Louis et al., 2010). On the other hand, relationship building, fostering cultures featuring trust, sharing and collegiality among teachers is associated with effective PLC practice (Stoll et al. 2006). Effectively managing conflicts generated from collective inquiries and prompting deeper dialogue is also vitally important (Hord 1997).

Thus, PLC characteristics consist not only of educators' collaborative efforts of shared vision and values, collective learning, and shared practice, but also schools' supportive conditions such as facilitative leadership operated at the organisational school level (Zhang & Pang, 2016).

Studies within school literature in the United States (Bailey 2016), the Middle East (Al-Mahdy & Sywelem, 2016), and Turkey (Bellibas, Bulut & Gedik, 2017) have examined the effects of PLCs on teaching practices and students. Notably, these studies employed Olivier et al.'s (2010) PLCA-R survey. A recent doctoral study conducted by Bailey (2016) examined the impact of PLCs on collective teacher efficacy. Research was conducted in two rural school districts in the USA. The first district comprised of seven schools and the second district included nine schools ranging from elementary, middle to high schools. The versatility of the PLCA-R instrument enabled the researcher to identify and align research questions directly related to collective teacher efficacy within every dimension in the survey. The PLCA-R dimensions were triangulated with data from interview questions and focus group discussions to access information on participants' perceptions and the PLC conditions that impacted collective teacher efficacy; the effectiveness of collective learning; and the supportive conditions that fostered collective teacher efficacy. Findings from the elementary school indicated that the six identified dimensions on the PLCA-R had a positive impact on collective teacher efficacy at all levels in contrast to the results from the middle and high schools. With growing interest in PLCs in diverse context, this review will further discuss how PLCs are shaped and influenced by their cultural context and societal values.

2.4.2 Cross- cultural perspectives in PLC

Stoll and Louis (2007) have suggested that "as an interest in PLCs potential grows internationally, it is important both to acknowledge the work coming out of other countries as well as attend to the nuances of different cultural context" (p. 9). A comparative study by Webb, Vulliamy, Sarja, Hamalainen and Poikonen (2008) explored the influence of PLCs on primary school teachers' well-being and their professional learning between schools in Finland and England. Despite the differing national contexts, there were similarities in teachers' collaborative working attitudes. However, the differences in cultural backgrounds and societal values that influenced the education outcomes reflected how teachers worked in their PLC for both groups. English teachers were geared to

achieving an externally determined performance in contrast to the Finnish teachers, who worked in a more democratic and equitable school climate within the school limitations. Literature from an Asian perspective have reported that knowledge of PLCs has been predominantly drawn from Anglo-American settings (Hairon & Tan, 2017; Pang & Wang, 2016). Despite the growing body of literature on PLCs focused on Western perspectives, there is limited literature regarding the development of PLCs in East Asian countries (see, for example, Hairon, & Dimmock, 2012; Hairon, Goh & Lin, 2014). However, with growing interest in PLCs in the Asian settings, Hairon and Tan (2016) suggest that comparing and analysing contextual factors that contribute to successful PLCs in the Western literature may help to understand how PLCs work in Asian settings, extending this conceptualisation. Whilst, interest in PLCs began in Singapore schools with the MOE's policy initiatives in 2009. Hairon and Dimmock (2012) point out the constraints of PLCs within Asian hierarchical and high power–distance societies (Hofstede, 2001). The authors highlight how the hierarchical work culture of taking directives from the top in the Singapore school system undermines the integral factors of PLCs conceptualised in the Western system on self-directed learning, where teachers and school leaders act as change agents for school improvement and reforms.

Despite the policy initiatives and system-wide implementation of PLCs in Singapore school settings, results from the pilot school PLC trials revealed three challenges to transformation in teacher pedagogical practices (Hairon & Dimmock, 2012). These were: “high teacher workload; ambiguity of PLC process and its effectiveness; and hierarchical work system” (p. 405). Firstly, teachers viewed time spent on professional development as adding to their already high workload and preferred professional development programmes to PLC activities. The second challenge related to teachers and leaders expecting that the implementation of PLCs should be led by a top-down culture. Their lack of experience leading PLCs as a school-based initiative and the absence of evidence-based information challenged both teachers and leaders when exploring new ways of collaborating. The third challenge was the hierarchical top-down, Asian power distance culture which demands taking directives to ensure productive proficiency at work. Within such a system, the notion of teacher-initiated PLC practices was not workable.

Furthermore, contrary to the PLC literature describing the significance of school leaders' role in leading change, the roles of Singapore school leaders in the PLC training manual was carefully phrased as “leveraging existing structures and optimising structures and processes” (Hairon & Dimmock, 2012, p. 417). This contradicts the role of leaders in PLCs,

who generally support teachers to initiate changes and transform practices through an egalitarian work culture (Hairon, Goh & Lin, 2014). Therefore, it is a major challenge for Singapore school leaders under a centrally controlled system with hierarchical governing structures to develop and support PLCs for continuous learning and building relationships. Hairon and Dimmock (2012) assert that in such restrictive conditions PLCs cannot be transformative; rather they prevail as a “model, where professional development is confined to innovations in classroom teaching practices and subject knowledge” (p. 421). The authors argue that cultural context can be a critical factor in either shaping or impeding the development of PLCs.

Arguing along the same lines, a PLC study conducted in a Chinese educational context using Olivier et al.’s (2010) PLCA-R survey also reported some challenges. Li and Tu’s (2018) study employed the PLCA-R survey to examine school level factors that influenced PLCs in a Chinese high school setting. The study involved 484 high school English teachers from 42 high schools in Changchun, China. A Cronbach Alpha reliability test was conducted on the PLCA-R survey tool to test its employability within the Chinese cultural context. Dimensions related to supportive conditions and items on the role of stakeholders showed low scoring on the scale. These dimensions were removed as they were identified not suitable within the Chinese cultural context. Thus, an adapted version of the PLCA-R survey was formalized with attributes related to *shared and supportive leadership*, *shared values and vision*, *collective learning and application* and *shared personal practice*. High scores on *collective learning* and *shared personal practices* demonstrated that PLCs in this Chinese setting shared similar characteristics with the Western model of PLCs on how teachers work collectively towards shared goals in improving teaching and learning. On the other hand, results were weak on *shared and supportive leadership* and *shared values and vision*. Findings were similar to other studies conducted in Korea and China (see, for example, Seo & Han, 2012; Zhang & Pang, 2016). Results were attributed to the cultural values of Asian hierarchical system which inhibits sharing of leadership and shared values and vision with teachers. The study also suggested that PLCA-R survey tool developed on Western educational model may not be culturally appropriate to investigate PLCs within an Asian cultural context.

2.4.3 The role of teacher leadership

The role of teacher leadership in professional learning has been highlighted in educational literature to foster collegial and collaborative relationships amongst teachers to improve

instructional leadership for teaching and learning (Harris, 2010; Wilson, 2016). Teacher leadership can be both formal and informal. The formal often involves responsibilities of training, mentoring, and evaluating teachers. On the other hand, informal teacher leaders are recognised by colleagues without any positional authority and may be involved in coaching peers to resolve instructional problems, modelling reflective practice and articulating a vision for improvement (Danielson, 2007; Muijs & Harris, 2003; York-Barr & Duke, 2004). Due to increased complexities in school organisation the notion of positional leadership gives way to a more distributed form of leadership across the organisation (Muijs & Harris, 2003; Spillane & Diamond, 2007). These shifts in leadership landscapes have expanded teacher leadership opportunities in re-culturing school improvement reforms (Wilson, 2016). York-Barr and Duke (2004) define the role of teacher leadership as:

the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with the aim of increased student learning and achievement. (p. 287-288)

Within the Singapore educational context, Hairon (2016) suggests that developing teacher leadership and empowering them to lead PLCs would be an effective way to distribute leadership in a hierarchical school climate. Hairon states that with growing demands for educational reforms, developing teacher leadership and sharing instructional leadership in a distributed way increases leadership capacity. He postulates that “teacher leadership can thus be said to be a product of the interaction between instructional leadership and distributed leadership” (p. 4). Hairon’s study explored instructional leadership practices supported by teacher leaders through PLC in 11 primary schools in Singapore. Findings suggested that teacher leadership played a significant role in supporting collegial and collaborative structures promoting teacher learning which indirectly impacted teaching practices. The study also noted that building collegiality through mutual trust was a feasible instructional leadership task achieved by the teacher leaders. Teacher leaders’ informal roles meant they were considered to be of equal status with their colleagues in the PLC groups. This factor helped in building supportive relational structures. This review of empirical works in the school literature from an Asian perspective establishes gaps not previously focused in research related to PLCs. It is also noteworthy that there are few, if any, studies on PLCs in the Singapore EC context.

2.4.4 Benefits of and barriers to PLCs

Several studies in the school sector have established the many benefits of implementing PLCs for school improvement (Hord, 2004; Servage, 2008; Stoll et al., 2006;). Benefits include leadership opportunities for teachers, a positive impact on school culture through relationship building within the school system, and additional support for adult learning (Brucker, 2013). PLCs also provide a vehicle for improving teacher quality and collegiality that improves teachers' instructional practices through peer learning; also, most PLCs are an influential tool to increase student achievement (Jensen, 2012; Wang, 2015). Although there are multiple benefits arising from the implementation of PLCs, there are several factors that hinder the creation of effective PLCs. These include: lack of teacher participation due to time and resource constraints; teacher hesitancy to share; and a lack of trust in building a collaborative network (Lujan & Day, 2010; Marley, 2010). Further barriers include teacher isolation that may prevent teachers from participating in challenging discussions for fear of criticism (Scribner, Hager & Warne, 2002) and teacher autonomy, where teachers with experience prefer not to incorporate ideas from collaborative learning. DeMatthews (2014) suggests that the role of the school leader is central to overcoming barriers and facilitating effective PLCs due to their "ability to manage resources and influence organisational culture and expectations" (p. 178). This parallels with findings that supported the role of leadership in facilitating effective PLCs (Hord, 2004; Stoll et al., 2006). Examining the mainstream literature has provided a context by which to understand the relevance of PLCs in ECE discussed in section 2.5.

2.5 PLCs in the ECE context

Empirical research on PLCs in ECE is limited (Cherrington & Thornton, 2013; 2015) Edwards & Nuttall, 2009; Thornton & Cherrington, 2014; 2018; Thornton & Wansbrough, 2012) compared to the proliferation of studies from the school sector. This section will review the limited empirical work that discusses PLCs in the ECE context. Drawing on Stoll's work, Thornton and Wansbrough (2012) explored the relevance of PLC characteristics and factors in the ECE context. A national survey conducted in New Zealand with 214 participants consisting of ECE teachers and leaders employed an adapted version of Olivier et al.'s (2010) PLCA-R. The findings indicated a number of factors that were important for developing PLCs in ECE. The role of leaders was crucial in supporting and developing teacher leadership to build relational trust, as were opportunities for mentoring and coaching for teachers, strengthening family involvement, and opportunities for

professional learning and discussion to improve teaching and learning (Thornton & Wansbrough, 2012).

Research conducted in New Zealand has explored the effectiveness of PLCs in ECE (Cherrington & Thornton, 2015) through case study research. Four cluster PLC groups with different focus of inquiry were established simultaneously. Action research was used as a vehicle for teachers to investigate their teaching practices over a period of 10 months. The study identified how Hipp and Huffman's (2010) characteristics of collective learning and application; shared personal practice; shared and supportive leadership; shared vision and values; supportive structural and relational conditions influenced the development of these PLCs. Evidence of structural aspects such as teacher turn over, change of locations for PLC meetings, lack of common planning time, and relational issues such as the importance of building trust for collegiality and critical inquiry were documented. The authors argued that addressing these issues will support the development of PLCs in the ECE sector. A follow up study was undertaken by the same authors to understand factors that contribute to the sustainability of PLCs in ECE over a 2½ year period and how engagement in PLCs transformed teachers' pedagogical practices (Thornton & Cherrington, 2018). Factors that contributed to the establishment and sustenance of PLCs were: clear membership and induction for new members; a shared focus; commitment and research orientation; clarity of roles including leadership roles; opportunities for dialogues; deprivatisation of practice and stimulus of new ideas (p. 11). Teachers' engagement in both PLCs were facilitated through action research and self-review process to improve teacher practices.

A recent study by Damjonvic and Blank (2018) in the USA reinforced how PLCs contribute to the effectiveness of ECE teachers' professional learning on pedagogical issues. The purpose of the study was to gain understanding about documentation for authentic assessment of preschool children's work. The authors justified their stance of employing PLCs in contrast to a structured professional development programme on the basis that it provided opportunities for teachers to identify and critique their own beliefs, knowledge and experiences which could be reflected on and shared within the community for continuous learning through inquiry. Data was collected over a period of 4 months through the observation of PLC sessions, interviews with participating teachers and classroom documentation including artifacts of children's work. Findings suggested that the inquiry-led sessions opened up opportunities for teachers to improve their pedagogical practices. A sense of trust evolved through their collegiality encouraging teachers to "problematize practice rather than simplifying it" (p. 574) or seek a single answer. The study concluded

that the characteristics of PLCs applied within ECE settings embodied values of learning through collaboration, critical reflection and shifts in thinking about teachers' practices. Although there has been less research about PLCs in ECE than in the school sector to date, studies suggest that PLCs offer an appropriate infrastructure for supporting professional development in ECE (Cherrington & Thornton, 2015). The research discussed above suggest that PLCs hold the promise of transforming teaching and learning for both educators and children in the sector. Earlier discussion in this review noted the significant role of leadership in supporting PLCs, both in ECE (Thornton & Wansbrough, 2012) and in the school sector (see section 2.4). PLCs in ECE have reinforced the pivotal role of leaders in sharing and supporting leadership with teachers through a distributed perspective in order to transform practice. Findings also shed light on the importance of leaders building relational trust amongst teachers to facilitate teachers' collaborative learning and sharing of teaching practices (Thornton & Cherrington, 2014). Given the dearth of scholarly research in this area, little is known about the role of PLCs and collaborative leadership development in the Singapore ECE context. Therefore, for the purpose of my study the following definition of a PLC has been adopted for collaborative leadership learning: "a professional learning community refers to an inclusive and mutually supportive group of people with a collaborative, reflective and growth-oriented approach towards investigating and learning more about their practice" (Stoll, 2011, p. 104).

2.6 Leadership development through learning communities

School-based literature suggests that leadership development expands the collective capacity of organisations to engage effectively in leadership practices (Bush & Glover, 2003). As noted by Day (2001), the burgeoning interest in leadership development has witnessed many publications; however, he contends that there is a lack of clarity in drawing a distinction between leader development and leadership development. Day (2001) also discusses the linkages with social networks by suggesting that while leader development is linked to enhancing human capital, leadership development is linked to enhancing social capital with emphasis on building networked relationships among individuals that enhance cooperation and resource exchange. Hence, Day (2001) conceptualises leadership development as an integration of human and social capital and is the result of complex reciprocal interactions between the leader, others, and the social environment. Furthermore, effective leadership development stresses that leaders develop and function within a social context. Leadership is an integration of individual development and

“understood within the context of others, social systems, and organizational strategies, missions, and goals” (Olivares, Peterson & Hess, 2007, p. 79).

Studies suggest that research focused on understanding the learning needs of experienced leaders is sparse (Cardno & Youngs, 2013; Leithwood, Louis, Anderson & Wahlstrom, 2004). Some empirical works have affirmed professional renewal as fundamental to sustaining enthusiasm in leadership practices and stressed that principals should be able to decide on their own personalised development programmes for improvement. In studies conducted by Solansky (2010) and Stroud (2005), principals preferred mentoring and coaching programmes to meet their diverse needs and to build capabilities. Further, Robinson et al, (2009) identified critical reflection and problem-solving skills as central for leadership development programmes to support leaders to resolve complex leadership challenges. According to Day (2001), leader development and leadership development are linked and involve a relational model developing both intrapersonal and interpersonal competence. He further reiterates that leadership development should include both intrapersonal (self-awareness, self-regulation and self-motivation) and interpersonal (mutual trust, respect and building networked relationship) competencies.

From the ECE perspective, Thornton’s (2010) review of early years’ professional leadership development programmes suggested that programmes in the UK are customised to meet the contextual requirements of leaders’ workplaces through collaborative processes. Programmes are delivered through mentoring and coaching, group learning, and participation in blended learning with online and face-to-face processes, and promote collaborative self-awareness that enables leaders to receive feedback and reflect on their leadership practices. There is a growing interest in using blended learning approaches for teachers’ professional development programmes (Moore, Robinson, Sheffield & Phillips, 2017). The next section will further review the concept of blended learning with empirical and conceptual literature.

2.7 The role of blended approaches for leadership learning

Research indicates a number of benefits of online professional development (Curtis & Swenson, 2003; Vrasidas, Michalinos, & Chamberlain, 2004). Online professional learning ensures instant access to a network of professionals sharing useful skills and knowledge for continuous training and fostering of a PLC (Chapman, Ramondt, & Smiley, 2005). Yet online professional learning programmes face significant challenges in organizing and maintaining a virtual community. The most significant barrier is to foster a sense of

belonging, trust, and support among participants necessary for effective learning in a community (Vrasidas et al., 2004). Studies have explored the challenge of resolving community building in online environments by employing a blended approach to professional development. This method integrates both online experience and face-to-face components to strengthen the social cohesion of the learning community and implement meaningful changes to teaching practices (Garrison & Kanuka, 2004; Owston, Wideman, Murphy & Lupshenyuk, 2008).

Many differing perspectives are offered to the meaning of blended learning (Owston et al. 2008). Emerging from the higher education system, blended learning approaches are defined as consisting of face-to-face components combined with online components (Garrison & Vaughan, 2008) enabling learning flexibility with a range of technology tools. In a blended community, the “complex weaving of online and face to face communities” (Garrison & Vaughn, 2008, p. 27) allows participants to move between boundaries, forming the sense of community in one environment and reflecting and sustaining it in the other. Blended learning communities might use face-to-face meetings to build relationships and engage with new information, alongside an online environment with synchronous tools such as discussion forums or asynchronous tools such as email, blogs and wiki tools for reflection, networking and collaboration (Garrison & Vaughn, 2008).

Collaborative communities support professional development, whether they meet face-to-face (McLaughlin & Talbert, 2001) or online (Barab, Kling, & Gray, 2004). In blended learning approach, the potential for collaboration are numerous. Thornton (2009) suggests that the use of blended action learning is not widespread for leadership learning and development. Furthermore, Thornton (2010) states that leadership development programmes open opportunities for collaborative networking and learning for educational leaders.

Thornton’s (2009) doctoral study employed a case study approach using blended action learning to support leadership development in the ECE context in New Zealand. The blended action learning process included a combination of using online tools and face-to-face interaction with an action learning component. Action learning process involved learning and reflecting between meetings on real issues related to their workplace and working on solutions. Findings indicated that action learning groups in a facilitated learning community, integrating both online and face-to-face learning activities, helped leaders to develop trusting relationships thus promoting reflection and shared practice. In addition to developing self-awareness through reflection on their leadership practices, the

model of leadership learning empowered leaders to embrace the notion of distributed leadership (Thornton, 2009). The convergence of face-to-face and online learning has been suggested as an effective approach for professional learning (Leake, 2014). These studies may also have implications to this current research as I seek to use a blended approach for ECE leaders participating in PLCs to facilitate and enhance their learning approaches. As the literature review concludes, the next section will discuss Mezirow's (1978) transformative learning theory which has been employed as the theoretical framework in this study to understand participants' transformation of learning about collaborative leadership within a PLC.

2.8 Theoretical framework

Mezirow's (1978) transformative or transformational (terms used interchangeably) learning theory provides a theoretical framework for this study. The section will begin with a brief definition of the theory. This will be followed by discussion of conceptual literature and empirical studies that support the use of transformative learning theory within the PLC context. The next section will discuss the tenets of the theoretical framework and finally the rationale for adopting Mezirow's theoretical framework in the stud

2.8.1 Defining the framework

Predicated on a social constructivist approach, Mezirow's transformative learning theory characterises how adults make sense of their life experiences (Simsek, 2012). In his original study Mezirow (1978a; 1978b) investigated change in perspective experienced by 83 adult women who returned to college in 1975. Findings of his research highlighted the importance of adult education and its potential to help learners acquire "a new sense of identity...which can lead to greater autonomy, control and responsibility for their own lives" (Mezirow, 1978, p. 102). Participants in his study experienced a change in perspective affecting their thoughts, beliefs, feelings and behaviours as a result of their learning (Mezirow, 1978). This led Mezirow to characterise the core concept of perspective transformation in order to understand how learners structurally reorganise their assumptions and their world view through meaning-making (Mezirow, 1985).

Mezirow (1991) defines transformative learning as a theory about making meaning through critical reflection, and not just perceiving knowledge through life experiences. Mezirow (1997) emphasized that critical reflection and discourse were central to transformative learning, helping adults to change the way they interpret their experiences. Over the years, Mezirow's transformative learning theory has evolved with contributions by many

researchers providing new dimensions and interpretations to adult learning (Simsek, 2012). According to Taylor (2007), transformational learning is a process of shifting from unquestioning knowledge assimilated from others to conscious reflective learning. Furthermore, Brookfield (1995) states that transformative learning is the idea that learners are not transformed in isolation and that learning requires “observations, insights, and challenges” (p. 5) from others to identify and analyse issues through reflective discourse within a trusting social context.

Extensive research studies that have used Mezirow’s theory assert that transformative learning begins with the revision of the adults’ meaning structures combined with critical reflection, engagement in discourse, and critically taking action on the transformed frame of reference based on individual experiences (Caleja, 2014; Kitchenham, 2008; Taylor, 1994). These key constructs have much in common with the characteristics of PLCs discussed in the school effectiveness literature (McCormish & Parsons, 2013; Servage, 2008).

2.8.2 Mezirow’s transformative learning within the context of PLCs

Conceptual literature (McComish & Parsons, 2013; Servage, 2008) and empirical research (Kelly & Cherkowski, 2015) related to PLCs and transformative learning theory note that the congruency of collaborative learning and critical reflections, grounded in human communication, are evident in both transformative learning theory and PLCs. Servage (2008), in her conceptual work, suggested that “Mezirow’s transformative learning framework is a useful way to organize and delimit our expectations of the individual learning that takes place in professional learning communities” (p. 67) and how they impact change. She outlines the similarities between the tenets of transformative learning theory and the characteristics of PLCs suggesting that both emphasize “critical reflection dialogue in group settings and transformative change” (p. 69). She adds that transformative learning theory can be used to understand the learning and transformation that takes place within an individual through a collaborative dialectical relationship in a PLC environment.

Similarly, McComish and Parsons (2013) reviewed the concepts of transformative learning, its applicability and relational significance, drawing examples from two PLC research studies. The authors acknowledge transformational learning theory “to be a viable framework” (p. 243) used within PLCs to understand the transformation of individual members’ learning through collaborative critical reflection. In addition, Kelly and Cherkowski (2015) conducted a qualitative study to understand how teachers transferred

their professional learning from PLCs to their teaching practices. The authors assert that using transformative theory enriched their understanding and helped teachers to examine the collaboration, relationships and critical reflection and their learning orientation within the context of a PLC structure. This leads to a brief discussion of the tenets of the theoretical framework in the next section.

2.8.3 Tenets of Mezirow's theoretical framework

The tenets that comprise Mezirow's transformative learning theory highlights the importance of the various processes of learning. Most importantly, the theory stresses the importance of a critical dialectical environment which promotes awareness to develop insights about the transformed perspective and guides action to change practices (Mezirow, 1991). According to Mezirow, transformation theory has four main elements: These are changes in *frames of reference*, *critical reflection* that takes place within a *reflective discourse* and finally the *action* that informs praxis (Mezirow, 1991.p.9).

Frames of reference

The goal of transformational learning is to change one's frame of reference. According to Mezirow (2012), a frame of reference is the collective assumptions through which we interpret and understand something. Frames of reference are composed of two dimensions: habits of mind (meaning perspectives) and point of view (meaning schemes) (Cranton & Roy, 2003). Habits of mind is how a person views oneself through cultural norms and one's own ethical and moral values (Merriam, Caffarella & Baumgartner, 2007). The second dimension is one's point of view, made up of "meaning schemes which are sets of immediate specific beliefs, feelings, attitudes and value judgements" (Mezirow, 2000, p. 18). A person expresses one's habits of mind (meaning perspectives) through one's point of view (meaning schemes) which contributes to beliefs and attitudes about a particular situation or person (Mezirow, 2000).

Changes to frames of reference occur when there is change in beliefs and attitudes (points of view) or transformation of one's entire perspective (habits of mind) (Mezirow, 2000). Thus, transformative learning occurs when prior habits of mind do not fit into one's current thinking and are questioned. Transformative learning can be sudden, or it may be slower with incremental transformation in one's points of view, eventually leading to change in one's habits of mind (Cranton, 2016). Mezirow (1991) also points out that not all learning is transformative, rather it can be adding new knowledge or learning new information.

Thus, learning occurs in one of four ways: “by elaborating existing frames of reference, by learning new frames of reference, by transforming points of view or by transforming habits of mind” (Mezirow, 2000, p. 19). Mezirow (2003) asserts that a person cannot try on someone else’s beliefs (or habit of mind). A person can “aspire to change someone’s point of view through sharing of good practices, [however] transformation of a habit of mind needs to come from within learners themselves (p. 132). Based on Mezirow’s construct Caleja (2014) reiterates that, an individual can change a point of view (by trying another’s point of view) only when the individual aspires to change from within to learn from others.

Critical reflection

Mezirow (1991) asserts that critical reflection is the distinguishing characteristic of adult learning that effects change in a learner’s frame of reference. Kreber (2012) expounds that critical reflection is closely related to “reflective thinking, critical thinking and reflective practice” (p. 324). Mezirow distinguishes three types of reflections: “content reflection, process reflection and premise reflection” (Kitchenham, 2008, p. 114). Content reflection is thinking about the experience and process reflection involves thinking about how to deal with the problem. Although both content and process are instrumental to transformation, Mezirow emphasises that it is premise reflection or critical reflection of assumptions that leads to profound perspective transformation, leading one to question the relevance of the problem based on one’s assumptions, beliefs, or values (Mezirow, 1998).

Reflective discourse

Mezirow (1996) points out that “discourse is not a war or debate but a conscientious effort to find agreement, to build new understanding” (p. 70).) He further stresses that integral to collaborative critical reflection and critical self-reflection is the use of reflective discourse (Mezirow, 2003). Reflective discourse develops best when participants are well informed, free from coercion, listen attentively, have equal opportunities to participate, are driven by objectivity and seek common ground by suspending judgements taking a critical stance toward established viewpoints (Belenky & Stanton, 2000; Taylor, 1998).

Action

Taking action is the final step of Mezirow’s transformative learning process. Mezirow (1991) posits that the goal of transformative learning is to take action for change. Mezirow (1997) points out that relational learning within the transformative process helps in examining diverse critical viewpoints in two ways: objective reframing (critical reflection

on assumptions of others) or subjective reframing (self-reflectively assessing one's ideas and beliefs). Subjective reframing is about looking inwards and undertaking a critical examination of one's values and beliefs that are distorted, constrained or discriminating (Brookfield, 2002). Most importantly, Mezirow (2000) reminds us that adults need a culturally mindful transformation learning experience to make an "informed and reflective decision to implement changes or actions" (p. 4). In other words, Mezirow explains that cultural aspects which prescribe specific values and beliefs within an organisation, workplace and lifestyle should be taken into consideration when taking actions to change practices.

2.8.4 Employing transformative learning theory

Taylor and Cranton (2013) consider transformative learning "as a theory in progress" (p. 44) that is still evolving. A number of research studies (Kabes, Lamb & Engstrom, 2010; Steyn, 2017) and doctoral theses (Pratt, 2014; Stanton, 2009; Watkins, 2016) have contextualised transformational learning theory within the dimensions of PLCs. According to Drago-Severson (2007), transformational learning occurs when adults endeavour to deal with challenges in their practices that require changes. Experiences are knowledge that one perceives through reflection and direct participation in an event that helps to make meaning of the world (Mezirow, 1991). Experiences can be critically examined and transformed through collaborative discussion and self-reflective practices (Drago-Severson, 2008). Desire to change and act refers to the process when a shift in thinking takes place to transform the course of action. (Mezirow, 2003). Therefore, employing transformative learning theory as a framework in this study may help to understand how participants' deal with their challenges in their leadership practices and how their perspectives can be transformed through collaborative PLC discourses. Furthermore, examining their reflective and relational discourse may shed some light on participants' critical reflection of others' views and how it guides one's personal beliefs and values in shifting their perspectives about collaborative leadership practices and the action taken to resolve the challenges related to their leadership practices.

2.9 Gaps in literature

In summary, the literature review highlights the importance of viewing ECE leadership as a shared process which draws on a range of collaborative strategies. Models such as PLCs have the potential to help develop collaborative learning, leadership development and

practices in ECE. This literature review has also examined how leadership has been conceptualised in school settings, the nuances of terms used in educational leadership, and forms of collaborative leadership practices from school settings. The review also addressed the influence of cross-cultural perspectives in both school and ECE leadership, highlighting the challenges of translating Western perspectives of leadership practices within Asian hierarchical educational contexts. This discussion also addressed cross-cultural perspectives related to PLCs from the Singapore school context.

Given the dearth of scholarly research situated in the Singapore ECE sector, little is known about the effectiveness of leadership practices. The establishment of PLCs where leaders can seek or share their experiences for professional development and cultivate critical and reflective thinking when they face challenges and issues at work is a topic of interest. Developing a greater appreciation of how leaders in ECE make sense of and respond to issues in their practices through collaborative learning networks is a priority. As indicated earlier, while some school-based literature has explored the application of Mezirow's transformative learning theory to PLCs there is, however, a paucity of research situated in ECE examining the concept of learning through PLCs.

2.10 Chapter Summary

This chapter has discussed relevant theoretical and empirical literature related to the focus of this investigation. Discussion of Mezirow's transformative learning theory has established the conceptual framework to be used in this study. The review of empirical literature relevant to collaborative leadership and PLCs reveals that limited research has been conducted in the Asian context, particularly in the Singapore ECE sector where little is known about the prevalence of these concepts. The literature review has identified gaps in the literature and which this study has the potential to fill. Both collaborative leadership and PLCs are relational, social and collective in nature and it is important to consider factors related to policies, cultural, societal and organisational factors as these can influence ECE leaders' learning and shifts in thinking. This study aims to contribute to the knowledge base of how engagement in a PLC can support the development of collaborative leadership practices for ECE leaders in Singapore.

Chapter 3: Methodology

3.1 Chapter overview

The first section of this chapter outlines the research methodology used in the study. It begins with describing the philosophical underpinnings of the study, followed by strategies on research design, selection of cases, sources of data, and ethical considerations. The next part describes the group composition of the research participants (PLC1, PLC2, TG1 & TG2), research procedures and the PLC programme design. The chapter ends with a discussion on data analysis, the role of the researcher and issues of trustworthiness. In order to preserve participants' anonymity terms such as 'EC leaders' for principals; and 'centres' for services are used irrespective of whether they were childcare or kindergarten services.

3.2 Framework for research inquiry

The process of research inquiry is concerned with “how we view our world(s), what we take understanding to be, and what we see as the purposes of understanding” (Cohen, Manion & Morrison, 2010, p. 5). Employing a theoretical perspective is a way of looking at the world and making sense of it. It is guided by abstract principles or beliefs about what knowledge is, what is knowable, and how we go about gaining knowledge (Crotty, 1998). These philosophical assumptions are central to research endeavour and are often referred to as a paradigm, which is defined as the “basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (Guba & Lincoln, 1994, p. 105). Philosophical assumptions comprise the “nature of reality (ontology), how knowledge is constructed (epistemology), the plan of action (methodology) that the researcher brings to selection of method, participants, data collection, analysis and interpretations” (Klenke, 2008, p. 15) within a research design. Creswell (2002) employs three questions which illustrate how philosophical assumptions underpin a research design:

1. What knowledge claims are made by the researchers?
2. What strategies of inquiry will inform the procedures?
3. What methods of data collection and analysis will be used? (p. 5)

Each of the above questions will be considered in the following sections.

3.2.1 Knowledge claims: An interpretive research paradigm

The paradigm chosen for a study acts as lens to determine the questions asked by the researcher and the modalities to answer these questions (Terre Blanche & Durrhiem, 2006). It is therefore important to place the study into its theoretical context (O'Brien, 1993). The purpose of this research is to discover the learning experiences and perceptions of the research participants involved in the study. Hence the interpretive paradigm situated within the subjectivist dimension of Burrell and Morgan's (1979) sociological framework is deemed suitable to articulate the underlying assumptions in this study. The participants' experiences will be regarded as "intersubjectively shared meanings" (Burrell & Morgan, 1979, p. 31) and the study will explore individuals' perceptions and their shared meanings, and develop insights about the phenomenon of study. By adopting an interpretive approach, the researcher is seeking to understand the deeper meaning that these structures have for the human actor. Thus, the interpretive researcher seeks explanations from within the frame of reference of the participant, is committed to the tenets of the sociology of regulation, and "is informed by a concern to understand the social world as it is, at the level of subjective experience" (Burrell & Morgan, 1979, p. 28). These authors add that the interpretivist researcher's aim is not to achieve change in the order of things. It rather endeavours to explain what is going on and finding out the truth embedded in social interaction based on naturalistic approaches.

The interpretive researcher's ontological assumption is that social reality is constructed "by humans through their action and interaction" (Orlikowski & Baroudi, 1991, p. 14). It is about what constitutes reality and how we can understand its existence. Klenke (2008) suggests interpretivism adopts a relativist ontology that "endorses multiple realities socially constructed by individuals from within their own interpretation" (p. 15). The social reality of leadership in the Singapore ECE context will be understood through: its existence manifested by a leader's assumed position; qualifications acquired through mandatory training; the leaders' roles and responsibilities; and a professional status defined through their relationship with other staff members, parents and the community.

According to Hussain, Omar and Naseef (2013), an interpretivist believes that "reality is constructed and interpreted by individuals according to their ideological and cultural positions" (p. 2376). Therefore, participants' interpretations in this study will collectively create multiple realities that enhance the researcher's understanding about the phenomenon of the study. The epistemological perspectives refer to how knowledge is understood through the subjective experience, language, symbols and meaning constructed by the participants (Krauss, 2005). According to Crotty (1998), social reality may be interpreted by people in

different ways and meaning can be co-constructed. Therefore, the co-construction of participants' understanding and learning experiences reveals how individuals interpret the world around them. As Crotty suggests, meaning is contingent upon human practices and is constructed via interaction between human beings and transmitted within an essentially social context. Thus, meaning for my study is not discovered but constructed through research participants' experiences within their social contexts of PLC discourses.

3.2.2 Strategies of inquiry

In Creswell's (2002) framework, the second question on strategies informs the research approach employed in the study. Strategies of inquiry are qualitative, quantitative or mixed method designs that inform and enable the researcher to select the appropriate approach that best suits the aim and rationale of the study (Creswell, 2009). Mixed-methods research has been defined by Creswell, Plano and Clark (2007) as a "research design based on assumptions that guide the collection and analysis of data and the mixture of qualitative and quantitative approaches" (p. 5). However, Morse and Maddox (2014) argue that "despite the emergence of mixed and multiple methods in the past two decades, there are discrepancies in the literature in the use of many terms and clarifications of these terms are essential" (p. 524). Morse and Maddox assert that a mixed method design is defined by giving priority to one core component which could be either qualitative or quantitative based on the emphasis of the inquiry. In other words, they suggest that the major component used in the study could be a qualitative approach in which the results could stand alone together with a "single quantitative measure, or even a small survey which serves to complement the qualitative core component, but is not publishable by itself" (p.525). The basic premise of mixed method study permits the integration and "synergistic utilization of data" to extract meaning and understanding that do not necessarily emerge through using solely either quantitative or qualitative sources (Wisdom & Creswell, 2013, p. 1).

According to Creswell (2013), combining both qualitative and quantitative approaches in research enable us to understand different phenomena. Therefore, the qualitative approach in this study aims to capture EC leaders' experiences and understandings of collaborative leadership through the implementation of a PLC process. Although the findings cannot be generalized, qualitative data from interviews, discussion forums and focus group discussion may contribute to the building of theories about collaborative leadership in the Singapore context. The smaller secondary quantitative component uses a survey to explore EC leaders' understanding about collaborative leadership practices before and after their engagement in

the PLC process. The quantitative data will help to understand what participants have learnt through the PLC implementation. Therefore, a mixed method approach focussing on a primary qualitative approach with a supplementary quantitative strand enhances the overall design of the study.

3.2.3 Characteristics of qualitative research

Qualitative research is “multimethod in focus, involving an interpretive, naturalistic approach to its subject matter” (Denzin and Lincoln, 1994, p. 2). Qualitative research involves naturalistic inquiry to understand how the participants derive meaning from their surroundings, and how their meaning influences their behaviour. Creswell (2013) describes:

Qualitative research begins with assumptions and the use of theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study and data analysis that is both inductive and deductive and establishes patterns or themes. (p. 44)

This definition encapsulates several characteristics of qualitative inquiry emphasizing the use of descriptive context to understand human and social problems in a natural setting, with multiple sources of data preferred over a single source (Creswell, 2003). The nature of the approach is to employ rich and thick description with words and images to describe the settings and experiences of people (Merriam, 2002). Furthermore, it refers to the researcher as the primary instrument, accentuating the distinctive relationship between the researcher and the subjects and the constraints that shape the value-laden nature of inquiry (Denzin & Lincoln, 2011). The nature of such an inquiry stresses the acknowledgement of positionality and reflexivity of the researcher that calls for continuous critical self-scrutiny and conscious awareness of the researcher’s influence (Creswell, Plano & Clark 2007). Qualitative research is also characterised by the use of complex inductive and deductive analytical approaches in building themes, patterns and categories to make sense of data to derive findings (Braun & Clarke, 2006). Merriam (2009) suggests that the core idea of qualitative research is to uncover and interpret how people experience their worlds and how meaning is constructed. The core qualitative and supplementary quantitative methods will help develop a deeper understanding of the experiences of ECE leaders and the context of collaborative leadership practices in the Singapore context.

3.2.4 Research Design

The third level of Creswell's (2002) framework is the research design that informs the methods of data collection and analysis. Yin (2009) refers to research design as a "logical plan for getting from here to there" (p. 28). The research design articulates the tools or procedures used in selecting participants for the study and strategies for collecting, analysing and interpreting data. Given the interpretive position adopted in this research and the nature of the research investigation, a case study methodology is considered the most appropriate approach as it lends itself to research of a bounded or single unit system (Merriam, 1998).

3.2.5 Case study design

Creswell (2003) defines case study as a "research design, in qualitative research in which the investigator explores bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information" (p. 73). Stake (1995) suggests that the bounded system helps to clarify the phenomenon and the context of the study. A case study can focus on a variety of different things. A case can include "a program, events, or activities" (Creswell, 2002, p. 485). Merriam (2009) points out that the bounded system in case study research needs to "'fence in' the phenomenon that needs to be investigated" (p. 40). Further, she suggests that "the single most defining characteristic of case study research lies in delimiting the object of study, the case" (Merriam, 1998, p. 40). It may be the limit on the number of people to be interviewed, a prescribed time frame for observations, or the instance of some phenomenon, concern, or issue. According to Yin (2009), a case study design should be considered when the focus of the study is to answer "how" and "why" questions about a set of events (p. 14). Further, Yin suggests that the approach is particularly appropriate in situations where contextual conditions of the event being studied are critical, when the researcher has no control over the events as they unfold and relies on "multiple sources of evidence" (Yin, 2009, p. 18) to understand the phenomenon.

Stake (2005), Merriam (2009) and Yin (2009) use different terms to describe the various types of case study designs. Terminologies may differ; however, the authors complement each other in describing the characteristics of various case study designs. Stake (1995), distinguishes three types, the intrinsic, instrumental and collective. He describes intrinsic case study as exploratory in nature as the researcher is guided by a particular interest in the case rather than generalising or building theories. On the other hand, in an instrumental

case study, a particular case is examined to “provide insight into an issue or refinement of theory” (Stake, 1995, p. 237). The collective case study involves studying a number of cases collectively in order to make comparisons of a particular phenomenon or issue (Stake, 2005). Merriam (2009) characterizes “qualitative case studies as particularistic, descriptive and heuristic case studies” (p. 43). According to Merriam (2009), a case study is particularistic when it focuses on a specific “situation, event, programme or phenomenon” (p. 43). Descriptive refers to the end product of the study which yields a “rich and thick description of the phenomenon under study” (p. 43) and heuristic means the case study “illuminates readers’ understanding of the phenomenon under study, providing new meaning, extending readers’ experience or confirm what is known” (Merriam, 2009, p. 44).

Yin (2009) notes that case studies can be exploratory, descriptive, or explanatory depending on the research questions and the goals of the study. In an exploratory case study, the purpose is to understand an emerging phenomenon and to propose new theoretical insights to generate further research and hypotheses (Yin, 2003). A descriptive case study presents a “complete description of the phenomenon within its context” (Yin, 2009, p. 238). An explanatory case study presents “data bearing cause-effect relationships explaining how events happened and are connected” (Yin, 2009, p. 238).

3.2.6 Categories of case study design

Yin (2014) distinguishes four categories of case study design, namely, single-case [holistic], single-case [embedded], multiple-case [holistic] and multiple-case [embedded]. Yin proposes that in addition to “identifying the ‘case’ and the ‘type’ of case study” (Baxter & Jack, 2008, p. 549), it is imperative to consider whether the phenomenon will be better understood by conducting a single case study or multiple case study design. Yin (2014) suggests there are five reasons to consider when using a single case study, namely that the case is critical in some way (e.g., testing a well formulated theory), unusual, common (investigating an everyday situation), revelatory (previously inaccessible to researchers) or longitudinal (to compare the case at different points in time due to changing conditions). A multiple case study design is equated to multiple experiments in which more than a single case is considered. The findings provided from multiple case studies are robust and compelling and allow for cross-case comparison (Yin, 2009). Another option is to adopt a holistic or an embedded research design, wherein attention is given to accommodating a single unit or sub-units within a single or multiple case design (Yin 2009). A holistic design is global in nature with a single unit of analysis in which an individual programme or a

single organisation is studied. However, in an embedded design attention is given to sub-units nested within the case. The study of sub-units within a case offers “opportunities for extensive analysis, enhancing the insights into the single case” (Yin, 2014, p. 56).

A single embedded exploratory case study design was deemed suitable in this study since it addresses a phenomenon over which the researcher has little control and the contextual factors of the phenomena are studied (Yin, 2009). The study aims to explore the phenomenon of collaborative leadership within a PLC context for leadership development. Hence, a combination of data collection methods will be selected to provide a comprehensive picture of the collaborative leadership phenomenon. The study of collaborative leadership practices in the Singapore ECE context is the bounded case. Within this single case study, two units of analysis were embedded; each consist of a group comprising six leaders within the main units and teachers forming the subunits selected from each of the six centres as shown in Figure 3.1. However, participant attrition occurred in PLC2 leaving the group with five leaders for the study (See section 3.4.1 on reason for participant’s attrition in the study). Due to the paucity of research conducted in the area of collaborative leadership development in the Singapore ECE context, a single embedded exploratory approach is considered appropriate for the current study.

Case: Collaborative Leadership in the Singapore ECE context

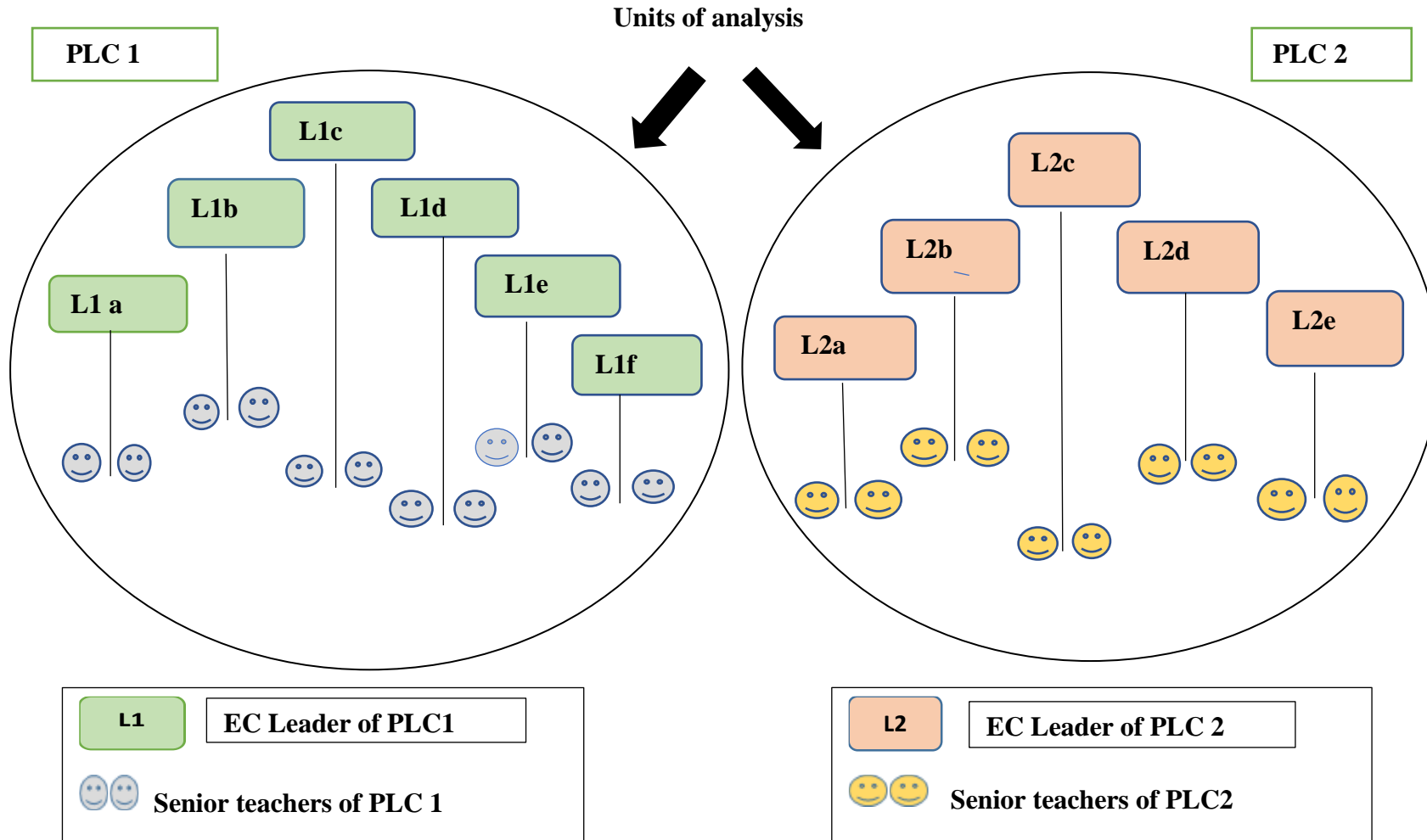


Figure 3.1 Single Embedded Exploratory Case Study

3.2.7 Selection of participants

The participants were selected from an anchor² group childcare provider and private childcare³ providers in Singapore. It was intended that each unit of analysis would have six EC leaders (a total of 12 EC leaders) and a subunit of two EC teachers from each centre working with the respective leaders (total of 24 teachers). The EC leaders' group were coded as PLC1 and PLC2 with specific codes for teachers as TG1 and TG2. Purposeful sampling was employed to intentionally select individuals using specific criteria such as experience, age and qualifications to better understand the central phenomenon of the study (Johnson & Christensen, 2008). Purposeful sampling takes place when the researcher selects a sample from which the most can be learned (Merriam, 1998). It is the most common sampling strategy in qualitative research and seeks cases rich in information which can be studied in great detail about issues of central importance to the purpose of the research (McMillan & Schumacher, 1993).

It is important to note that purposeful sampling was employed in the process of selecting the six private centre leaders. Eight private group principals were invited to the study. Out of the eight, who expressed interest in participating in the study, six EC leaders were chosen based on the criteria specified in Table 3.1. However, with the anchor operator group, due to constraints imposed by the management, the process of employing purposeful sampling procedure was unsuccessful. Participants were chosen by the management based on the leaders' availability of time and their positions as 'executive principals'. I was bound by ethical protocols to select participants on a voluntary basis, hence in order to clarify my position as a researcher, I queried the management on their decision in selecting the participants for the study. The management committee decided that the leaders' position as executive principals meant that they were better qualified as research participants and they also met the specific criteria required for the study. The management also assumed that the principals were professionally experienced, and their participation may also enable the leaders to gain knowledge about the phenomenon of collaborative leadership through my

² Anchor group child care providers or Anchor operators (AOP) are a consortium of child care centres supported by government grants to make child care services affordable to parents in Singapore.

³ Private centres are also known as premium preschools which include both kindergartens and child care centres. They claim to have special teaching pedagogy and offer other additional programmes. These centres also charge a high premium monthly fees

study. Thus, my stance as a researcher to choose participants on a voluntary basis employing purposeful sampling was not effectively implemented in selecting leaders from the anchor operator.

Table 3.1 Criteria for ECE leaders

Total No. of Participants	Educational Background	Job Responsibilities
12 Early childhood leaders (6 in each unit from 2 childcare providers)	Graduate / GCE 'O' or 'A' level with a Diploma in Early Childhood Leadership	<ul style="list-style-type: none"> • Minimum 3 years of supervisory experience in managing early childhood centres • Acquired SPARK accreditation process for the centre • Experience in mentoring teachers in curriculum and pedagogy • Knows the policies and procedures of MSF (childcare licensing) and MOE (ECE curriculum matters) • Good command of the English language

3.2.8 Sources of data

A key component of the study was the implementation of a PLC process over a period of 6 months, using a blended learning approach that includes face-to-face and online interactions. The online interactive processes were supported by a web-based learning management system supported by asynchronous tools which enabled the use of a variety of online tools for collaborative interaction. According to Khosrow-Pour (2007), asynchronous tools are those which facilitate online communication in a delayed format across longer periods of time. Both the face-to-face and online PLC processes were facilitated by the researcher. Blended learning approaches are defined as consisting of face-to-face components combined with online components (Garrison & Vaughan, 2008), enabling learning flexibility with a range of technology tools (Cross, 2006). In a blended community the “complex weaving of online and face to face communities” (Garrison & Vaughn, 2008, p. 27) allows participants to move between boundaries, forming the sense of community in one environment and reflecting and sustaining it in the other. Thus,

qualitative data includes both face-to-face and online activities with asynchronous resources employed for the online interactions. This study used asynchronous tools, and these were: discussion forums, online reflective journals and emails

Face-to-face data collection methods included individual semi-structured interviews, focus group interviews and field notes. Individual semi-structured interviews soliciting participants' opinions enabled me to gain insight into their perceptions. Interviews "may use propositions as the basis for further inquiry" (Yin, 2009, p. 107) to probe individual leader's perspectives of collaborative leadership practices and the impact of the PLC process on their leadership practices. Interviews are generally organised around a set of predetermined open-ended questions, followed with probe questions. Individual interviews were held before the first PLC meeting to ascertain leaders' current leadership practices, and were followed by another at the conclusion of the PLC to determine if leaders' PLC participation resulted in any changes in their leadership practices. A copy of the questions for pre and post interviews are attached (see Appendices 4 & 5).

Focus group interviews offer the opportunity to effectively tap into the multiple realities of people's experiences (Kitzinger, 1995). Focus group interviews were conducted with the teachers to ascertain their views of leadership practices of their principals in the individual centres after the PLC process. A copy of the questions for focus group discussion is attached as Appendix 6. Field notes help in recording "in-depth descriptive details of people (including themselves), places, things, and events, as well as reflections on data, patterns, and the process of research" (Brodsky, 2008, p. 342). Taking the dual role of a researcher/ facilitator, it was not a feasible task to write field notes during the PLC meetings, interviews and focus group meetings. In order to facilitate the writing of field notes, these interactions were recorded with a wide angled video and audio recorder. Field notes were written by transcribing the video and audio tape for analysis. This method facilitates opportunities for the recordings to be re-played in order to validate and cross check interpretations (Jewitt, 2012).

An adapted version of the PLCA-R survey designed by Olivier et al. (2010) was used in the study. The online survey was administered before and after the PLC, using a Qualtrics software programme. This version of the instrument for the ECE sector has been administered in studies related to PLCs in the New Zealand ECE context (Thornton & Cherrington, 2014; Thornton & Wansbrough, 2012).

The adapted survey uses a 4-point Likert-scale with fixed-response questions and includes open-ended questions to elicit more in-depth responses. The survey is generally used in research studies related to the wider school leadership process; however, some adaptations were required to meet the requirements of the ECE sector. Terminology in some survey items were changed and items related to school’s utilization of data and assessment were omitted in order to meet the relevance of the ECE sector in Singapore. Table 3.2 summarizes the research questions and the relevant data sources employed in the study

Table 3.2 Overarching primary question, sub questions and data sources

In what ways do professional learning communities support the development of collaborative leadership practices in the Singapore ECE context?	
Sub questions	Data sources
1. How does leaders’ engagement in a PLC process shift leadership thinking and practices?	<ul style="list-style-type: none"> ▪ Individual semi-structured interview ▪ Field notes ▪ Discussion forum ▪ Reflective journal
2. What are teachers’ perceptions about the impact/influence of the PLC process on their centre leader’s practice	<ul style="list-style-type: none"> ▪ Focus group interview
3. What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?	<ul style="list-style-type: none"> ▪ Individual semi-structured interview ▪ Field notes ▪ Reflective journal

3.3 Ethical considerations

Creswell (2014) suggests that gaining approval to conduct a research inquiry is imperative in view of protecting the privacy and confidentiality of individuals participating in the study, ensuring their cooperation and their understanding of the purpose of the study. Creswell (2013) further proposes that prior to conducting a study “it is necessary to gather university approval from the institutional review board for the data collection involved in the study” (p. 57). Therefore, as part of gaining approval from the Victoria University of

Wellington Human Ethics Committee, information sheets and consent forms were prepared. The information sheet included the outline of the study, timelines to conduct the research, data collection procedures and ethical considerations. A copy of information sheets and consent forms are attached as Appendices (1a, 1b, 2a, 2b, 3a & 3b).

The study adhered to the ethical guidelines and regulations set by the Human Ethics Committee, Victoria University of Wellington. The research was conducted under the ethical principles of informed consent, confidentiality and the right of participants to withdraw from the research. The consent forms provided participants with the choice to be involved in the research and information on their rights as participants to withdraw from the research. On the matter of confidentiality, pseudonyms were used to ensure the participants' confidentiality. All information and data provided by the participants were kept confidential as electronic files on the researcher's password protected computer. Participants were guaranteed confidentiality in any reports of findings, and data were kept confidential during and after the research. I also strived to ensure that the research process and its findings did not have any negative impact on the participants.

3.3.1 Gaining informed consent

Since I had an ongoing professional relationship with the management of the anchor operator and principals of the private childcare centres, the following procedures were undertaken to gain access to potential participants. An email was sent to the Directors of the anchor operator provider with the information sheet and consent form requesting approval for their principals to participate in the research. As the anchor group centres were going through their licensing and accreditation process, one of the Directors managed the process of selecting the six participating principals. These principals were expected to allocate time to participate in the study. Once access was granted, the information sheet and consent forms were sent to the six centre leaders to notify them of their participation.

Similarly, emails with the information letter and consent forms were sent to private centre leaders to seek their participation in the research and their participation was voluntary. The two sub-units of EC teachers were formed by selecting two teachers at the senior level working with their respective leaders. My access to teachers to seek their participation in the study based on voluntary participation was not feasible due to their irregular working hours and workload. During the first meeting with the leaders, I requested that the senior teachers were invited to participate in the study. When email access was granted for the researcher to contact

the teachers, the information sheet and consent forms were sent to the senior teachers. Consent form were duly signed by all participants and were returned to me before the interviews commenced.

3.4 The research groups: Orientation to case study

This section describes the composition of the two PLC groups and the teacher participants. As noted in section 3.3.6, each PLC group is a unit of analysis within a single embedded exploratory case of collaborative leadership in the Singapore ECE context. The section begins with the description of the group composition of PLC1 and PLC2 which includes a description of the participants, structure of their work environment and outline of the PLC programme. The final section describes the research procedures which include pre- and post-individual interviews with EC leaders; the PLC programme design, both face-to-face and online; and focus group discussion with the teacher groups, TG1 and TG2.

3.4.1 Composition of PLC1 and PLC2

The leaders of PLC1 operate large centres with a capacity ranging from 150 – 200 children and 30 – 40 staff members. The participants are identified by the pseudonyms Su Ling, Maria, Mei, Victoria, Siti and Daisy. The second research group, PLC2, was initially made up of six EC leaders from various private childcare centres in Singapore. However, due to unforeseen circumstances one of the leaders withdrew from the study. All previous data collected pertaining to this participant were discarded in accordance with the ethics approval. Hence, the second group comprised five leaders until the end of the study. All but one of these EC leaders operated large centres with a capacity ranging from 100 - 600 children with 30 – 60 staff members. The leaders are identified by the pseudonyms Shuwen, Christy, Hazel, Lynn and Yvonne. Table 3.3 and 3.4 summarises the participants' demographics and structure of their work environment.

Table 3.3 PLC 1: Demographics and work environment of ECE leaders

Groups	No	Participant	Age	Qualifications	Work Experience and Environment
PLC 1	1	Su Ling	40 – 50 yrs	Bachelor’s degree with DPL	15 - 20 years of work experience as centre principal. Manages two centres with a capacity of 250 children and 37 staff members in the first centre and 140 children with 35 staff members in the second centre in various capacities
	2	Maria	40 – 50 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal and runs a centre with 140 children and 30 staff members in various capacities
	3	Mei	40 – 50 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 160 children and 30 staff members in various capacities
	4	Victoria	30 – 40 yrs	Bachelor’s degree with DPL	15 - 20 years of work experience as centre principal with a capacity of 140 children and 36 staff members in various capacities
	5	Siti	30 – 40 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 190 children and 30 staff members in various capacities
	6	Daisy	30 – 40 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 200 children and 35 staff members in various capacities

Table 3.4 PLC 2: Demographics and work environment of ECE leaders

Group	No	Participant	Age	Qualifications	Work Experience and Environment
PLC 2	1	Hazel	40 – 50 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 550 children and about 54 staff members in various capacities
	2	Christy	40 – 50 yrs	Bachelor’s degree with DPL	10 - 15 years of work experience as centre principal with a capacity of 96 children and 20 staff members in various capacities
	3	Lynn	40 – 50 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 120 children and 35 staff members in various capacities
	4	Yvonne	30 - 40 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal with a capacity of 70 children and 25 staff members in various capacities
	5	Shuwen	30 - 40 yrs	Bachelor’s degree with DPL	5 - 10 years of work experience as centre principal and runs a large early years’ centre with a capacity 300 children and 38 staff members in various capacities

3.5 Research procedures: Pre and post PLC programme

Upon receiving approval from the management for PLC1 and the participants of PLC 2, the following research procedures were undertaken. This list includes procedures undertaken during and after the PLC programme.

- Emails were sent to both groups of leaders introducing myself as the researcher and inviting them to an introductory meeting on separate dates. The email included an invitation to take an online survey to examine their perceptions about PLCs.
- The introductory meeting was an orientation to get to know each other, explain the background of the study, understand their roles and expectations as research participants in the study, and outline the timeline for participation.
- During the introductory meetings, dates were confirmed with the participants to conduct individual interviews prior to the PLC programme and a reminder to complete the online survey to examine their perceptions about PLCs.
- A request for senior teachers to participate in the online survey and focus group discussion after the PLC programme was made to the leaders.
- Emails were then sent to the identified senior teachers to invite them to participate in the study
- Individual interviews were held before and after the PLC programme for EC leaders. The pre-PLC interview was held before the first PLC meeting to ascertain leaders' current leadership practices and was followed by a post-PLC interview after the conclusion of the PLC programme to determine if leaders' participation in the PLC process resulted in any changes in their leadership practices.
- Seven face-to-face PLC meetings were conducted separately for each group of leaders. An interval of two to three weeks between each face-to-face PLC meeting was provided for participants to reflect over the issues discussed during the meeting and to engage in online activities.
- The online activities included a discussion forum, and reflective journal on the Learning Management system after the face-to-face PLC meetings.
- Focus group discussions were conducted separately with both groups of senior teachers examining if they had experienced changes in their leaders' practices.

- After the focus group discussions with teachers the post-PLC online survey was administered to EC leaders in order to determine their thoughts about learning about collaborative leadership through PLC.

Figure 3.2 summarises the timeline of the research process. The boxes indicate the data collection points in the research process and the arrows below the boxes indicate the timeline for participation in online interactions.

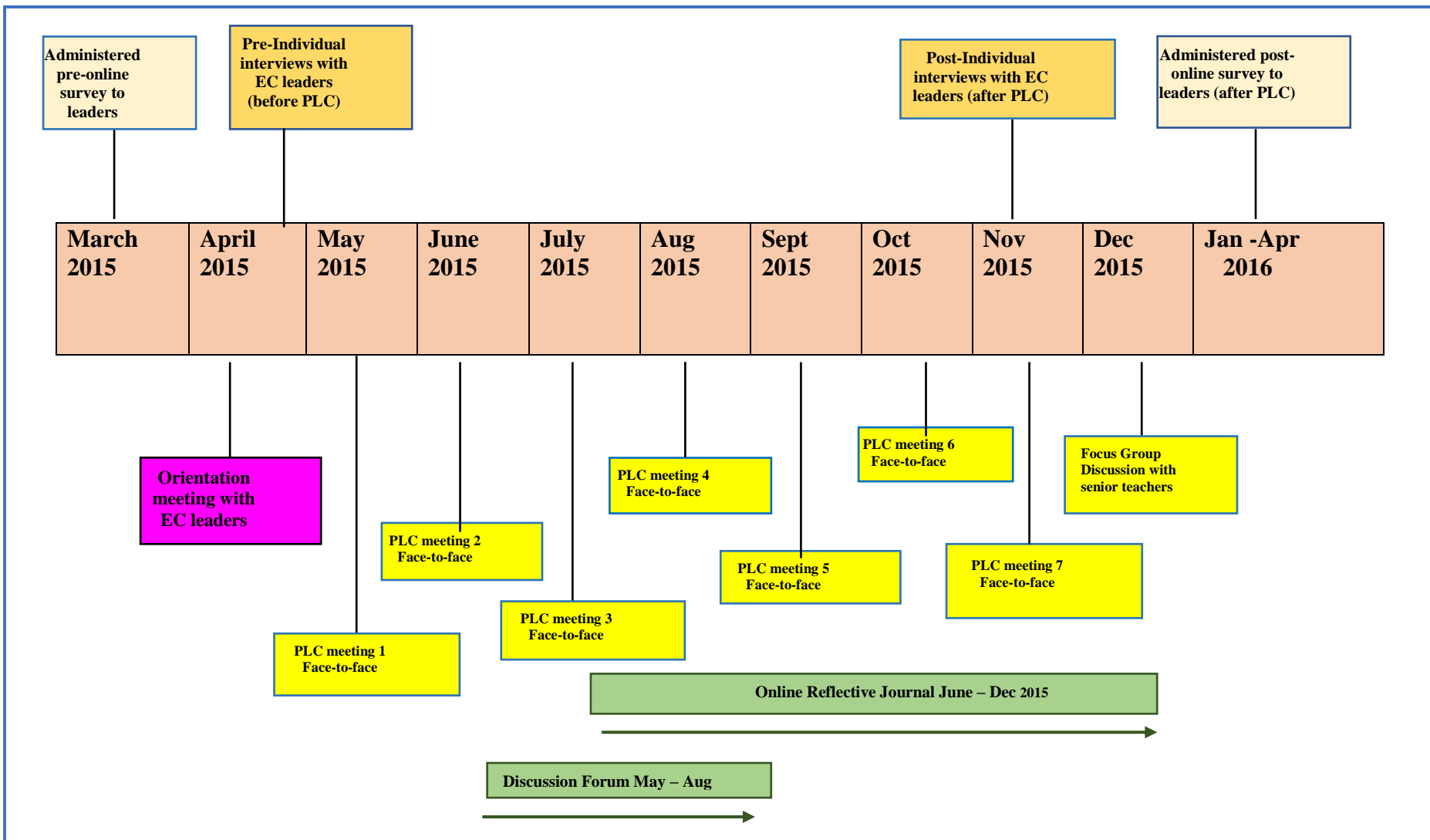


Figure 3.2 Timeline of research process and data collection sources: PLC1 and PLC

3.6 PLC programme design

This section describes the structure of the PLC programme and briefly outlines the seven face-to-face PLC meetings implemented for the leaders and the online activities employed for online interactions.

3.6.1 PLC programme: Face-to face and online interaction

In order to support the development of collaborative leadership practices, seven face-to-face PLC meetings were implemented interspersed with online participation. The blended approach allowed for discussion of issues, sharing of practices and opportunities to build a sense of community and relationships. Further online activities such as reflective journals and discussion forums were used to encourage participants to reflect, network and post their thoughts between meetings. The topic and objectives for the first face-to-face meeting were established by the researcher to gauge the participants' response and interest. However, participants readily expressed their interest in knowing more about issues related to leadership approaches and development. Hence, the topics and objectives for the consecutive meetings were driven by the participants and designed to meet their interests. Although the leaders belonged to different categories of services as in private and anchor operations, the meeting topics were kept quite similar as they met the requirements of leadership development for both groups. Table 3.5 summarises the PLC programme designed for both PLC1 and PLC2.

Table 3.5 PLC programme for PLC 1 and PLC 2

Timeline	Phases	Data sources
April 2015	Introductory Meeting	
Objective	Orientation: mutual introduction and briefing of the research study	<ul style="list-style-type: none"> • Researcher's Reflective Journal
May 4 /11 2015	PLC Meeting 1	
Objectives	<ul style="list-style-type: none"> • Getting to know the group • Introduction to PLC and collaborative leadership development • Developing goals for shared learning as a PLC group 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and materials	Ice breaker activity Powerpoint slides – PLC and collaborative leadership development Leadership journey – sharing by leaders Reading articles on PLC and collaborative leadership	
Follow up online activity	'Participants learning goals to develop trust for a shared learning process as a PLC group'	<ul style="list-style-type: none"> • Discussion Forum
June 2 / 9 2015	PLC Meeting 2	
Objectives	<ul style="list-style-type: none"> • Building relational trust among participants • To know the values of one's own values and others in the group to build trust among staff members 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and materials	Exercise on core values to identify similarities and differences in the group	
Follow up online activity	'Building relational trust between staff members and between the leader and the staff members	Participant's Reflective Journal

Timeline	Phases	Data Sources
July 8 / 10 2015	PLC Meeting 3	
Objective	<ul style="list-style-type: none"> • Building relational trust to collaborate with staff members, parents and children 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and materials	<p>Exercise on relational trust - respect, personal regard, competence and personal integrity</p> <p>Sharing participants' reflection on relational trust from the article</p>	
Follow up online activity	'My Personal Journey with the PLC group'	<ul style="list-style-type: none"> • Participant's Reflective Journal
3/ 4 August 2015	PLC Meeting 4	
Objectives	<ul style="list-style-type: none"> • Reflection on building trust for collaborative leadership practices • Knowing my leadership approaches 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Materials and activity	Reading article: Roy, P. (2007)	
Follow up online activity	'Building trust for collaborative leadership'	<ul style="list-style-type: none"> • Discussion Forum
2 / 8 September 2015	PLC Meeting 5	
Objectives	<ul style="list-style-type: none"> • Six leadership styles guided by emotional intelligence • Defining dimensions of collaborative leadership 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and materials	Reading Article: Goleman, D. (2000).	
Follow up online activity	'Leadership styles' based on Goleman's article	Reflective Journal

Timeline	Phases	Data Sources
6 / 8 October 2015	PLC Meeting 6	
Objectives	<ul style="list-style-type: none"> • Leadership styles • Understanding collaborative leadership approach 	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and Materials	<p>Powerpoint slides on leadership approaches</p> <p>Discussion on Goleman's article and its applicability at work for leaders</p> <p>Reading Article: Harris, A. (2011).</p>	
Follow up online activity	Thoughts on PLC and collaborative leadership	Reflective Journal
6 / 9 November 2015	PLC Meeting 7	
Objectives	<ul style="list-style-type: none"> • Review on dimensions for collaborative leadership <p>Leaders' thoughts and reflection on the applicability of the PLC dimensions for collaborative leadership</p>	<ul style="list-style-type: none"> • Video Recording • Audio Recording • Researcher's Reflective Journal
Activity and materials	Discussions and sharing	
Follow up online activity	Collaborative leadership is everyone collaborative?	Reflective Journal

3.7 Focus group discussions

The final data collection phase comprised four focus group discussions held with the senior teachers of the anchor group and the private group respectively known as TG1 and TG2. Two teachers working with the respective leaders (total of 12 from the anchor and 10 from private group) were invited to attend the discussion (See Appendix 6 for focus group questions). However, two teachers from the anchor group did not attend, resulting in ten teachers from each group. The leaders took the onus of selecting senior teachers of their choice, who met the selection criteria for the study provided in Table 3.7. Discussions were conducted in groups of five for both groups to ascertain their views on leadership practices implemented in the individual centres by the leaders after the PLC process. Table 3.6 summarizes the criteria for selection of senior teachers who participated in the study.

Table 3.6: Criteria for senior teachers

Total no. of participants	Educational background	Job responsibilities
22 EC teachers (2 individuals from each of the 11 centres)	GCE 'O' or 'A' level or Graduate with a Diploma in Early Childhood Education	<ul style="list-style-type: none"> • Works at a senior level capacity • At least 3 years of teaching and managing a class • Participates in centre administration matters, curriculum decision making, meeting parents and involved in centre accreditation process • Good command of the English language

3.8 Data analysis

This section discusses both quantitative and qualitative data analysis. Quantitative data were gathered using a web-based PLCA-R survey hosted by Qualtrics software platform. The survey was administered to EC leaders before and after the PLC. The software was preferred since it protects the identity of respondents in order to maintain confidentiality (Qualtrics, 2012). Responses from the surveys administered before and after the PLC were analysed by performing cross-tabulation in order to obtain descriptive statistics on the frequency of the results. Since the data set were small for this study, quantitative data analysed by the Qualtrics software programme were then transferred to a Microsoft word

document. Tables were drawn to present the data numerically to analyse and compare the difference in participants' responses.

Qualitative data analysis is an iterative and reflexive process that begins as data are being collected (Stake, 1995), enabling investigators to generate an emerging understanding about the research questions (Merriam, 2009). Before analysing qualitative data, a database for each PLC was established which consisted of transcribed data from the pre- and post-individual interviews, observations of PLC meetings, and focus group discussions. All qualitative data were managed using the NVivo 11 software programme. The purpose of using a software programme was to prevent any loss of data and enhance the retrieval of information during analysis. According to Merriam (2009), using computer-assisted qualitative data analysis software like NVivo 11 offers an organised filing system for data and analysis and helps to visualise the data relationship among codes and themes. However, Punch (2005) contends “whatever package/software used...needs to be remembered that it is a tool which can help in qualitative data analysis, but which cannot do the analysis” (p. 229). This reminded me that as a researcher who was cognisant of the paradigmatic position of the study, my initiative and personal attention was necessary to understand the data before using the software programme. Therefore, the following section describe the procedures employed in the process of qualitative data analysis. These include data organisation which includes coding and theme building, and data interpretation.

3.8.1 Data organisation

First, I managed the data manually transcribing the individual interviews, field notes of observation from PLC meetings, participants' online reflective journals, discussion forum and focus group discussions with teachers into an electronic word document and sorted the data based on sources of information. Data sources were categorised according to the research questions. I followed Braun and Clarke's (2007) six phase process for thematic data analysis. Before uploading the data sources into Nvivo, I read through all the transcripts several times to gain familiarity and an overall understanding of the data. During the reading and analysing process, I compared the notes in my reflective journal to the emerging data. As a first step of the process, I did an inductive analysis of the transcripts to make notes of the patterns, themes and categories of codes that emerged from the data. The research questions for this study also provided a framework to generate possible categories of codes. These were drawn from empirical research on PLCs and the leadership

literature. Thus, both inductive and deductive approaches were drawn upon during the data analysis.

Next upon loading the data sources into Nvivo, a second coding phase was undertaken by highlighting features of the data that might be relevant to answering the research question. This process reduced lots of data into small chunks of meaning. During the coding process, the list of categories was modified, and new categories were added in order to capture key trends and insights emerging from the participants' responses (Miles & Huberman, 1994). A continuous iterative process was established during the analysis, which involved sorting and merging overlapping data. With the help of Nvivo's sorting techniques, I was able to identify major categories and sub-categories in the data (Pratt, 2006). As for the third process, the coded data were examined for broader patterns of meaning that could be collated into potential themes. Since the researcher is the main tool for analysis, and interpretation requires flexibility, creativity, insight, and intuition (Denzin & Lincoln, 2005), once the data management was completed in Nvivo, I undertook a manual analysis of the data.

Next, the themes were reviewed and checked against the dataset, to determine if they provided a convincing story of the study. However, during this process of analysis I had to guide my thinking with questions as suggested by Boeije (2010) such as: "What is going on here? What is this about? What is the problem? What is observed here? What is this person trying to tell? What else does this term mean? What experience is represented here?" (p. 99). These questions provided the framework to analyse the data logically and offered a meaning-making process. During the fifth process, the thematic analysis of each theme was presented coherently and logically with vivid verbatim extracts that clearly demonstrated the main points. This was easily done with the aid of Nvivo which had provisions to categorise verbatim extracts under each category labelled with the participants' pseudonym. The sixth phase of the data analysis process contextualised the thematic categories in relation to existing literature and presented an argument related to the research questions in a written report.

3.8.2 Data interpretation

During the analysis process, I moved back and forth in the data and developed themes drawing on PLC and collaborative leadership literature. Each case study was analysed separately in detail and I then conducted a cross-case analysis to identify common and

different themes between both cases. According to Sutton and Austin (2015), reflexivity is a significant process for a qualitative researcher when articulating their position, “so that readers can better understand the filters through which questions were asked, data were gathered and analysed, and findings were reported” (p. 226). Hence, I brought my own perspective of data interpretation to provide a context in analysing the theoretical framework of Mezirow’s (1995) transformative learning theory in this study.

3.9 Researcher role

I assumed a dual role as the researcher and facilitator of the PLC implementation in this study. The subjective nature of being an interpretive researcher provided me an opportunity to co-construct knowledge with the participants. Nandhakumar and Jones (1997) describe such processes as “engaged data gathering methods” (p. 119). Such processes attenuate the boundary between the researcher and participants, providing intensive interaction to gain additional insight about the research context. However, it was essential to strike a balance to maintain objectivity between my role as a researcher and my overt role as a facilitator in leading participants during the PLC sessions.

There is little literature exploring the dual role of a facilitator/ researcher in a research inquiry (Thornton, 2010). The dual role cannot be made discrete and it “demands mental agility on behalf of the researcher in regularly flipping between the roles, and social dexterity in avoiding drawing the attention of other actors to the change” (Nandhakumar & Jones, 1997, p. 126). Thus, researchers need to engage in reflexive analyses to examine the impact and to clarify one’s own assumptions and behaviour process and position in the research inquiry (Creswell, 2003). In an interpretive study, the researcher is committed to recognizing the value-laden nature of the study through the selective nature of epistemological assumptions and methodological approaches (Creswell, 2012; Denzin & Lincoln, 2005). Establishing a process of ‘reflexivity’ helps an interpretive researcher to enhance the rigour of the study and its ethics. Reflexivity was established by maintaining a researcher’s journal to capture the biases and feelings that influenced my position as a researcher (Creswell, 2012).

My professional role in the local ECE sector in Singapore includes online and face-to-face teaching, training and mentoring leaders and teachers in the field. My familiarity and experiences in the ECE sector helped me to form trusting relationships with participants during the research inquiry. However, I understand that my privileged position may bring unintended influence over the participants and may lead to biases and assumptions. The

following precautions were taken to establish trustworthiness and ethical considerations to maintain the credibility of my study.

3.10 Trustworthiness

Lincoln and Guba (1985) suggest that trustworthiness is measured by credibility, dependability, confirmability and transferability. These aspects jointly ensure quality and rigour in qualitative research. Each of these will be discussed in relation to the current study.

3.10.1 Credibility

Credibility was established using several methods: data triangulation; peer debriefing; avoiding biases in data collection procedures; prolonged engagement; and persistent observation (Creswell, 2003). Triangulation involves using several sources to collect data to ensure consistency when verified across the different methods (Stake, 2006). I engaged my research supervisors for reviewing and assessing transcripts during the research inquiry. My prolonged engagement with both participants in the field and on-going observation during the data collection provided the breadth and depth necessary to gain full understanding of the phenomena being investigated (Yin 1994). However, to avoid any unintended personal biases influencing my recording of the responses during data collection, the one-on-one interviews, participants' interactions during the PLC meetings and focus group meetings with teachers were audio- and video-recorded. This practice enabled me to transcribe participants' responses accurately and helped to reduce the problem of researcher's bias in analysing and interpreting data (Johnson & Christensen, 2012).

3.10.2 Dependability

Dependability relates to whether the process of research is logical, traceable and clearly documented, particularly the methods chosen and the decisions made by the researcher (Lincoln & Guba, 1985). The major technique for establishing dependability was conducted through an audit trail of the research process and findings shared with my research supervisors. Dependability can be enhanced if threats to inaccuracies of data collection and interpretation are reduced. In order to enhance descriptive and interpretive accuracy, I used low-inference descriptors such as field-notes, and audio-recordings of interviews and focus group discussion to capture all necessary information (LeCompte & Goetz, 1982). The audit trail included discussing the coding process and initial trends with my supervisors, to enhance the credibility of the process of coding, identifying emerging

categories, and interpreting data. Further, a member checking process was undertaken by sending the summary of the pre- and post-interview transcripts to participants for their validation (Johnson & Christensen, 2012). Frequent debriefing sessions with my supervisors provided a forum to discuss data analysis and whether interpretations were in line with the research questions and conceptual framework of collaborative leadership and PLCs.

3.10.3 Confirmability

Confirmability is defined as “the degree to which findings are determined by the respondents and conditions of the inquiry and not by the biases, motivations, interests or perspectives of the inquirer” (Lincoln & Guba, 1985, p. 290). As an interpretive researcher and acting as a facilitator in this study, I was aware that that my perspectives, experiences, beliefs and values might have influenced the study (Johnson & Christensen, 2012). An active process of reflexivity was integral to increasing the credibility of my findings. I was engaged in a continuous process of self-reflection of recognising, examining and understanding how my background affected the subjectivity in the research process. This reflexive process was augmented by maintaining a reflective journal which helped me to keep detailed records of my own thoughts, reflections, the rationale for decisions and interpretations during the process of data collection and analysis (Nadin & Cassell, 2006).

3.10.4 Transferability

Transferability in qualitative research refers to whether or not particular findings can be transferred to another similar context or situation, while still preserving the meaning and inference from the completed study (Lincoln & Guba, 1985). I have provided a complete description of the setting, including the boundaries of the study to facilitate comparisons and to understand the context of the study. Providing thick descriptions of the findings and conclusions will enable the reader to make informed decisions about the transferability of the findings to their specific contexts (Toma, 2006). Both quantitative and qualitative parts of this study involved a small number of participants and the study was mainly qualitative in nature. Therefore, this study does not aim to make generalisations from the research findings to the wider contexts (Stake, 2008).

3.10.5 Chapter summary

This chapter has presented the research methodology for this study discussing the research process which includes the philosophical underpinnings of the study and the research

design. The rationale for employing a single embedded case study was explained and the multiple data collection methods such as the pre- and post-PLC survey, individual semi-structured interviews, field notes, focus group interviews and online activities that included a discussion forum and reflective journal discussed. Ethical issues such as gaining informed consent were considered and this was followed by a description of the research groups, criteria for participant selection, research procedures and the timeline of the research. Finally, the chapter closes with procedures employed to conduct data analysis and my stance on establishing the trustworthiness of the findings.

CHAPTER 4: Findings from PLC1

4.1 Chapter overview

This chapter presents the findings of PLC1. The first section begins by describing findings from the PLCA-R survey administered before the PLC implementation and this is followed by participants' perceptions of their leadership practices analysed from the pre-PLC individual interviews. The next section reports findings of participants' engagement in the PLC process and its influence on their leadership practices. This is followed with findings from the post-PLC individual interviews documenting participants' shifts in thinking, implementation of collaborative leadership practices and their perceptions of teachers' attitude to the changes. The chapter also outlines findings from the PLCA-R survey administered after the PLC implementation. The next section presents findings from the senior teachers (STs) focus group (FG) discussion of perceptions of the PLC process on their centre leader's practices before concluding with the chapter summary. At this point, it is important to note that due to a medical condition, one principal was not available for the post-PLC interview and as a result, her senior teachers were not contactable for the FG discussion. Therefore, analysis of results from the post-PLC interviews and FG discussion consist of data from five principals and their STs for this group.

4.2 Leaders' perceptions of PLC attributes before the PLC implementation:

PLCA-R survey

To ascertain leaders' perceptions of their centre-level practices before the PLC implementation, participants were asked to complete an online survey based on the dimensions of PLCs. The survey was completed by all six participants. Table 4.1 presents the summarised results of the survey. Participants had the choice of selecting 'strongly agree', 'agree', 'disagree' or 'strongly disagree' for each item in the survey. However, in the discussion of results here both 'strongly agree' and 'agree' are presented as 'agree' and 'disagree' includes both 'strongly disagree' and 'disagree'. Responses from the sub-scales of the five dimensions will be discussed together with comments made in each section.

Table 4.1 Results of pre- PLCA-R survey: PLC1

PLC1 Leaders N=6					
	Statements	SA	A	D	SD
<i>Shared and Supportive leadership</i>					
1	Staff members are consistently involved in discussing and making decisions affecting issues at the centre and suggestions are incorporated into decisions made by the principal/supervisor	2	4		
2	The principal incorporates advice from staff members to make decisions	2	4		
3	Staff members have accessibility to key information	1	5		
4	The principal is proactive and addresses areas where support is needed	1	5		
5	Opportunities are provided for teachers to initiate change	1	5		
6	Leadership is promoted and nurtured among teachers	1	5		
7	The principal participates democratically with staff sharing power and authority	1	1	4	
<i>Shared Values and Vision</i>					
1	A collaborative process exists for developing shared vision and shared values among staff	1	5		
2	Shared values are reflected in ways of working that guide decisions about teaching and learning	1	5		
3	Staff members share visions about improvements that clearly focus on children's learning	1	5		
4	Policies and programmes are aligned to the centre's philosophy and vision	2	4		
5	Decisions are made in alignment with centre's values and vision	2	4		
6	Parents/extended family members are actively involved in creating high expectations that serve to increase children's learning [development]	1	4	1	
<i>Collective Learning and Application</i>					
1	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work	3	3		
2	Collegial relationships exist among staff members that reflect commitment to centre's improvement	3	3		
3	Staff members plan and work together to find solutions to meet the diverse needs of children and their families	4	2		
4	A variety of opportunities and structures exist for collective learning through open dialogue	3	3		
5	Staff members engage in dialogue that reflects a respect for diverse ideas and that lead to continued inquiry	2	4		
6	School staff members are committed to programmes that enhance learning	2	4		
7	Professional development focuses on teaching and learning	1	5		
8	Staff members collaboratively analyse multiple sources of data to assess the effectiveness of instructional practices for children	1	4	1	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 4.1 cont'd

PLC1 Leaders N=5					
	Statements	SA	A	D	SD
Shared Personal Practice					
1	Opportunities exist for staff members to observe peers and to provide feedback related to teaching practices	1	5		
2	Staff members informally share ideas and suggestions for improving children's learning	3	3		
3	Staff members collaboratively review children's learning to share and plan to progress the learning	1	5		
4	Staff members provide feedback to peers related to instructional practices	1	5		
5	Opportunities exist for coaching and mentoring	2	4		
6	Individuals and teams have the opportunity to apply learning and share the results of their practice	2	4		
Supportive Conditions – Relationships					
1	Caring relationships exist among staff members and children that are built and respect	2	3	1	
2	A culture of trust and respect exists for taking risks	2	3	1	
3	Achievements are celebrated and recognised	2	4		
4	Staff members, parents and members of the community exhibit a sustained and united effort to embed change into the culture of the centre	1	5		
5	Relationships among teachers support honest and respectful examination of data to enhance teaching and learning	2	4		
Supportive Conditions – Structures					
1	Time is provided to facilitate collaborative learning and shared practice	1	4	1	
2	Appropriate technology and instruction materials are available to staff members	1	4		1
3	Resource people provide expertise and support for continuous learning	2	3		1
4	Communication systems promote a flow of information among staff members/parents and the community	2	3	1	
5	Communication systems promote a flow of information including central office personnel, parents and community member	2	2	1	1

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Results demonstrated that most participants agreed with the items in all the dimensions with disagreements on 10 items of the survey. Four participants disagreed on item 7 of supportive and shared leadership, “*the principal participates democratically with staff sharing power and authority*”; however, there were no open-ended comments explaining this disagreement. This could be an indication of the hierarchical relationship that existed between staff members and the principal which did not involve sharing power and

authority. Significantly, there were disagreement on all five items related to structural conditions. There were no open-ended comments explaining their disagreement. It is apparent from the response that supportive structural conditions were not favourable in their services for *collaborative learning, provision of technology for instruction, communication, expertise support from resource people and accessibility to communication systems to disseminate information*. There was no disagreement on items relating to shared personal practice; however, one open-ended comment illustrated how feedback was provided to teachers. It is clear from the comment that feedback was provided by the principal or the senior teachers instead of a PLC-oriented peer feedback process. Furthermore, comments provided by two participants commented on the collaborative decision-making process at work and principals being a good role model for staff members. These were generic comments and not related to any particular dimensions:

<i>Decision making is a collaborative effort</i>
<i>As a principal, we should model good leadership behaviour so that staff will learn from us good values</i>

<i>Feedback to teachers is provided annually during appraisal and by the senior teachers when they observe teacher's classroom teaching</i>

On ratings of items related to collective learning and application the following comment was provided to support the disagreement on item 8 by the participant:

<i>Teachers can be pretty new and the relationship to support the data to enhance teaching can be limited.</i>

4.3 Leaders' perceptions of their current leadership practices: pre-PLC individual interview

This section describes participants' responses to the pre-PLC individual interview. Questions sought information on participants' leadership roles and work; definition of leadership; their beliefs and values relating to leadership; their notions about sharing leadership tasks; views about PLCs; and the opportunities they may have for leadership development. Inductive and deductive analysis of interview responses resulted in five

categories: leadership roles and practices, beliefs and values influencing leadership, sharing of leadership tasks, knowledge of PLCs and opportunities for leadership development. These aspects will be presented supported by verbatim extracts from the data.

4.3.1 Leadership roles and practices

When asked about their roles as leaders, participants unanimously shared that their role was to lead and guide their staff members. They had a clear sense of their roles as leaders in guiding, mentoring, inspiring and motivating their staff members. Further, being a reflective leader and a role model to their staff members were considered vital responsibilities of leaders. Participants articulated how these roles manifested in their practices at work. Su Ling commented that she guides, mentors, supports her teachers and she noted, ‘I ensure that they are influenced, and I do these by being the role model.’ Victoria noted that her teachers were inspired when she motivated and guided them to be involved in projects. Daisy articulated how she walked the talk by guiding her teachers through role modelling and undertaking teaching roles alongside her teachers. She also pointed out how she would like to be viewed as a leader, ‘I want my teachers to see me as someone who is very much in the classroom not just being a leader and being directive’. Maria shared the virtue of being a reflective leader, and how it helped her to see issues from the teachers’ perspectives. She added that she understood her teachers’ problems at the ground level due to her own experience being a teacher in the past. Her role modelling served as a guide and motivation for her teachers to be more evaluative at work and she commented that, ‘I saw my teachers demonstrating these reflective behaviours during the SPARK accreditation process’. On a similar note, Siti commented that a leader in ECE should have been a teacher before and be equipped with the relevant knowledge and skill to understand the challenges on the ground. She added that leadership is about influence. It is about influencing her staff members to be reflective when making decisions. Siti noted that administrative duties took up a major part of her work but she identified her strength as a curriculum leader. It provided her the opportunity to guide and mentor her teachers to be reflective in their pedagogy. She commented:

Teachers are very good at ground work but miss out being a reflective practitioner. If you want to see quality in children, then one has to be reflective. As a leader I encourage teachers to be reflective, that's something a leader needs to do [Siti, pre-PLC/I]

Similarly, Mei also commented that her leadership role was consumed by administrative tasks. Mei reflected on her first experiences when she started as the principal of the centre. Coming from a management discipline, her leadership style and practices were not accepted by her staff members. However, she had to learn how to change her practices following feedback from her staff members. She expressed:

When I first started in the centre as principal, I was very task oriented. Teachers began to rebel, I asked them how I should change. They listed all the issues, then we came to an agreement if they can follow up with their work without my intervention ...we can work this out. It helped me to reflect on myself and I changed my leadership style [Mei pre-PLC/I]

The change also made her understand that it was not about just getting the work done and managing people but building relationships to encourage and guide her staff members at work. However, she admitted that her leadership practices reflected more of her management skills and she was still learning to be a people person.

4.3.2 Beliefs and values influencing leadership

Participants' responses to the question on their beliefs and values about leadership were congruous to the mission, vision, and values proposed by their organisation. Further, participants also expected their staff members to adhere and ensure the goals and values were articulated in their work with children, parents and other staff members. During the interview, I probed further to find out about their personal values and beliefs about leadership, beyond the organisation's philosophy. However, only three leaders shared their perspectives on personal beliefs and values. Siti commented that she believed in collective learning and encouraged her staff members to take leadership in their own learning by being reflective. As for Maria, her values were set in giving the best to the children. She required teachers to be 'reflective when any planning or decisions are made in their services to ensure children are the beneficiaries.'

In contrast, Mei felt that that adhering to the organisation's philosophy alone may not be beneficial if leaders have to deal with challenges posed by staff members. She noted that it was important to have the right leadership approach to meet with the organisation's philosophy. When Mei took over the centre as a principal, her responsibilities included ensuring that teachers were well informed of the mission and vision of the organisation. Mei had to be firm with teachers to ensure they constantly practiced the mission and vision at work. However, she realised that the staff members were not open to her leadership style

and furthermore, there was a lack of communication and non-cooperative behaviour amongst the teachers. She realised that her leadership style did not positively influence her staff members, but rather became a barrier. She commented:

I realised that without good communication and teamwork, all the best principles set cannot be achieved...I had to change! Being consultative and using a collective approach...have become my beliefs and values [Mei/pre-PLC/I]

4.3.3 Sharing leadership tasks

When participants were asked how much of their leadership work and authority they would share with their staff members, all six participants explained that sharing their leadership tasks may be an extra workload for teachers. They explained that teachers were already overloaded with preparing portfolios and lesson planning in addition to their full teaching loads. Sharing of power and authority with all teachers was not a common practice since there were guided policies on operational matters for principals. However, senior teachers who were delegated to do some tasks were considered to be stakeholders in sharing power and authority within the parameters of their delegated roles. Nevertheless, some participants expressed reservations in delegating and sharing leadership tasks with teachers. Su Ling responded that she would entrust tasks such as parents' programmes, planning field trip and curriculum planning to her staff members and mentioned that, 'these are the little things that teachers would share as leadership tasks at the centre level'.

Siti explained that apart from delegating tasks, the senior teachers also had an added responsibility of being the conveyors and moderators to disseminate messages from the principal to the rest of the staff members. She added that when she made decisions, it was not necessary to inform all the staff members; however, the senior teachers and key teachers appointed were expected to explain the decisions made and moderate the feelings of the teachers. She said, 'they work as a bridge between me and the teachers to convey and make them understand the changes that needs to occur at the centre'. On the other hand, Victoria reported that she would not share any of her leadership tasks with her staff members unless there was a requirement to groom any experienced teachers for a leadership position. She commented:

No, I normally don't share any task with the teachers. I don't want to bother them; they have their load of tasks as well. [Victoria/pre-PLC/I]

On the same note, Daisy commented that her centre was very large and each classroom had a capacity of about 40 children, which took up much of the teachers' time. She added that leadership tasks would be shared only if the teacher demonstrated the capability and if the management approved the initiative. She expressed:

When anyone comes through as a senior teacher they do so with the guidance of the headquarters. If they are not ready, I will not add on anymore workload on them. I just want them to do things they are best at doing...if they have the capabilities then I shall look into it.
[Daisy/pre-PLC/I]

In contrast, Mei had a different perspective on delegating tasks to her staff members. She noted that delegating tasks may empower a staff member; however, teachers may not be able to perform to meet the required expectations since they are overwhelmed with responsibilities. It could be challenging monitoring their work to meet the high expectations of the reporting officer. She added that the delegation of work to other staff members added to the workload of the principal and as a leader she had to ensure they were performing well and this doubled up her workload. She commented:

Staff are overwhelmed with their own responsibilities and they tend not to focus on the given work. So, in the end I will be the one chasing and reminding them to complete the work and it boils down to micromanaging a task...So I'm very careful what is given to them [Mei/pre-PLC/I]

4.3.4 Leaders' knowledge of PLC

When asked about their knowledge of PLCs, participants recalled memories of management organised 'professional learning circles'. Their objective was to come together to talk about challenges at work with a facilitator to provide solutions. These 'professional learning circles' became defunct as teachers were not keen to attend them. Mei quoted an example of how a facilitator came around to conduct a 'professional learning circle' session with her teachers on classroom facilitation. Teachers were probed and asked too many questions. The session became very confrontational and teachers were intimidated and very little interaction took place. She added that teachers, 'were not keen to have someone they were not familiar with and finally the idea of having PLC was dropped that year'.

Similarly, Maria commented on how teachers in her service were unhappy to participate in the professional learning circles. She described how an English language development

specialist came in as a facilitator to observe the teachers in the classroom. She would then meet the teachers during the ‘professional learning circles’ and provide feedback on her observations on areas that teachers needed to improve. There was also sharing of literature and a review of what they had learnt from the article. Apparently, this had been a cause for much stress and dissatisfaction at the workplace for her teachers. Daisy added that the facilitators of ‘professional learning circles’ lacked experience and expertise to invoke interest in the teachers to participate. The sessions were mainly about pointing out teachers’ shortcomings rather than to help them learn from each other. She related how discussions during the meeting were polarised and became directive than being consultative. She added that:

Facilitators don't seem to have the professional experience. They should have some substance or some back up plan to make teachers feel comfortable which didn't happen at all. I think they need some facilitation techniques. [Daisy/pre-PLC/I]

Participants’ knowledge of PLCs was therefore limited and they lacked information beyond their experiences of ‘professional learning circles’. Siti and Su Ling also shared that the concept of PLCs was unknown to them and they had never heard of its practice in Singapore. Participants’ conceptual knowledge of ‘professional learning circles’ was a deficit model contrary to the principles of PLCs. The negative experiences and having no prior knowledge about PLCs rendered in them a misconception of PLCs. This misconception was also evident in their survey results as they agreed on most items without appearing to have a clear understanding of PLC dimensions related to their practice.

4.3.5 Capability building for leadership

As a concluding interview question, I asked whether participants had ongoing leadership development for capability building through collaborative professional learning with other leaders in their services. All six participants responded that they aspired for such collaborative learning to develop their leadership practices. Being ‘Executive Principals’, these leaders are expected to perform at their best. However, when it came to capability building and leadership development, management provided limited opportunities for collaborative professional learning. Mei commented that collaborative support is important because leadership becomes a lonely journey and a lack of such support thereof could be stressful. Further, participants also expressed that directives were disseminated not to share their best practices with other leaders within the same organisation. The principals were put in cluster groups managed by an Area Director (AD) to guide them in administration

issues. However, these ADs discouraged them from sharing their practices with principals in other clusters fearing that others may learn strategies to perform better. Participants expressed that such competitive assumptions should change for all to improve and learn from each other collaboratively.

On a similar note, Daisy explained how principals were encouraged to exemplify best practices driven by a competitive spirit and this was supported by the management. She emphasized that when the centre performed well, it reflected on the principal's competency. Nevertheless, principals were not encouraged to share good practices with other centres within the organisation which could restrict collaborative sharing and learning. She added,

I have certain strong feelings against such practices of being competitive; however, I'm not allowed to talk the way I should talk. I need to be a role model for the rest. So, I have learnt how to shut up! Because one can be judged and it's very hard. [Daisy/pre-PLC/I]

Su Ling responded that there were fewer opportunities for leaders to develop professionally, unlike the senior teachers who are professionally groomed for leadership positions. She acknowledged that there was a career path in progression for principals to become a CQM (centre quality manager); however, there were limitations in the organisation to provide leadership development opportunities through professional or collaborative learning. She expressed:

It will be good if there are ongoing development courses for personal leadership development or just for all leaders to come together to share and learn...but sharing is restricted. [Su Ling/pre-PLC/I]

Siti expressed that she aspires to see leaders come together as a professional group to share, interact and learn. She also commented on how the management discreetly discouraged sharing and learning amongst principals:

I do see there is always some secrecy. I also get an email not to share openly about certain practices. People need to understand that when you are giving out certain information you will learn more and learning grows! [Siti/pre-PLC/I]

Victoria stated that the culture in the organisation lacked support for leadership and capability development. She expressed:

I really want to voice out but I have to show consideration for others...the option of sharing is only sharing what we should and there are things we

can't do or go beyond. So, I don't see leaders development happening so soon here [Victoria/pre-PLC/I]

4.3.6 Section summary

Findings of the pre-PLC individual interviews explored participants' roles and practices, and their espoused beliefs and values about leadership. Participants had varied perceptions about sharing leadership with their staff members. Delegation of tasks to teachers was believed to be part of sharing leadership with teachers; however, some participants believed that teachers should not be given additional leadership tasks beyond their workload. Interactions with the participants also provided insights into participants' lack of information and misconceptions about PLCs. Participants also shared the lack of leadership growth and deliberated on the need for professional learning and capability building. Findings analysed before the PLC served to plan the road map for the PLC implementation. The issues also became sources for further discussions and interactions during PLC meetings.

4.4 Leaders' engagement in the PLC process and its influence on their leadership practices

This section focuses on leaders' engagement in the PLC process and its perceived influence on their leadership practices. Data for this section were drawn from participants' involvement in the face-to-face meetings, my reflective diary, participants' online engagement and their responses in the post-PLC individual interviews related to how the PLCs influenced their leadership practices. Responses were inductively and deductively analysed with the following themes emerging: Trust, perceptions of PLC, and collaborative enquiry through PLC.

4.4.1 Trust

The centrality of trust emerged early, when participants raised the importance of establishing confidentiality to safeguard information that was discussed in the PLC meetings. Apart from being an integral part of building relationships between the PLC members, the notion of trust became a point of discussion during the PLC process and it enabled them to see the challenges and find ways to address the issues. Participants' responses across the data set focused on the lack of trust amongst their staff members which impinged on building positive relationships in their services. The following sub-categories: establishing trust within PLC, issues of trust from PLC to workplace, and self-awareness on leadership practices were identified.

Establishing trust within PLC

When participants met for the first PLC meeting, there was an atmosphere of apprehension and anxiety inhibiting participants from interacting openly. Although the six participants belonged to the same organisation, there were no prior experiences of working together collaboratively similar to that of a PLC environment. An ice-breaker activity during the first meeting encouraged participants to open up and share about their workplace and leadership practices. Taking into consideration that participants held misconceptions of PLCs, a briefing session was held to explain the purpose of the research, introduction to online tools and the definition of PLCs employed in the study. Participants were encouraged to know that they would take ownership of the PLC by sharing, discussing, interacting and bouncing ideas off each other to resolve issues. Mei and Su Ling commented that they lacked such a platform to share and to self-direct their learning by taking perspectives from each other. Su Ling noted:

This is all new for us and knowing that we could come together out of our office to talk about issues and challenges ... will be a good thing
[Su Ling/PLC/M1]

Mei also commented that it may serve as a good platform to share practices with each other. She added that principals lacked such opportunities to share practices and learn from others. Mei and Su Ling were the only participants who contributed at this point. Mei was forthcoming and she commented:

As matured professionals we need to trust each other to share in the first place. I think we need to be open and at the same time the sharing will help us to learn from each other's experiences [Mei/PLC/M1]

Maria promptly responded that she was not sure if the sharing within the group would be safe and kept confidential. She was afraid that it might become a platform for complaining and not resolving issues. She had apprehensions that members could unwittingly take the information out of the PLC domain to share with others. As a result of participants' fears and apprehension, a suggestion was made to develop objectives to help the group establish trust. Shared objectives were set as guidelines for participants to respect the group dynamics and maintain confidentiality of information shared within the PLC group. Table 4.2 illustrates participants' shared norms.

Table 4.2 Shared norms established by PLC 1

Goal	Develop professional learning community (PLC) with leaders in the ECE industry to improve leadership practices through collaborative dialogical approach
Victoria	To embark on open and truthful communication with members to share and improve individual competencies
Maria	To openly share viewpoints with other leaders and find solutions to issues that we face
Mei	Be a change agent leveraging innovative thinking through our sharing and maintain confidentiality
Daisy	To share and learn collaboratively with respect and without judgement for transformative learning
Su Ling	Foster interactions between peers/leaders with a sense of trust, collegiality and respect
Siti	Engage in open discussions that enable leaders to see different viewpoints analytically

At the second PLC meeting, participants discussed aspects of trust from an article posted to them. They shared how building trust and respect can be elusive and is a tough job as a leader. Victoria pointed out that the article focused on the principal's interpersonal qualities rather than strategies to work with teachers. Earlier on, during the pre-PLC interviews, Victoria and Mei shared their challenges encountered with their staff members and commented that the literature had given them an insight that leaders should have shared beliefs and values with staff members to build relationships. Both Maria and Victoria shared that due to heavy workload commitments they seldom had time to reflect on their beliefs and values as a leader, and as leadership practices evolved due to the changing needs of the sector, teachers' professional needs and their own professional growth. Hence a 'core values' activity was introduced to enable participants to unpack their individual beliefs and values about leadership.

Participants displayed similar beliefs and values about leadership and each participant explained how these values guided their leadership practice. The importance of building trust and relationships with staff members by understanding their shared values and beliefs was discussed. An unexpected turning point happened when Mei shared her experience of starting out as a centre leader. She shared that situations could have been better if she had known about the importance of building trust with teachers then. She recounted how she failed to solve problems due to the lack of trust amongst her staff members. The rest of the participants appeared surprised that Mei would take the risk of

sharing a failure. Mei described how she came across a very difficult staff member, who was pitting the teachers against each other. The situation turned chaotic with teachers resigning. Mei acknowledged, '*teachers could have assumed that as a principal I was incapable of dealing with the issues*'. Mei confessed that she was at her wit's end when she dealt with the situation which led to the management's intervention and a major overhaul to let people leave and to recruit new teachers. Mei expressed:

Coming to think of it now I realise that teachers never trusted me neither there was trust amongst themselves. I could have handled the situation well but I failed to do so! Only if I had known then... all about trust and how to...? [Mei/PLC/M2]

She realised through the interactions, readings and the core values activity that trust was the main connective tissue for a collaborative work environment and efforts should be made to build positive relationships amongst teachers. She added that the core values activity may help as a starting point to work with her teachers as trust was still an elusive issue in her centre. The situation changed in the PLC following Mei's admission. Victoria shared that she would like to try the activity with her teachers. She said, "*I've not attempted to understand my staff members. Perhaps this activity may help in knowing their values and find out what would drive them to be collaborative.*" Participants shared similar perceptions on how trust could deepen relationships and collaboration. Su Ling pointed out that the core values activity could be a good start-up activity to help her teachers articulate their values and beliefs in order to build trust and positive relationships amongst them. Mei responded, "*trust and respect are the ingredients for building collaboration and collegiality*" - she believed that improving teachers' interpersonal interactions might help to build trust and respect. Maria acknowledged Mei's point and expressed that she understood the rationale behind the core values activity and how it could help her to work with the teachers in her service. She commented:

Although we were diversified in articulating our beliefs and values the outcomes of the core values activity were similar to illustrate the connectedness to trust each other to work [Maria/PLC/M2]

The notion of trust evolved as the PLC meetings progressed. Participants' reflective journals further illustrated aspects of building and learning about trust within the PLC. Maria, Siti and Victoria shared similar thoughts on how the notion of collegial trust had evolved within the PLC group and helped the participants to build collaborative relationships and professional learning. Maria expressed that trust was an enabler and

members could agree to disagree on issues during the meetings. She said that the prospect of coming together as a PLC group was definitely beneficial for professional learning. She added:

As principals we seem to have similar challenges but never had the opportunity to share with our colleagues, the trust which is built in the PLC...actually made us empathetic to listen to each other's issues and provide solutions [Maria/RJ]

Siti shared that the notion of collegial trust and collaborative learning helped the group members to share without any inhibitions and the PLC seemed to be a trusting platform to learn from each other. Siti expressed:

The group dynamics has been healthy in our PLC group...there is rapport and there is trust and knowing whatever matters discussed will not be shared outside PLC and one will not be judged. [Siti/RJ]

Victoria reflected that the working relationship between the members of the PLC group had strengthened. She added:

The one ingredient...that binds us together was the collegial trust. Knowing that our problems are the same and trust ensures they can be shared and solved without fear. More than sharing solutions, it was encouraging that someone listens to you intently [Victoria/RJ]

Post-PLC interview responses from Mei and Su Ling expressed similar ideas that trust within their PLC strengthened their relationship. Mei shared that the level of trust developed through mutual respect enabled them to share experiences without being judged. She commented:

We were able to understand the challenges ...the core values exercise was a launching pad to know, we shared the same beliefs and values at work...that's how trusting relationship was built in our group...gave me the confidence that my challenges will be heard. We knew what to expect and I was comfortable with the rest during the discussion [Mei/post-PLC/I]

Su Ling expressed that although they were colleagues, she never expected the PLC would be a way to establish a bond and trust to open up, and it was unexpected. However, she added that getting to know each other began with the activities and sharing of challenges that all of them grappled with at work. She commented:

Core values activities was very helpful, I may not have seen the similarities in beliefs, values and challenges of my colleagues and to reflect on my own beliefs and values. Sharing of challenges established the connecting, bonding and building trust to support each other. [Su Ling/post-PLC/I]

The process of establishing trust within the PLC was built upon discussions related to confidentiality within the group and establishing mutual respect through trust-building activities. When participants felt safe, they then took appropriate risks to expose their vulnerabilities with each other. Trust was the key element to strengthen the bond and collegiality within the PLC and led to mutual support through professional sharing and learning.

Issues of trust: from PLC to workplace praxis

From building trust within the PLC, the discussion on trust extended to issues related to the workplace including the lack of positive relationships and trust amongst staff members. The interactions during the meetings and the reflective journal entries illustrated participants' experiences and how they wish to solve the issue of trust at work. At the third PLC meeting participants discussed how an article on trust posted to them helped them reflect on aspects of interpersonal engagements to build trust and respect with their staff members. Mei expressed that the article made her reflect deeply on whether she had embarked on those aspects of trust for a collaborative working environment. She commented that teachers were not co-operative, and the younger teachers had issues working collaboratively with the experienced older teachers. She added that she may have to look at issues from a different perspective. She commented:

Due to heavy workload I don't seem to have paid attention to open communication and the idea of soliciting feedback... perhaps I should start with my novice. I guess that's what they need [Mei/PLC/M3]

Victoria added, very hesitantly, 'I have not read the article but from the sharing it seems to be similar to my problem too'. She shared about how she had to take over the running of another centre in her vicinity, due to the resignation of the principal. With the situation being chaotic at the centre, the management expected Victoria to bring about changes in a short time. She encountered uncooperative staff members and a lack of collegiality amongst them, possibly due to the changes. She did not have the time to engage in

interpersonal communication, and said ‘I’m contemplating on where to begin with the teachers?’ Although the group discussions on the reading gave her some perspectives, she also wondered what she could do further. She commented:

I’m known to be a task master and my time is short to get the new centre ready for SPARK accreditation. I wonder how I would build that culture of trust and their commitment to collegial efforts.
[Victoria/PLC/M3]

Daisy responded to Victoria that building trust was a two-way process between the principal and staff members and took time to be established. She added that having personal time and showing care and concern would draw the staff members closer to the principal. She commented:

I’ve been close with my staff members and they feel at ease with my presence. Trust was easily built with my staff members when care, and good interpersonal relationship were invested. However, Victoria...it’s too quick to ascertain and change the mindset of your staff members...it depends on the principal’s behaviour and efforts to bring them closer [Daisy/PLC/M3]

Daisy and Maria shared their expertise and strategies to help Victoria cope with her challenges. Participants were also keen to know what other factors were required to build trust amongst staff members to communicate, share and learn from each other. Considering participants’ enthusiasm another activity on trust was introduced which facilitated opportunities for participants to reflect on enabling conditions to build relationships and trust with their staff members. The online reflective journals provided insights into participants’ perspectives on how their interactions, activities and related readings impacted their thinking on improving trust with their staff members. Maria, in her reflective journal, described that the activity on trust made her reflect and plan what was necessary to build positive relationships and mutual trust amongst her staff members. She expressed:

I see my teachers have issues...in respecting each other. I see them not being open to others’ ideas and suggestions. There’s gossiping and disrespect to accept another person’s views during meetings. I may have to work on some strategies to change their mind set and build... relationship and trust. [Maria/RJ]

Similarly, Su Ling commented on facilitating positive relationships amongst her teachers.

She expressed:

I have teachers from various countries working with our local English language and Chinese language teachers. They can't seem to connect with each other and at times there can be conflicts. I find it very difficult to get them together to learn collectively and in making decisions. [Su Ling/RJ]

She further commented that some teachers were not self-directed but rather waited for directives from the principal. They did not see the importance of working collaboratively. However, Su Ling believed that by working on aspects of building trust she hoped to see a cohesive team taking the initiative to work collaboratively. Victoria reflected that before coming into the PLC group she pondered how she could ever change the situation with some of the teachers at the new centre. However, the discussions, activities and readings had helped her to see the issues from a different perspective. She expressed:

I've come to realise that before changing the situation of my teachers, I need to invest some effort to change my style of communication to get into their space to build that trust. The readings and activities are helping to understand the approaches to build trust from bottom up and not top-down. [Victoria/RJ]

Further, participants took to the discussion forum to share their thoughts on learning about trust. Table 4.3 illustrates excerpts from the discussion forum on how they articulated and responded to each other's posts inclusive of my response to their postings.

Table 4.3. Discussion thread from the online discussion forum

Daisy	<i>My thoughts on building trust with teachers...would be to encourage positive communication with staff members and scaffold building relationship to work cohesively and solve problems together. Trust was never a problem in my centre and teachers work cohesively but the PLC discussion was a good reminder for me to sustain it.</i>
Siti	<i>Yes! agree with Daisy... establishing that positive communication with teachers... principals need to believe in their teachers' ability and willingness to fulfil their responsibilities and I see better competency skills in my teachers, knowing that what they are doing is appreciated and we rely on one another for goodwill. This helps teachers to achieve their goals and resolve problems</i>
Su Ling	<i>The aspects of learning about trust helped me understand the importance of communicating and building relationship with staff members. Trust requires positive on-going interaction with and between staff members to improve matters at work. Principal also need to follow up with her words and actions for staff members to trust her.</i>
Maria	<i>Yes, it starts with the principal and I agree, principals need to walk the talk and we need to display some practices that will enable teachers to trust. I think it is important for principals to build trust through positive communication, monitoring our reactions, address teachers' concerns and conveying affirmations to teachers</i>
Mei	<i>For me firstly, I need to deconstruct the issues at the centre and look at how I can work around them to build the trust. Working on the activities I learnt during PLC may be a help. First thing is to bring the young and the older staff members together to build mutual respect and trust</i>
Victoria	<i>It's good to read all your comments...but my struggle is where I start with this new centre...teachers at the current centre know that I'm very task oriented. Probably my reputation has travelled to the new centre and staff have become defensive... I need to find that little gap to break in to work with them</i>
Sukuna	<i>Enjoyed reading your posts. Great to see your reflections and your thought process. The readings seem to be of good help for the discussions. It is about starting small and believing in yourself that you can do it. It's not hard after all if we can build trust within our family, it can be done with your teachers too with skills! Best wishes - keep the thread of discussion growing</i>

Learning about trust within the PLC seemed important for helping participants understand their work challenges. They were able to articulate by deconstructing the problems and reflecting on ways to problem solve through collaborative discourse. The readings were pivotal in stimulating their critical thinking and ways to apply strategies at work with their staff members. Most importantly, the collaborative learning within the PLC through sharing expertise helped them move forward.

Building trust: Reflective practice

From the notion of building trust with staff members, the discussions and online interactions encouraged participants to reflect on their current leadership practices. Mei was reflective about her readings on ‘personal integrity’ being an important attribute for leaders to build trust. She mentioned that learning about trust was a shift which assisted her to improve her leadership practices to deal with issues and challenges. She said:

The readings helped me to reflect...it's informative to know how personal integrity...in a principal supports building trust with teachers and awareness to my leadership practices. I didn't realise or rather did not see where the problem was. I have never seen the gaps in my leadership practices so much as I'm doing now...thought teachers were stressed because of their incompetency and perceptions but I need to look into my leadership approaches...now
[Mei/PLC/Post-I]

A PLC discussion that focussed on leadership approaches based on Goleman's (2000) article stimulated participants' reflection on their leadership practices. Participants shared their perspectives about the article and the similar challenges they encountered at work. Victoria shared that the article had provoked her thinking as to how leadership approaches can help build relationships and trust with staff members. She commented:

Despite all my efforts to ... to build relationships amongst my staff members, I still see that it's not easy for my staff members to build trust in me! However, after reading the article it dawned upon me that I'm a pace setter and extremely firm with my ways. I'm trying to change my leadership styles...to build that trusting relationship with my staff [Victoria/PLC M7]

On the other hand, Su Ling shared that one learning point she acquired from the readings and the interaction during the PLC meetings was the concept of being open

in order to connect with her staff members. She reflected that her top-down leadership style inhibited her from making connections with her staff members. Further, the experiential learning acquired by listening to others and Goleman's article facilitated an awareness in Su Ling to reassess her leadership practices. She commented:

Listening to Daisy's family-oriented values of leadership approaches and on the other hand, Mei's issues and challenges with her staff members due to lack of trust was a wake-up call for me to look into my leadership style and ways to build trust with my staff members.

[Su Ling/RJ]

Maria and Siti shared similar sentiments about their leadership practices in their reflective journals. The discussions during PLC meetings and related literature made them reflect on their leadership practices. Siti was confident about her shared leadership practices and explained how she shared some of her leadership tasks with her senior teacher. However, the readings on distributed leadership made her reflect if she was sharing or delegating work. She expressed:

Learning about distributed leadership made me reflect on my practices... have I been a democratic leader or just delegating task... although tasks were shared I constantly monitored my senior teacher to ensure she performed what was required of her...did I trust my staff member or have I been monitoring her job scope. Aspects of building trust has made me think ...how much have I invested in building trust as a collaborative leader to empower her?

[Siti/RJ]

Maria seemed to have been influenced by reading the literature on distributed leadership and her reflection also questioned her leadership practices. She commented:

I encourage my teachers to share leadership tasks; however, this particular line in one of the readings has left an impact on me. The article reads... "the move to a distributed leadership model provides the opportunity to move beyond the status quo of on-going principal delegation of tasks to a model where schools can create teams that do not mimic the leader but provide different and equally important strengths for the organization". In actual fact I am creating a mold of myself in my teachers instead of empowering new leadership strengths...I need to review my leadership practices. [Maria/RJ]

Daisy was quite confident in her leadership practices and felt that her teachers were comfortable with her leadership practices. However, she stated that she may have to focus on teachers' professional learning and working collaboratively. On the other

hand, the rest of the principals in PLC1 shared how their participation in the PLC encouraged them to reflect on their leadership practices. Such reflection helped them to see the gaps in their leadership practices, and how this shaped their staff members' work and behaviour. They were honest in acknowledging their weaknesses and keen to improve their situation.

4.4.2 Perceptions of PLCs

Participants' face-to-face and online interactions also revealed their perceptions of the PLC and the benefits of collaborative learning. Data provided insights to understand their thoughts about the PLC and how they conceptualised the process of learning collaboratively. Responses were analysed into the following categories: *change in perspective*, *PLCs for professional development* and *collaborative enquiry through PLCs*.

Change in perspective

When asked about their perceptions of PLCs, participants shared varied concepts of PLCs based on their personal experiences. Su Ling expressed that she acquired a new understanding of PLCs, as opposed to her earlier perceptions. She compared it to a 'sounding board' for principals. She also added that matters that were presumed private and personal problems of principals, '*were given airtime to be heard*' in a safe and professional way and '*our personal views became shared views and the process facilitated to learn from one another*'. She added that the PLC platform helped participants to articulate issues in a mutual and trustworthy way. She commented:

This was unlike the PLC that was conducted by the management ...which was directive. I have a total perspective change of PLC now. Coming together as a PLC... I see that leaders don't have to be alone, and learning together could take place in a different dimension through PLC. [Su Ling/post-PLC/I]

Similarly, Maria described a PLC as a collaborative professional platform that helped to build trust. Although members of the PLC were colleagues working under the same management, they had few opportunities to collaborate in any professional capacity. She added it could have been challenging to work together cohesively if it was not for the dynamic structure of the PLC that established collegiality and mutual trust through supportive interactions. She expressed:

As a principal, working with teachers I know it's never easy to ask people or presume they could trust one another in any collaborative venture but it was the articulation of shared values, the common focus and dialogue within PLC build...relationship to trust each other, credit goes to your facilitation techniques that gave us space to direct our learning. [Maria/post-PLC/I]

Participants also commented that principals never had opportunities to share and critically interrogate each other's practices. Mei expressed that the sharing helped her acknowledge that challenges were common amongst the principals and that the PLC made her realise that collaborative learning and sharing could be possible. The solutions provided by members helped her to explore possibilities and challenged her assumptions. She commented:

Seeking clarifications from my PLC colleagues provided the confidence I have a support group to listen and share sentiments. PLC further promotes my critical thinking to assess if the solutions and practices shared would work in my context. [Mei/post-PLC/I]

Siti expressed that constraints from the management promoted a culture of working in isolation for principals. However, the PLC served as a good platform to understand the benefits of giving constructive feedback and learning through shared practices. She expressed:

People have different views and concepts and we may not see things the same way as another. Collaborating and learning from each other ideally leads to growth which was never encouraged...the coming together as a PLC group to share practices collaboratively is an empowerment for principals [Siti/post-PLC/I]

PLCs for professional development

Participants viewed the PLC as a supportive system for their leadership development. A notable learning point was the importance of reflective thinking which left a positive impact on them. Reflective practice and learning were the most elusive practice which could be overlooked due to their workload. Participants' responses indicated that reflective learning provided opportunities for personal and professional growth. Siti expressed that the PLC fostered professional learning in a practical way rather than through attending a course which did not contextualise learning to the situation. She commented:

Our PLC discussions often start with a problem and ends with several possible solutions...further readings enabled critical thinking. Both the discussion and the journal writing allows a leader to assess the situations from a broader perspective and critically reflect...and contextualised... learning to find ways to our problem. [Siti/post-PLC/I]

Maria suggested that, it was encouraging to be part of the PLC as it was a supportive platform to share and seek solutions. She added that the reflective process was possible due to the homogeneity of the group members. When a challenge was posed it was common to the group members working under the same management and their perspectives were culturally bound to be shared and implemented. She pointed out that the PLC served as professional development to improve and self- direct her learning. She commented:

Talking to another principal during the PLCs gives the validation that one is not alone...when I share, it helps me to reflect and was a double learning process...taking perspectives from my colleagues...since we work under the same organisational culture and experiences shared can be applied into our work contexts with adaptations. [Maria/post-PLC/I]

Mei's online journal revealed that her participation in the PLC stimulated an ongoing process of thinking, acting, questioning and collaborating. She expressed that she never had opportunities to share her challenges with her colleagues when they convened for work-based meetings. However, it was the supportive environment provided by the PLC that motivated her to find out how her colleagues dealt with challenges and issues at work. She added, '*initially it was also daunting and I felt vulnerable to share*'. Nevertheless, she felt safe when the PLC members were open-minded and listened without being judgemental, to discuss and share their perspectives. She commented:

I realise the rest were actually listening, reflecting and asking interesting questions, this was a motivation and this has never happened before...it also got me to reflect further on my own practices and the changes required...this is the kind of reflective learning for leaders' growth...appreciate Sukuna's facilitation which only guided us by the side with good questions and never to step on our views to direct us. [Mei/RJ]

Victoria, in her final reflective journal entry, expressed that the PLC was the platform which helped her to reflect on her challenges, and self-direct her learning through

collaborative learning to find ways to problem solve. The reflective learning process helped her to visualise the issues from her teachers' perspective, encouraging her to question whether she had the right leadership skills and approaches to deal with the teachers and the problems. When she made efforts to change her leadership approaches, she could see her teachers approaching her for advice and to share their problems. She expressed:

I reflected on my pace setter leadership style and try to match it with my leadership values and beliefs that I shared during the core values activity. They don't seem to synchronise...lot more could be achieved if I adopt better leadership approaches... my teachers have stepped forward to work closely with me now...the change is not big...reflective learning through PLC was a changing moment. Sukuna's facilitation skills was great, I wish to pick up those skills.
[Victoria/RJ]

Collaborative inquiry through PLCs

Participants' interactions and reflections provided deeper insight into their perceptions on the benefits of collaborative learning through PLCs. Mei shared how the PLC worked as a support system for her. She noted that the management presumed that as executive principals they could overcome any challenges. However, coming together as a group validated the notion that as principals, they were prone to similar challenges and problems. However, they never had an avenue to address them openly in a group like a PLC. The discussions and reflections through collaborative learning facilitated discussion of how they could overcome their problems. She commented:

Principals have the same issues and challenges and the collective learning has been valuable to make improvements. I don't understand why we cannot collaborate to share. This PLC experience has been an eye opener and proved that we can improve by sharing and learning our experiences [Mei/RJ]

During the fifth face-to-face PLC meeting, participants brought up the benefits of collaborative learning through PLCs. Participants were enthusiastic about bringing their learning over to their teachers to implement these collaborative learning strategies. Su Ling commented that engaging in an ongoing cycle of questions promoted reflective thinking and the collaborative learning worked like a scaffold system to build on each other's experiences to find the best possible ways. She

expressed that opportunities for principals to share and learn collectively should be encouraged by management rather than repressed. She commented:

Getting out of the office and learning together through PLC is a new perspective. We never had this experience...meetings were like informal professional development...gave me the confidence to question and analyse the reason why certain practices do not work and make changes to improve my leadership practices [Su Ling/M5]

Maria agreed with Su Ling and commented that the process of collaborative learning fostered through the PLC was new. She noted that when the PLC group came together the difference of opinions did not matter *‘but our attention was collectively mobilised towards the same direction to seek solutions and that is important for professional learning and coming together was a respite from working in isolation’*. She added that it was an opportunity to seek solutions and served as a platform to analyse issues. She further commented that it was not about learning and sharing per se but how collaboratively they could help each other to resolve certain issues as colleagues. She commented:

Working alone can never make one a better person. When we talk to other principals, we learn how well they are doing and learn from each other and at the same time help each other when there are challenges. The collective learning through PLC made a difference [Maria/PLC/M5].

Victoria responded that collaborative learning helped her to stretch her mind, from being myopic to have a broader vision. It opened up her thoughts and encouraged her to question whether she had the right skills and approaches to deal with the teachers and their problems. The PLC served as a mirror to reflect on her practices and strategies and tips that were provided by her colleagues helped her in preparing for her centre’s accreditation process. She felt that teachers could also improve through PLC experiences. She commented:

The process of collaborative learning to share experiences was valuable...I think having PLC modelled meetings for teachers will guide them well in terms of sharing ideas, and to work as a team collaboratively accepting others’ perspectives. [Victoria/PLC/M5]

The discussion around collaborative learning led to an exploration of the PLC dimensions in the next face-to-face meeting. This provided an opportunity to examine

the PLC attributes of *shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions of relationships and structures*. After examining each dimension, participants had varied perceptions about the PLC dimensions. Participants acknowledged that they lacked most of the PLC attributes related to collaborative leadership and learning; however, some participants had reservations about the statements on *shared and supportive leadership*. They felt that most of the statements on sharing leadership were Western-oriented perspectives and may undermine the cultural beliefs and values of leadership in their services. They felt that such practices may not be approved by the management. Daisy commented that a culture of competitiveness was inherent in the organisation to ensure productivity amongst principals. Furthermore, the notion of sharing leadership with teachers could be constrained due to hierarchical practices and added:

Although PLC is a possible professional learning model for teachers, I don't think as principals we have the set skills to organise/facilitate these for teachers ...we need directives from the management and in our present administrative style not all aspects of collaborative leadership can be shared.
[Daisy/PLC/M5]

Maria explained that with the rapid expansions that were taking place at the organisational level, it was too monumental for a principal to shoulder all responsibilities and working collaboratively would be the way forward. Furthermore, fostering healthy relationships amongst teachers could be enhanced through collaborative professional learning. She added, *“if change is necessary to improve our practices, we have to be the change agent to propose these to the management...it can be made possible if we could adapt some of these attributes”*. Despite some disagreement, the majority of the participants found PLC-oriented collaborative learning strategies beneficial in building positive relationships amongst teachers. The excerpts provided in Table 4.4 demonstrate participants' thoughts about implementing collaborative learning practice

Table 4.4 Participants' discourse on collaborative learning for teachers: PLC1

Mei	<i>As I am exploring the statements under shared personal and practice, I wonder how these practices could benefit my teachers. Particularly peer observation and offering feedback to peers to improve practices. This is a good way of learning from each other but the culture in my centre is different it is either me or the senior teachers who would provide feedback...could be implemented but may not be easy.....though! This is something new in our culture</i>
Su Ling	<i>You are right Mei, I was thinking in the same line I like the idea but having challenges with teachers from different cultural background...implementing this may not be easy but I have to think of some way to encourage teachers to take responsibility in sharing their learning</i>
Victoria	<i>Learning about the concept of teacher leadership in PLC was helpful. I have identified some willing teachers...to be teacher leaders in my centre. I think we could bring in ideas from shared personal practice and collective learning and application through these teachers than us leading the teachers. I think it is easier for a colleague to relate to the teachers than someone in position.</i>
Maria	<i>Yes, I agree with Victoria that engaging lead teachers would be a great idea! As I examine both shared personal practice and collective learning - these dimensions have some ideal strategies and I may want to implement these first for my teachers. It is not easy to ask teachers to give feedback to their peers due to our cultural context, but we can try in an informal way.</i>
Siti	<i>Listening to the discussions has given me some insights. I actually have a teacher who does not have any formal senior position. Other teachers approach her for teaching ideas and strategies rather than coming to me or my senior. This may be a lead to bring in the idea of collaborative learning through teachers who have the propensity to build collegiality with others.</i>

The above extracts show how critical and reflective thinking constantly evolved during the PLC discourse. This process illustrates how one's perspective or perception about a particular phenomenon can change through a critical dialogical process.

4.4.3 Section summary

Findings from leaders' engagement in the PLC process and its influence on their leadership practices provided insight into how trust was important to the formation of collegiality amongst the PLC members. It also became the backbone for the building of positive relationships between leaders and their staff members. In addition, participants' involvement in the PLC process involved positive collaborative learning experiences. Participants perceived the PLC as a supportive collaborative learning platform to enable them to reflect on their leadership practices through professional discussions and online interactions. Departing from the engagement in the PLC process, the next section focuses on how their learning from the PLC motivated participants to make the changes to their collaborative leadership practices.

4.5 Implementing collaborative leadership practices

This section outlines the changes that participants made to their leadership practices through implementing aspects of collaborative leadership practices. Data for this section were drawn from individual post-PLC interviews, online reflective journals and notes from my reflective diary. Interviews were undertaken with specific questions to ascertain if principals' participation in the PLC process shifted their thinking to implement collaborative leadership practices and as a result, whether there were changes in staff members' attitudes or work (see Appendix 5 for post-PLC interview questions). Participants' responses included the benefits of learning various leadership approaches to improve their practices, the challenges involved in implementing collaborative leadership practices and teachers' attitudes to the changes implemented. Responses were inductively analysed and documented as participants' *individual leadership experiences of collaborative leadership*. Excluding Daisy who was hospitalised due to a medical condition, the rest of the participants demonstrated a willingness to work on certain aspects of collaborative leadership practices. Participants were also aware of time constraints, teacher attitudes and hierarchical structures embedded in their services that could be impediments to their endeavours. However, they showed initiative to work on areas that would be feasible to implement within the ambit of their leadership capacity. Participants were keen on improving their own leadership approaches and developing teacher leadership to build positive relationships and collaborative learning through selective PLC dimensions: *collective learning application, shared personal practice, and supportive conditions related to relationships*. However, they were restricted in

implementing selective criteria related to *sharing and supportive leadership* with teachers due to the organisation's policy and the existing culture of hierarchy. The next section describes each leaders' experience of their learning journey through the PLC and their thoughts about developing collaborative leadership practices in their services.

4.5.1 Victoria's experiences of developing collaborative leadership

Victoria was positive about the learning gained through her participation in the PLC, adding that it was a timely help that came at the right time for her. She had taken over the leadership of an additional centre, which required restructuring due to adverse circumstances. However, her existing leadership practices and approaches failed to help her in addressing the challenges that she was confronted with. Learning about collaborative leadership practices provided the opportunity to critically reflect on her leadership practices and the ensuing discussions helped her acquire the knowledge to resolve her problems. She particularly liked the core values activity, which helped her to refocus on her leadership values and beliefs. She reflected:

I've also realized that I am beginning to share quite a bit during the PLC sessions as compared to previously ...I used to be very quiet during the meetings. The PLC was our scaffold system to build confidence to share because I could trust my colleagues...without PLC we would not have built this bond to share and solve my challenges, I faced at the centre. [Victoria/RJ]

When sharing her experiences of implementing collaborative leadership practices, Victoria was clear about what she intended to change in her practice. She aspired to work on her personal leadership approaches and collaborative learning for teachers. She was concerned about the non-collaborative learning that prevailed amongst the teachers and the lack of teacher leadership skills in leading the learning groups. Therefore, she distributed the responsibility to one of her teachers, who was willing to share her time. Victoria was proactive in leading change. When she learnt about the benefits of the dimension of *collective learning and application* during the PLC, she implemented some of the strategies of the dimension. The following comments are illustrative of the changes and reflect the outcome of her implementation:

My focus was to work on collaborative learning... the edu-care staff members faced problems in using the Relationship based curriculum (RBC) and the related weekly plan activity (WPA) but there's one teacher who was good at it and I assigned her to lead...I discussed the

issues and gap in the practices... to improve the situation. I see some things moving...now under her guidance. Learning from a colleague with expertise is easier and collaboration evolves. [PLC1/Post/I]

Furthermore, she expressed that the highlight of her learning through the PLC was learning about various leadership approaches through discussions and that the Goleman's (2000) article improved her leadership practices, communication style and relationship with her teachers. However, Victoria felt that there was much to learn and it was only the start of improving her leadership practices. She commented:

I've began to work on my leadership style...to improve my relationship with my teachers...I understand how it affected me and the staff members... I have a nursery teacher who went into depression due to overload of work... that actually got to me to reflect... am I too fast? Am I too result oriented? Now I realise that my pace-setting style could be a cause for my teacher's depression. I've learnt to take it easy. [PLC1/RJ]

Victoria expressed that not all teachers were appreciative of the changes to implement collaborative leadership practices. There were some teachers showing negative attitudes towards the collaborative learning established with the lead teacher. Victoria had been cautious in facilitating the collaborative learning for teachers. She also had concerns that it may turn against her if teachers reported that additional tasks had been added to their workload in leading learning groups. She had to approach a willing staff member, who had the right attitude, expertise and good rapport with her colleagues to lead the group members in collective learning. Victoria shared that running two centres simultaneously was an arduous task and learning about collaborative leadership had helped her to re-conceptualise her leadership practice. It had helped her to shift her thinking about sharing leadership with teachers. However, with the hierarchical organizational structure, Victoria suggested that a clear incentivised policy framework was necessary to develop teacher leadership. Otherwise, teachers may view it as added workload which may add to the incidence of teacher turnover highly prevalent in the ECE industry. The following comment was illustrative of her perceptions about collaborative leadership:

The definition of collaborative leadership has profound implications than my understanding of roles and responsibilities being delegated as shared leadership...I think empowering teachers with leadership tasks would actually decrease my workload and make workload manageable...and empower teachers. Management needs to understand the need for good practices and...clear policy guidelines

are essential to avoid teachers' misunderstanding of our efforts in sharing leadership. [PLC1/Post/I]

However, when asked whether there were changes in staff members' attitudes towards the changes, she was unsure but positive that teachers could work collaboratively with her.

4.5.2 Su Ling's experiences of developing collaborative leadership practices

Su Ling openly shared her thoughts about engaging in the PLC. She recalled seeing an email from the management indicating that she had been chosen to participate in a research project which involved attending PLC meetings and interviews organised within her working hours. She felt that it was going to be an added responsibility amidst her heavy schedule of work. However, her experiences of the PLC and learning about collaborative leadership practices involved a total perspective change. Her involvement gave her insights to understand the benefits of collaborative leadership and learning collaboratively through the PLC. She recalled several valuable learning moments, particularly the core values activity that provided an opportunity to learn about her colleagues' beliefs, values and their views about leadership which helped them to connect, bond and build trust as a PLC group.

Before she could think of changing practices at the centre, Su Ling recognized the shifts in her own practices. Formerly, she was never inclined to share leadership with her staff. There was clear demarcation of work allocation for teachers and management and it was not easy for her to make that shift for fear of losing control. The readings and discussion during the PLC sessions gave her insights into collaborative leadership, a concept that may not be encouraged by the management.

She added:

I see that I need to make a shift and I can't take everything on my shoulders...I need that support from the staff members too...I never saw the importance of establishing common goals with my staff members. I assumed that the mission and vision set by the organisation should help teachers...apparently it doesn't. I must admit it will take time for me. [PLC1/Post/I]

Although there were impediments to implementing collaborative leadership practices, Su Ling was inclined to work on shared values and vision and to implement some strategies of collective learning for her teachers. She noted that one of the most

significant learning points of the PLC was to know about the different leadership approaches that a leader could use. She shared her experiences about a leadership workshop that she attended earlier. She related how the workshop provided a survey to determine her leadership style and she was categorised under a single leadership type without providing any strategies for improvement. However, learning about the different leadership approaches in the PLC gave Su Ling the confidence that she was doing the right thing at work.

When asked whether teachers were positive about the changes, Su Ling was certain that not all teachers would embrace changes to implement collaborative leadership practices. Teachers showed a lack of enthusiasm when she suggested strategies for collective learning during a professional learning meeting with her teachers. She also documented two instances of disappointments she encountered whilst trying to make some preliminary changes in her services. Su Ling had a diverse background of teachers working in her centre. These teachers were from Vietnam, China, Malaysia and they seemed to have different approaches and attitudes towards work compared to the local Singaporeans. There was always a thread of disagreement amongst the teachers, and conflicts were quite common. Su Ling decided to work on the core values activity to build shared values and beliefs between the teachers. Due to her lack of facilitation skills, Su Ling was not able to carry out the activity well. Teachers were disinterested and the activity did not elicit appropriate responses from teachers.

In another instance, she was keen on appointing teachers to take on leadership roles. She approached a teacher who had good rapport with parents and expertise in presentation skills. She asked the teacher to organize a parents' session; however, the teacher did not carry out her responsibility well and the outcome of the meeting was poor. Despite the shortcomings, Su Ling was persistent and moved on to identify a teacher who was willing to share her knowledge and expertise with her colleagues. She organized a small group learning opportunity with the teacher leading the learning sessions. She commented:

The change is not big...I do see improvement in some of my staff members... I see some ownership and she wishes to be a role model for others. I would say if I can see a shift in one, I'm sure more will be changing...I believe in 3 to 5 years...collaborative practices should not be a difficult thing to achieve. [PLC1/Post/I]

4.5.3 Maria's experiences of developing collaborative leadership practices

Maria expressed that the PLC benefitted her as a principal; however, upon reflection she felt that not all aspects of a leader's responsibilities could be shared with the teachers. Moreover, her efforts may not be encouraged by the management. She commented that the aspect of allocating some leadership responsibilities to senior teachers was a normal practice in Singapore. However, the egalitarian concept of sharing leadership with teachers was not widely practised in a hierarchical top-down system where it is typical for teachers to take directives from principals. Maria added

Collaborative leadership needs much of a shift in mind set... to look at the broader perspective...of its benefits. However, management may assume as an overload of work on teachers and leaders being hands off with their responsibilities. [PLC1/Post/I]

Maria also highlighted that the most valuable learning experience was the notion of building trust which is vital for people to work collaboratively. Maria shared that one of the challenges she experienced at her centre was teachers' disrespect for each other's views. She wished that she had known about building trust earlier to resolve these challenges. She said, "*I'm working on it and nothing can be achieved overnight*". She also admitted that her involvement in the PLC had changed her misconception about PLCs that had arisen from the unfavourable experiences acquired through 'professional learning circles' which were conducted as meetings to resolve issues rather than as a collaborative learning platform.

Maria added that she was encouraged by aspects of '*shared personal practice*' and '*supportive conditions*'. She felt that these aspects of collaborative leadership might be feasible to be implemented within her services rather than bringing in innovative changes with sharing leadership responsibilities. Knowing changes take time to implement, she started working on building mutual trust and respect amongst the teachers to prepare them for the next step. However, she added that the implementation required her personal attention and supervision to ensure teachers were performing well and doing the right thing. This could be an added workload for her. She noted if changes needed to be done, she needed teachers and the management to understand the importance of teacher leadership and the importance of collaborative leadership practices. The leader alone could not be responsible for making changes. She commented:

As I reflect on collaborative leadership, I think teachers also need to know about the approach and information... provided as professional development course or shared with them during training. A principal alone cannot make changes, it should be a collaborative effort. [PLC/M7]

Maria was confident that her teachers would see these small changes in a positive way and continue to build trusting relationship for a better work environment.

4.5.4 Mei's experiences of developing collaborative leadership practices

In the final PLC meeting, Mei shared what she felt about collaborative leadership practices. Before engaging in this research study, she thought that she knew what it was to be a collaborative leader and she believed that she was one. However, her engagement in the PLC changed her perspective about collaborative leadership. She added that being a collaborative leader was about influencing and empowering others and not holding everything under one's purview to ensure productivity. She added:

I understand being collaborative is different from delegating but it is not easy to change the existing cultural practice. To be collaborative... the support of the team is necessary...when staff members are given the empowerment, they should be ready to take the ownership...willing to work collaboratively however it has been culture that teachers here take directives from the top and that has to change...from top-down to bottom-up. [PLC/M7]

She noted that collaborative leadership was not relinquishing the leader's responsibilities or acquiring added responsibilities to monitor teachers' work. However, collaborative leadership ensured that other staff members had the opportunity to lead at appropriate times and were given the necessary support to make change or innovate. Further, *"I've learned about the importance of communication and building relationships which was one of the best learning points for someone who deals with issues from a management point of view rather than using the leadership lens"*.

She said that relevant readings and discussions during the PLC provided insights to learn about the benefits of shared and supportive leadership and how teachers can be empowered by sharing leadership practices. However, her concerns were about the management who may not view implementing such changes favourably. Furthermore, there were some teachers who were very particular about working within the given parameters of their job scope and anything more would be considered as an extra workload. Mei opened up to share an encounter she had with the member of the

management. During her meeting with one of the management staff, she shared her involvement in the research study and wanted to try some of the strategies for sharing leadership tasks with her staff members to work on collaborative leadership. However, the management staff member was very apprehensive and discouraged her from making any changes without prior approval from the management. She commented:

When I told the management that I am going to make some changes to how teachers conduct professional learning...by building in some tasks for the senior teachers for collaborative networking....her response was not favourable, rather it was a disapproval!...it takes time to change and....these are barriers for principals like me to apply what we learn. [Mei. PLC M7]

Despite the constraints, Mei was keen to try out the PLC-styled collaborative learning with her teachers. She organized a small group of young teachers for curriculum planning. She facilitated the meeting to ensure every teacher was involved in providing feedback on each other's work plan. She got them to share their ideas and encouraged every idea with positive feedback. Teachers came up with innovative ideas to adapt the curriculum instead of following a prescribed format. She took this opportunity to ask a teacher who volunteered to share her teaching strategies with the group and wanted the rest to give their thoughts and provide feedback for improvement. Mei felt that leaders played a vital role in supporting teachers' collaborative learning. She added that, "learning about the PLC attributes on collective learning and application and shared personal practice was an eye opener to understand the nuances for collaborative learning". She explained how teachers felt encouraged when they were allowed to direct their learning in a collegial setting. She noted:

These young teachers liked the style of professional learning conducted...said that it was a positive experience. They took ownership to plan...willing to provide feedback on each other's views...one of the teachers who was reluctant to share is showing some good signs. [post-PLC/I]

However, when asked whether her teachers would be positive about the changes, she related that given the situation at her centre she did not expect a complete overhaul but was content to see a small breakthrough in teachers' collaborative learning.

4.5.5 Siti's experiences of developing collaborative leadership practices

When asked about her thoughts and experiences of developing collaborative leadership in her service, Siti attributed her knowledge acquisition about collaborative leadership practices to PLC. She commented that she was always supportive of shared leadership and believed her leadership practices were collaborative in nature. However, learning about collaborative leadership related to PLC attributes provoked her to reflect that her work involved more delegation than collaboration. Although her colleagues were apprehensive about sharing leadership with teachers, Siti was quite positive that it could be implemented by adapting the practices without breaching the hierarchical beliefs and values. She commented:

It is important to move towards collaborative approaches in our services. With the government's push for stakeholder's accountability and improved quality provision in children services... shared leadership would be the ideal way...is important to find out how these practices can be suitably adapted within our cultural values and beliefs. [post-PLC/I]

She further added that management expects executive principals to undertake more administrative tasks than to concentrate on curriculum leadership. She explained that the curriculum planning department in the organisation had developed a centralised framework for teachers to follow in planning curriculum so that leaders could devolve their role as curriculum leaders to concentrate on administrative tasks. Siti felt that it was in the domain of curriculum leadership that teachers could be empowered and leadership tasks shared. Siti had always taken responsibility for guiding each level of her teachers with curriculum planning; however, learning about teacher leadership and PLC attributes of shared and supportive leadership and collective learning, had provided Siti with strategies to mobilise her teachers in an effective way for collaborative professional learning. She formed a curriculum team and appointed a key teacher to lead them. Siti had been coaching the lead teacher to ensure collective learning took place and everyone contributed to planning. As part of this collaborative learning, teachers tried out their planning and shared their feedback about the lesson. Siti felt that this would encourage all teachers to share and help each other to build their professional capability and relationships. She shared:

The strategy of forming a curriculum team seems to work... giving teachers the space to exercise power over curriculum matters...I could see the key teacher being very confident... there's lots of

camaraderie through sharing. Most importantly there's hope to build trust... teachers are comfortable with a colleague who is the lead teacher. [post-PLC/I]

When I asked Siti about her teachers' response to these new initiatives for collaborative learning, Siti replied:

this change has just happened\... I may need some time to find out about teachers' attitude and whether teachers are positive...if so this should be the way forward to groom more leaders. [post-PLC/I]

4.6 Results of post-PLCA-R survey after PLC implementation.

Following the PLC implementation, participants were asked to complete the same online survey administered as before the implementation. Table 4.5 presents the summarised results of the survey. Since Daisy was not available, due to her medical condition, only five participants completed the survey. Compared to the pre-PLC survey, participants had moved away from strongly agree to agree and in some areas, there were disagreements. The slight changes in results may be attributed to participants' engagement in the PLC and their greater understanding of the PLC attributes related to collaborative leadership practices. This were also reflected in some of the participants' open-ended comments.

Table 4.5 Results of post PLCA-R survey: PLC1

PLC1 Leaders N=5					
	Statements	SA	A	D	SD
	<i>Shared and Supportive leadership</i>				
1	Staff members are consistently involved in discussing and making decisions affecting issues at the centre and suggestions are incorporated into decisions made by the principal/supervisor		3	2	
2	The principal incorporates advice from staff members to make decisions	2	3		
3	Staff members have accessibility to key information		5		
4	The principal is proactive and address areas where support is needed	5			
5	Opportunities are provided for teachers to initiate change	1	4		
6	Leadership is promoted and nurtured among teachers		2	3	
7	The principal participates democratically with staff sharing power and authority		1	4	
	<i>Shared Values and Vision</i>	SA	A	D	SD
1	A collaborative process exists for developing shared vision and shared values among staff		5		
2	Shared values are reflected in ways of working that guide decisions about teaching and learning		5		
3	Staff members share visions about improvement that clearly focus on children's learning		4	1	
4	Policies and programmes are aligned to the centre's philosophy and vision	5			
5	Decisions are made in alignment with centre's values and vision		5		
6	Parents/extended family members are actively involved in creating high expectations that serve to increase children's learning [development]		4	1	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 4.5 cont'd

		PLC1 Leaders N=5			
		SA	A	D	SD
Collective Learning and Application					
1	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work	1	4		
2	Collegial relationships exist among staff members that reflect commitment to centre's improvement	1	4		
3	Staff members plan and work together to find solutions to meet the diverse needs of children and their families	1	4		
4	A variety of opportunities and structures exist for collective learning through open dialogue		3	2	
5	Staff members engage in dialogue that reflects a respect for diverse ideas and that lead to continued inquiry	1	4		
6	School staff members are committed to programmes that enhance learning	5			
7	Professional development focuses on teaching and learning	1	4		
8	Staff members collaboratively analyse multiple sources of data to assess the effectiveness of instructional practices for children	1	3	1	
Shared Personal Practice		SA	A	D	SD
1	Opportunities exist for staff members to observe peers and to provide feedback related to teaching practices		1	4	
2	Staff members informally share ideas and suggestions for improving children's learning	2	3		
3	Staff members collaboratively review children's learning to share and plan to progress the learning	1	4		
4	Staff members provide feedback to peers related to instructional practices		2	3	
5	Opportunities exist for coaching and mentoring	2	4		
6	Individuals and teams have the opportunity to apply learning and share the results of their practice	1	2	2	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 4.5 cont'd

PLC1 Leaders N=5					
	Statements	SA	A	D	SD
Supportive Conditions – Relationships					
1	Caring relationships exist among staff members and children that are built and respect	1	4		
2	A culture of trust and respect exists for taking risks		3	2	
3	Achievements are celebrated and recognised	5			
4	Staff members, parents and members of the community exhibit a sustained and united effort to embed change into the culture of the centre	1	4		
5	Relationships among teachers support honest and respectful examination of data to enhance teaching and learning	1	4		
Supportive Conditions – Structures					
1	Time is provided to facilitate collaborative learning and shared practice	1	4		
2	Appropriate technology and instruction materials are available to staff members	1	3	1	
3	Resource people provide expertise and support for continuous learning	1	2	2	
4	Communication systems promote a flow of information among staff members/parents and the community	1	3	1	
5	Communication systems promote a flow of information including central office personnel, parents and community member	1	2	2	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Disagreement on item 7 of supportive and shared leadership, *“the principal participates democratically with staff sharing power and authority”* was similar to the disagreement evident in the pre-survey. One reason could be related to participants’ beliefs about preserving the values of hierarchy attributed to positional leadership. There was also disagreement on items 1, *“staff members are consistently involved in discussing and making decisions affecting issues at the centre and suggestions are incorporated into decisions made by the principal”* and 6, *“leadership is promoted and nurtured among teachers”* in the same dimension. No open-ended comments were provided. The disagreement reflected in items 1, 4 and 6 of shared personal practice, was contrary to the results found in the pre-PLC survey where all participants had agreed that peers provided feedback. While it was evident from their PLC meetings that participant had acquired a better understanding of these statements related to PLC attributes, their ratings may have

more accurately reflected the reality that existed in their services as shared during the PLC meetings. This dimension was widely discussed during the PLC meetings to understand how it was carried out informally among staff members and the open-ended comments provided by two participants on this dimension reflects the outcome:

The dimension on shared personal practice is contrary to my understanding about feedback given to teachers by the senior teacher. Now I understand these items are attributed to collaborative learning and has not happen in my centre yet!

I see shared personal practice from a different perspective now and am yet to implement to see its outcome.

Compared to the pre-PLC survey, disagreement on item 2 of supportive conditions-relationships, “a culture of trust and respect exists for taking risks” was increased; however, no open-ended comments were provided to explain the difference. However, a generic comment provided by a participant reflects that not many choices were available in completing the survey:

After PLC there are some areas I’m working on perhaps the survey should have different legends. I am currently working on teachers’ collaborative learning I cannot agree or disagree because I have just started. The survey should have legends like ‘developing’ or ‘emerging’.

Participants all agreed on item 7 on *collective learning and application*. However, a participant remarked on the availability of professional development for teachers:

I am not clear on this one item 7 on collective learning! It cannot be confined to PLC! professional development for teachers at the centre is compulsory

The last dimension on *supportive conditions-structures* demonstrated more disagreements than the pre-PLC survey; however, the reasons were not supported with open-ended comments.

4.6.1 Section summary

In general, participants agreed with most of the items despite some movement towards disagreement on selected items. However, the results in the post-PLC survey have moved from strongly agree to agree, suggesting that participants gained some awareness about PLC attributes and wished to keep their rating at a moderate level compared to their earlier ratings. On the other hand, as commented on by a participant, ambiguity in the survey posed a dilemma as whether to agree or disagree when an implementation was on-going or had just begun. Furthermore, as noted by another participant, regardless of whether the PLC attributes in the survey were related to collaborative leadership, the dimensions were parallel to the criteria related to leadership issues found in the SPARK quality rating scale. Participants' experiences gained through the SPARK accreditation process training could have also influenced the outcome of the survey results. This could be another reason for confusion in participants' ratings in both the pre- and post-PLC survey.

4.7 Teachers' perception about the influence of the PLC process

This section describes the results of the focus group (FG) discussion conducted with two senior teachers (ST) working with each of the respective principals. In some cases, where centres had only one senior teacher, a lead teacher (LT) participated in the FG discussion. Due to Daisy's medical condition I was not able to contact her teachers for their participation in the FG discussion. Thus, only 10 teachers participated in the study to ascertain their perceptions of changes in their principals' leadership practices after the PLC process. Before beginning the FG discussions, I introduced myself and gave some background about their principals' engagement in the PLC process which involved collective learning about collaborative leadership practices. I assured them the discussion would be kept confidential and not be shared with their leaders. Teachers felt at ease to share if they had witnessed any changes to their principal's leadership practices.

Questions were asked to seek information on: the teachers' leadership practices; their roles and responsibilities in supporting the principal; the process of collaborative decision making with the principal; and whether there were any differences in their principal's leadership practices after their engagement in the PLC process. Inductive analysis of responses resulted in two categories emerging: *teachers' role in supporting the principal* and *changes to leadership practices*. These aspects will be explained supported by extracts from the data. Participants are identified by their pseudonyms: Hannah (ST), Nisa (LT),

Farah (LT), Charlene (ST), Stephanie (ST), Ching (LT), Rohana (LT), Naomi (ST), Shi Min (ST) and Rita (LT).

Teachers' role in supporting the principal

STs were aware of their principals' participation in the study. Discussion began with asking teachers to describe their role in supporting the principal and how they collaborated with the principal in making decisions and changes in their services. Responses varied, with some STs expressing that they had specific operational roles to perform at their centre. The LTs described that their roles were confined to curriculum planning and assisting the STs during the principals' absence. Generally, they shared that specific leadership tasks were shared to ensure the smooth operations of the centre. Teachers had general perceptions that their principals were consultative, collaborative and respectful people who helped them solve problems and encouraged their professional development. I further probed to find out how leadership was shared between them and the principal. ST Hannah gave specific details of the work culture in her centre: She commented that it was like a pyramid, where the leader was at the top and responsibilities would be delegated to the staff members through her as the ST. She said, 'it is like a cycle - whatever she tells me I will delegate to them and pass it back to her.' There had been some critical situations where she had to intervene to explain to the principal on behalf of her teachers. She added, 'sometimes I'm also like a bridge between my teachers and the principal'. This analogy of being a bridge between the teachers and principal was shared by all the STs in the group. In ST Shi Min's case the principal had just taken over a new centre's administration and teachers had been anxious about her strict demeanour. Shi Min noted:

*My principal can be very firm...very consistent in whatever she does.
If there's any issue she tells us how to go about with it or I will be
asked to talk to the teachers...several times issues have become very
sensitive due to lack of communication and I have always been the
go-between to ease the situation like a bridge...never easy for me.
[Shi Min/FG1]*

LT Rita who worked with Shi Min also added that, despite being a strict leader, their principal had tried involving staff members in collaborative decision making, especially when planning short- and long-term strategic goals for the centre's SPARK accreditation process. However, she added that there were challenges in reaching out to all the teachers due to the large cohort

of staff members in the planning team. Teachers were asked to provide feedback; however, if teachers did not raise any concerns or viewpoints, decisions were made by the principal and teachers took directives to complete their work. She noted that her principal needed some strategies to overcome these issues if shared decisions were to be made. She further commented:

There are some who do not wish to share their ideas, even if they are not agreeable with the decisions made...they just go with the flow. I think the principal should find a solution to this issue by having section meetings to collaborate with teachers for decision making and allocating time for teacher discussion is important...that provides opportunity for everyone to have a say and work collaboratively. [Rita/FG1]

On the other hand, LT Farah shared how her principal was a dependable and transparent person and that she could approach her to solve any issues that she was faced with. She commented:

She gives instructions to teachers on areas that we need to work on... whenever we have issues with parents or children, she will always find solutions to solve the problem...I am happy with this current working relationship with my principal. [Farah/FG1]

ST Hannah shared that her principal exercised a different style, when teachers were confronted with issues or problems. She added:

Rather than stepping in each time...my principal believes that teachers should take the initiative to settle their issues. I think it is a way for teachers to learn how to approach their issues or problems...she comes in only when things begin to get a bit difficult...her intervention will be the last resort. [Hannah/FG1]

When asked about sharing leadership tasks with their principals, ST Charlene acknowledged that her principal encouraged shared decision making. However, Charlene's role as a decision maker occurred only during her principal's absence, saying '*if there are urgent matters that I can't handle I can contact the centre quality manager (CQM) for suggestions or I can also contact my principal via what's app when she is not at work*'. This was similar for Stephanie and the rest of the STs, when their principals were overseas the CQM was a replacement to seek advice from. Stephanie shared a recent issue raised by a parent related to her child's non-participation in a tour to the museum. However, after settling the issue she immediately had to update her principal who was overseas and call the CQM to give her an update of the matter.

At this juncture, ST Naomi described how her principal supported shared leadership through decision making and how she delegated tasks. She explained that *'being an all women work environment teachers can get very sensitive due to the stressful demands and with their own personal issues. I have to sort out many issues on both sides and make connections like a bridge'*. Besides being the bridge, she expressed that jobs would be delegated by her principal and it was Naomi's responsibility to delegate the task to the rest of the teachers. She further added, *'I work on administration, curriculum and management it's everything under one roof and have been asked to make decisions on centre related matters during her absence and if needed to seek the help of the CQM'*.

ST Shi Min and ST Hannah added that although principals were forthcoming in involving teachers in decision making, this may not be carried out well due to structural conditions such as lack of time and trust issues. Thus, principals were more inclined to make decisions on their own and teachers may have to follow up. Shi Min and Hannah provided similar comments:

My principal would seek suggestions from staff members when it is possible; since the centre is very large with 35 teachers, not many issues could be shared with all the teachers and in order, to prevent any misadministration the principal makes the decisions...and then information is disseminated to the staff members. [ShiMin/FG1]

Most of the time I am provided the opportunity to make decisions during her absence...but when it comes to some important decision on centre issues the principal might not find it necessary to consult all matters with the teachers or with me and would only disseminate information. [Hannah/FG1].

In conclusion, the FG discussion provided some insights to understand how STs and LTs conceptualised their role under the ambit of their principals' shared leadership practices. They were able to evaluate their work culture, how tasks were shared with teachers through delegation and their perceptions of the shortcomings they encountered. Responses seem to vary about decision-making. Some teachers were willing to take instructions; nevertheless, some were forthcoming in pointing out that decision-making should be made a collective effort and principals needed strategies to involve all teachers in collaborative decision-making. STs, in particular, were able to critique their roles in decision-making and how they undertook the role as a negotiator between the teachers and principal.

Changes to leadership practices

When asked whether teachers noticed any difference in their principal's practices after attending the PLC, teachers needed some time to reflect and contemplate. They had a brief conversation with their partner teacher and queried what specific practices I wished to know about. I then asked if they had witnessed any changes to leadership practices, particularly whilst working with the teachers. Participants shared both their perspectives and perceptions on the changes they observed in their principal's leadership practices. ST Charlene shared that during one of her mentoring sessions her principal talked about how leaders need to use various leadership approaches when handling teachers' issues at work. Her principal stressed that, *'it is not about sticking to one leadership style but I should learn how to manipulate different approaches when talking with people to get work done'*. Charlene also witnessed the use of a different leadership style when handling a professional learning session with teachers. She added that the centre has been always involved in many community projects; however, teachers were not ready to share the outcomes with external parties in the community due to fear and lack of confidence.

In order to build their confidence, her principal invited a small group of teachers from other centres within the organisation to attend the presentation. Instead of presenting to their own colleagues she added a little challenge asking teachers to present to a group of teachers they were not familiar with. She forged a collaborative sharing session for other teachers to learn from the presentation through feedback and questions and teachers were given the power to teach and share information about their project. Her principal's usual practice was to give some strategies and as a follow up either Charlene or the lead teacher would guide them further. This time, although she was involved she took a step back to let the teachers take the risk within a safe environment through collaborative learning. She could see the teachers gaining confidence by sharing their knowledge about their projects with other teachers and they were empowered to take responsibility for their own learning.

ST Hannah commented that her principal was inclined to make decisions on her own when teachers showed no interest in providing any feedback. Contrary to her usual practice, Hannah described that lately her principal seemed to be more open and would listen to what others had to say and she seemed to guide teachers with questions for them to open up and rationalise their issues. She told them that she was interested in understanding their issues and was listening to bring about changes. Recently, her principal had started to include Hannah in her meetings with staff members who were non-cooperative at the workplace. She commented:

I can understand her perspective to include me ...so that I can learn how to resolve issues and to handle them as I am not quite good at that...she has started coaching me. [Hannah FG1]

Hannah expressed that the changes have helped her to gain confidence and to be involved in handling issues. Further, she also witnessed her principal encouraging other teachers to share ideas during curriculum meetings. Instead of a big group meeting, it was a rather a small group that met for curriculum planning for the following year. The principal would normally have an agenda to share what was to be planned, but on this occasion she began by talking about what teachers thought would be the best to plan for their children. Hannah noted:

I don't think teachers were prepared for...they were taken aback...she waited patiently for each one to share. She spoke less and motivated teachers to share more as she documented their feedback and thoughts. This was a new learning experience for me too. [Hannah FG1]

After the meeting the principal conducted a feedback session with Hannah, asking her to share her thoughts about the meeting, as she wished to propose more collaborative activities to build trusting relationships amongst teachers for a better collaborative learning environment. LT Nisa, who worked with Hannah, also shared how the principal proposed a learning circle for a group of young teachers, and Nisa was included. Prior to the meeting, the principal met with Nisa and asked her if she could share some of her teaching strategies and resources for a discussion. Nisa commented:

Well, I was not prepared for this but...was happy to share. After my presentation she asked teachers to reflect and to provide feedback on my sharing, I was also asked to evaluate my own presentation...the rest in the group appreciated the resources...it's all new to me because this has never happened before...was a good learning experience for all. [Nisa/FG1]

Nisa noted that her principal wished to convene more such meetings for teachers to share and learn from each other. Teachers were motivated to hold such meetings provided they were conducted within their cohort groups. It was significant for her to know that the principal was making changes to her leadership approaches and was trying to implement some of the PLC attributes of *collective learning* and *shared personal practice* to inspire teachers' collaborative learning. Perspectives shared by ST Stephanie and LT Rohana provided insights about the changes their principal was aspiring to implement for

teachers' collaborative learning. Stephanie shared that her principal wanted to try out an activity that she learnt at the PLC meeting. She commented:

My principal has been worried about the diverse background of teachers and...conflicts that arises amongst them...she brought in a bonding activity learnt during your PLC engagement. She had strips of paper with some words on beliefs and values... was like a game where we had to choose what was most important to us about our work with children. It went well however, by the end of the session we were all lost and we couldn't understand what she was trying to bring across. [Stephanie/FG1]

Stephanie's principal explained to her that it was an activity to build trust and relationship within the group. However, she was determined not to lose heart but find ways for teachers to work collectively. Lately, her principal had been establishing smaller groups for learning within each level and making changes to how group meetings were carried out. Stephanie noted:

I see smaller discussion groups set up for curriculum planning sessions...its time consuming but she is determined.... I like her style of asking all teachers to share now. She's now grooming the teachers and identifies their strengths and skills. [Stephanie/FG1]

She reported that her principal listened keenly to what teachers had to say during meetings and showed interest in documenting teachers' suggestions on curriculum matters. She took the opportunity to talk to teachers, motivating them to take up leadership roles through collective learning. *'I think it will be a good way to groom more teachers through collaborative learning to lead as curriculum leaders.* LT Rohana shared an incident when the principal approached her to be a lead teacher to share her knowledge about setting up learning corners. Rohana comes from a neighbouring country in South East Asia and she had experiences in setting up and engaging children in learning corners. She commented:

I never thought that my work would be acknowledged and shared with others. I was taken by surprise. I've not experienced any co-operative learning experience at the centre nor does any teacher approach me for ideas. [Rohana/FG1]

However, her principal had a different perspective about her expertise and wanted her to share with teachers at the centre. Rohana acknowledged that she was pleased to hear this from her principal and that it was a great motivation to her that she could share her learning experiences. Rohana added:

She wants to me to conduct hands on sessions for teachers to participate where all teachers can contribute...this is great and will impact my professional development and I can come out of my classroom where I was isolated...to work with my colleagues.
[Rohana/FG1]

I asked ST Naomi if she had witnessed any changes at the centre, she was quiet for a moment and said that she has not seen any changes yet, but her principal has been discussing with her about making some changes to teachers' learning. She added:

My principal has identified teacher's strengths and grouped them accordingly to lead the groups for sharing and learning...I used to conduct these meetings but due to my workload I suppose she wishes to release me off those duties and engage teachers...these proposals are in the pipeline but I don't know if she's influenced by your PLC or it's the management's directive. [Naomi/FG1]

Both ST Shi Min and LT Rita acknowledged seeing some significant changes in their principal's leadership practices. Shi Min described her principal as a taskmaster and a result-oriented person. Her strict demeanour had been a cause for problems at the new centre. She added, *'teachers have been approaching me for not being able to cope with her style of work. She was pressed for time and within 6 months she had to push the centre for SPARK accreditation'*. Shi Min also noticed that after the accreditation process her principal seem to have slowed down and had been implementing bonding activities to build relationships with teachers. She added, *'she takes time to talk to teachers over coffee and was keen to find out more about them. Her leadership style is very unusual from being a firm leader to becoming a warm person'*. Her approach in dealing with issues was different and *'my role as the bridge between the teacher and my principal is slowly fading, I should say... but I'm not sure if the change was influenced by your PLC.*

LT Rita added that she could see changes in teachers' professional learning and sharing. She also agreed with Shi Min that there were changes to her leadership style and commented that she was impressed with the way she conducted meetings for teachers. Previously it was just discussing and disseminating information; however, now she was sharing articles to read and ensuring everyone was involved in providing suggestions on issues discussed. She commented:

This change is good for me and has impacted me a lot in learning through the articles and discussion. The other thing is that everyone's suggestion is being valued and now some teachers are wondering about the new changes to read and discuss an article...furthermore she listens more than giving us instructions. [Rita/FG1]

Shi Min shared about the 'Core Team work model' which was to be established in her centre and commented that her principal already had plans to select the right teachers to lead. She intended to mentor these lead teachers in building positive relationship with their team members. She wanted more teachers to take over curriculum leadership tasks. Shi Min further commented:

I must say my principal has toned down a lot unlike before and I like the effective way of conducting curriculum meetings. Usually I will be the one sharing of what needs to be done but now things have changed. She has given the space to the teachers to share and encourages them to make decisions...I see in small ways teachers opening up to her. [Shi Min/FG1]

4.7.1 Section summary

In conclusion, the focus group discussion with the STs and LTs revealed that their perceptions about the influence of the PLC process on their centre leader's practices were generally positive. Most had witnessed changes, strengthening collaborative learning for teachers. STs found them to be beneficial to improve the quality of learning for teachers and acknowledging teachers' voices. The changes implemented were small and were at the initial stages. The outcomes of the changes cannot be measured to understand its impact on the staff members and leadership practices; however, witnessing changes showed principals' initiatives to move towards collaborative leadership practices. It is important to note from the STs' and LTs' perspectives that principals were keen to implement changes on aspects of collaborative leadership practices related to teachers' practices and to nurture teacher leadership. Findings also suggest that principals held the fort of being the positional leader due to the organisational structure and only specific leadership tasks were shared with STs. There were parameters defined for each job roles within a collective work environment; however, principals were open to teachers sharing leadership tasks related to curriculum leadership and were also keen to work in those areas. The top-down model of leadership practices was still evident in their practices.

4.7.2 Chapter summary

Participants of PLC1 consisted of six principals and their STs who worked with the respective principals. The research process for PLC1 began with the pre-PLC survey, then a pre-PLC individual interview followed by their engagement in seven PLC meetings. After the PLC meetings, due to a medical condition one principal including her STs were not available; however, the research process continued with five principals and their STs. Findings for PLC1 emerged from participants' responses from pre- and post-PLC surveys; pre- and post-PLC individual interviews; engagement in both face-to-face and online PLC activities; and finally, responses from STs through FG discussion. Results of the pre- and post-PLC survey did not show major variations in results. The outcomes of the PLC meetings and online activities demonstrated participants' perspectives about building trust for collaborative learning, their shifts in changes about collaborative leadership practices, awareness about leadership approaches, knowledge about PLCs and how it supports collaborative learning and leadership practices. Participants were keen on learning about the nuances of collaborative leadership practices; nevertheless, they were also evaluative of how the PLC attributes would benefit their services without disrupting the hierarchical practices of positional leadership. Thus, shifts in changes to their leadership practices were geared towards developing teacher leadership to improve teachers' collective learning and decision making, shared personal practices through peer learning, collaborative processes for developing a shared sense of values amongst staff members and in improving their leadership approaches. FG discussions with STs provided deeper insights into whether principals were influenced to make changes to their leadership practices. Findings from FG discussions were analogous to a certain extent with what the principals aspired to change in their practices.

CHAPTER 5: Findings from PLC2

5.1 Chapter overview

This chapter presents the findings of PLC2, using a similar approach to presenting data as Chapter 4. The first section begins by describing findings from the PLCA-R survey administered before the PLC implementation followed by participants' perceptions of their leadership practices analysed from the pre-PLC individual interviews. The next section reports findings of participants' engagement in the PLC process and its influence on their leadership practices. This is followed by findings from the post-PLC individual interviews documenting participants' reflections on implementing collaborative leadership practices, challenges faced and their perceptions of teachers' attitudes towards the changes. The chapter also outlines findings from the PLCA-R survey administered after the PLC implementation followed by findings from the teachers' focus group discussion on their centre leader's practices.

5.2 Leaders' perceptions of PLC attributes before the PLC implementation: PLCA-R survey

To ascertain leaders' perceptions of centre-level practices based on the dimensions of PLC attributes, participants were asked to complete the same online survey that was administered to PLC1 (refer to Section 4.1). The anonymous survey was completed by all five participants. Table 5.1 presents the summarised results of the survey.

Table 5.1 Results of pre-PLCA-R survey: PLC2

PLC2 Leaders (N=5)					
	Statements	SA	A	D	SD
	<i>Shared and Supportive leadership</i>				
1	Staff members are consistently involved in discussing and making decisions affecting issues at the centre and suggestions are incorporated into decisions made by the principal/supervisor	3	2		
2	The principal incorporates advice from staff members to make decisions	4	1		
3	Staff members have accessibility to key information	3		2	
4	The principal is proactive and address areas where support is needed		5		
5	Opportunities are provided for teachers to initiate change	1	4		
6	Leadership is promoted and nurtured among teachers	2	3		
7	The principal participates democratically with staff sharing power and authority		1	4	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 5:1 cont'd

PLC2 Leaders (N=5)					
	Statements	SA	A	D	SD
	Shared Values and Vision				
1	A collaborative process exists for developing shared vision and shared values among staff	1	2	2	
2	Shared values are reflected in ways of working that guide decisions about teaching and learning	3	2		
3	Staff members share visions about improvement that clearly focus on children's learning	2	2	1	
4	Policies and programmes are aligned to the centre's philosophy and vision	3	2		
5	Decisions are made in alignment with centre's values and vision	3	2		
6	Parents/extended family members are actively involved in creating high expectations that serve to increase children's learning [development]	1	3	1	
	Collective Learning and Application				
1	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work	1	4		
2	Collegial relationships exist among staff members that reflect commitment to centre's improvement	1	4		
3	Staff members plan and work together to find solutions to meet the diverse needs of children and their families	1	3	1	
4	A variety of opportunities and structures exist for collective learning through open dialogue	1	1	3	
5	Staff members engage in dialogue that reflects a respect for diverse ideas and that lead to continued inquiry	2	3		
6	School staff members are committed to programmes that enhance learning	2	3		
7	Professional development focuses on teaching and learning	2	3		
8	Staff members collaboratively analyse multiple sources of data to assess the effectiveness of instructional practices for children	1	2	2	
	Shared Personal Practice				
1	Opportunities exist for staff members to observe peers and to provide feedback related to teaching practices	1	3	1	
2	Staff members informally share ideas and suggestions for improving children's learning	1	3	1	
3	Staff members collaboratively review children's learning to share and plan to progress the learning	1	4		
4	Staff members provide feedback to peers related to instructional practices	1	4		
5	Opportunities exist for coaching and mentoring	3	2		
6	Individuals and teams have the opportunity to apply learning and share the results of their practice	2	3		

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 5:1 cont'd

PLC2 Leaders (N=5)					
	Statements	SA	A	D	SD
Supportive Conditions – Relationships					
1	Caring relationships exist among staff members and children that are built on trust and respect	3	2		
2	A culture of trust and respect exists for taking risks	3	2		
3	Achievements are celebrated and recognised	4	1		
4	Staff members, parents and members of the community exhibit a sustained and united effort to embed change into the culture of the centre	2	3		
5	Relationships among teachers support honest and respectful examination of data to enhance teaching and learning	1	2	2	
Supportive Conditions – Structures					
1	Time is provided to facilitate collaborative learning and shared practice	2	3		
2	Appropriate technology and instruction materials are available to staff members	2	3		
3	Resource people provide expertise and support for continuous learning		4	1	
4	Communication systems promote a flow of information among staff members/parents and the community	2	3		
5	Communication systems promote a flow of information including central office personnel, parents and community member	1	3	1	

Legend: SA= Strong Agreeably A= Agree D= Disagree SD= Strongly Disagree

Results demonstrated that most participants agreed with items across all the dimensions with disagreement on 14 items of the survey. In the first dimension of shared and supportive leadership, whilst three participants strongly agreed with item 3, on staff members’ “accessibility to key information”, two participants disagreed. Disagreement on item 7, “the principal participates democratically with staff sharing power and authority” was demonstrated by four participants. There were no open-ended comments explaining their disagreement to the item. Reasons for disagreement could be similar to PLC1 due to the existence of hierarchical relationship between staff members and the principal which does not support sharing power and authority. However, the participant who agreed on the same item expressed her efforts to involve her staff members in decision-making processes:

I’ve been trying to involve staff members in discussion and making decisions affecting our operations, policies as well as their work, people generally prefer to shy away from decision-making, and they prefer not to be accountable for the decision made. Things are changing though- slowly but surely (or so I hope!)

On ratings of items related to shared values and vision one participant disagreed on items 1, 3 and 6 which were: “*a collaborative process exists for developing shared vision and shared values among staff*”; “*staff members share visions about improvement that clearly focus on children’s learning*”; and “*parents/extended family members are actively involved in creating high expectations that serve to increase children’s learning*”. Participants also expressed that a collaborative process for sharing values and vision did not exist amongst staff members:

As a school, I think we are all aware and are clear of the vision. The vision acts like a compass to help guide our practices and decisions. Now it is easy to know what is the right thing to do; That said, one who knows what is the ‘right’ thing to do may not want to do what is ‘right’ if that makes sense!

Ratings on collective learning and application showed three participants disagreeing on item 4, “*a variety of opportunities and structures exist for collective learning through open dialogue*”. There were no open-ended comments to support the disagreement. However, the response reflects the lack of opportunity for teachers’ collaborative learning through shared dialogue. A participant, who disagreed on items 3 and 8 of this dimension, commented that:

We need to look into point 3 and 8 as we are still trying our best to use various ways to analyse children’s development

Another participant who agreed on item 7 in this section commented on the importance of professional development processes for teachers at her centre:

We take professional development very seriously and we have managed to work around our schedule so as to provide teachers with 10 to 15 hours of planning time (i.e., non-contact hours) per week...through workshops

Participants’ ratings on *shared personal practice* showed variations across items that they disagreed with. Three participants disagreed on item 4 that addressed “*staff members providing feedback to peers related to instructional practices*”. This may also reflect the sentiments shared by a participant of PLC1 (see Section 4.1) on the accepted practice of

either principal or senior teachers providing feedback to teachers being viewed more favourably than involving peers in the process. One participant disagreed on item 1 related to “opportunities exist for staff members to observe peers and to provide feedback related to teaching practices” and another on item 2, “staff members informally share ideas and suggestions for improving children’s learning”. The participant who disagreed on item 1 also provided the following comment:

Would love to create opportunities for staff members to observe peers and provide feedback at the moment no time during working hours. However, doing so during training through role play is not accurate.

When rating *supportive conditions-relationships* two participants disagreed with item 5. A participant who agreed with item 5 commented on teachers’ collective work:

At our centre, we have specialist teachers who will take charge of one subject area. They will then share their lessons with the other members of the team and as such each team member has ownership towards writing good lesson plans.

The participant, who disagreed on item 3 of *supportive conditions-structure* commented:

At the moment we have limited resource people – reasons are time and cost for resource person.

Results from the pre-PLC online survey revealed that most participants gave a positive rating for each item. Respondents’ comments on some dimensions helped explain those instances where items were ranked as not occurring in their services. The results of the survey suggest respondents viewed these PLC characteristics as generic practices that should be evident in any ECE service. Alternatively, participants may not have had a clear understanding of PLC concepts.

5.3 Leaders' perceptions of their current leadership practices: pre-PLC individual interview

This section presents participants' responses from the pre-PLC individual interview. These interviews, undertaken in the same way as those in PLC1 (see Section 4.2) provided opportunities for principals to share their perceptions on their existing leadership practices.

5.3.1 Leadership roles and practices

When asked about their roles and practices as leaders, participants articulated how these roles manifested in their day-to-day work at the centre. Although participants' descriptions of their roles and responsibilities varied, similarities across these were evident. Shuwen and Hazel highlighted the influence of religious beliefs and values at work. Christy, as a new principal, was still grappling with finding the best fit for her leadership practices. Lynn viewed her role as an operational leader and a multi-faceted one, whilst Yvonne explained how she managed her role as an influencer and an instructor.

Shuwen felt her leadership role was multi-faceted and explained that she *'leads, mentors and guides her team at work'*. Working in a large centre, she was an operational leader, ensuring tasks were delegated to teachers appropriately and overseeing the entire operation of the centres that involved parents, teachers and children. Being influenced by the religious values and beliefs of the institution, when her staff members were resistant to any initiative, collective prayer meetings were a way to influence and encourage teachers to accept new ideas. She commented:

Teachers have talents but they don't show it off because at the end of the day they will have to do it...when I approach such people I use my head to give my perspectives objectively but at the same time I always pray with them...to open their hearts to accept new ideas and reception is better. [Shuwen/pre-PLC/ I]

Christy explained that she was still new in her leadership role. She found opportunities to work with her teachers as a team and believed in inspiring and guiding her team as a mentor. Whilst playing a minimal role in administrative tasks, she strived to engage in co-designing curriculum with the teachers. She noted that she took every opportunity to inspire her teachers by motivating them to rediscover their joy with children. Christy observed that the nature of inquiry curriculum planning provided many opportunities to collaborate with her teachers on decision-making. However, she felt that the teachers were not responsive

to collaborative decision-making but were more accustomed to taking instructions. She commented:

Inadvertently, there is gap between me as the leader and the team and I'm not comfortable with the gap. I have a general style of involving people and strive to be collaborative but may not be the most appropriate style here and I have to switch [Christy/pre-PLC/I]

Christy also noted she was still struggling to determine the best approach for cohesively leading her staff members. Although she had been trying her best to build relationships, a challenge was that many teachers serving at the centre had more years of experience than her. She felt her journey as a leader was lonely and she lacked support.

Hazel headed a centre managed by a religious organisation. Although she had many years of experience as a principal, she had recently transferred to the current centre which was experiencing high turnover issues. She had to use strategic leadership approaches to address the problems to retain the teachers. With a large team of teachers, she had to strategically develop smaller teams to mobilise their roles and responsibilities to meet the staff shortage. She compared her approach to the army strategy in building efficiency amongst staff members. Hazel had identified three senior staff members as the next line of leaders, delegating basic leadership responsibilities such as planning rosters and monitoring staff shifts to them. She added:

When I'm down my seniors get proactive and they will take position to head the centre...it's an automated strategy by default and they know how to react when there is a shortage of staff and effectively use the communication system. [Hazel/pre-PLC/I]

Hazel described her leadership as being a role model and a guide in promoting the fundamental religious beliefs of the organisation. She believed it was important that teachers shared these beliefs and fundamental morals for working with children, as it was the glue that bound the whole team. Hazel noted that ECE teachers were extremely stretched by their work and experienced burnout if they were not given the right emotional support. Hence, she met her staff members often to help them build confidence, and to demonstrate she valued their contributions to the centre. She hoped her teachers would be motivated and know they were being cared for. She commented:

I think as a leader in EC first it is very important for us to be in our teachers' shoes, I believe if I was able to touch their hearts and bring

them to understand the fundamental belief of why they are here then I think we will be able make it a success. [Hazel/pre-PLC/I]

Lynn used the analogy of an octopus to compare her multiple role as principal of the centre. She said, *'at times I have to be a cook, at times a teacher, a cleaner and a plumber too'*. She believed in leading and working with her teachers as a team. She described being an operational leader to ensure the centre ran well without any issues. She illustrated her concept of teamwork in the following extract:

I'm rather an operational leader. I believe in working with people and it's always two way. I feel my leadership is about delegating the tasks to facilitate teamwork and also grooming the teachers (Lynn/pre-PLC/I)

Yvonne described that as a leader she assumed dual roles of being an influencer and an instructor. As an influencer, she needed to motivate her staff to achieve her goals whilst at times needing to guide them on certain protocols at work. When asked about her leadership approaches, she articulated that she was both friendly and a task master. She confessed at times she could be harsh with her staff members when mistakes were repeated. Yvonne also hoped to change her leadership style since the philosophy of the centre was about *settling the heart* and should begin with her as a role model. She commented:

I don't keep my joys or frustrations but I voice it out. When I spot something wrong with a teacher at work...I would take immediate action to deal with it. My teachers tell me they feel lousy with my ways...I'm trying to change [Yvonne/pre-PLC/I]

5.3.2 Beliefs and values influencing leadership

As each participant described their espoused beliefs and values, it was evident that these were influenced by the philosophy of their centres and further guided by their individual insights. Shuwen expressed that the centre had its own philosophy; however, she took the initiative to revise the core values of the centre which included the contribution of teachers in improving children's lives. She read out the following revised core value aloud, *'Every pupil and staff (she emphasized) will grow to be appreciative, sharing, confident, enthusiastic, nurturing, sociable, inspiring, opportunist and notable'*. The career pathway for teachers in the Singapore EC industry was not clear, hence she firmly believed in building capability in teachers. She commented:

You can always plonk in first class leaders but if this first class leader is not humble enough to know the ladies...all the policies will be a

waste and doesn't get translated. Looking into their capability...enables the teachers to trust their leaders and helps them grow. [Shuwen/pre-PLC/I]

For Christy, the centre's philosophy complemented her beliefs and values and helped in directing her leadership practices. She added that the philosophy articulated '*empowering children to drive their learning and that learning has to be meaningful for both children and teachers*'. Although the centre's philosophy was established, teachers were not familiar in delivering the philosophy due to the turnover of principals in the past. She added that it was still a struggle for her to get the teachers' cooperation and understanding to execute the philosophy. She commented:

Some staff members are inspired and can execute, some inspired but are not executors and there is this last group who don't know whether they believe or not and don't know whether they can do it. It requires a mind shift for all staff members to change and I'm working towards it. [Christy/pre-PLC/I]

Hazel was happy to work in a place that nurtured her leadership beliefs and values. She explained that the philosophy of the organisation was '*nurturing through passion and love based on the spiritual belief that young children are pure beings and it is a privilege to be the chosen one in caring and imparting knowledge*'. As a leader, she took responsibility to influence and inspire her teachers in guiding them. She expressed:

I take the responsibility to ensure that teachers...are mindful of the fundamental beliefs when carrying out their task and will be blessed when they truly give! [Hazel/pre-PLC/I]

According to Lynn, the philosophy of the organisation valued caring and nurturing children's unique qualities and potential to become successful life-long learners. However, Lynn personally believed that co-operation and teamwork amongst staff members were vital to realise the philosophy of the organisation. She commented:

I need the teachers to work as a team to understand the rationale behind the philosophy and apply that in every aspect of their work and to be positive. [Lynn/pre-PLC/I]

Yvonne who managed her own centre believed in '*settling the hearts*'. She valued the principle that children should be nurtured and cared for without anxiety. However, she added that '*the recent spate of parents' demands on the insistence for an academic based*

*curriculum made me reconceptualise the centre's philosophy and my beliefs and values'. She questioned whether her teachers were competent enough in preparing their children for the next step to primary school. She was not swayed by the challenges but made efforts to settle the parents and teachers who were agitated by the issue. Eventually the issue helped her to rework the philosophy to ensure it *settled the hearts of children, parents and teachers*. Yvonne commented:*

Running my own centre...privilege of having my magic wand to do what I want. I bring in my beliefs and values and turn it around in a different way to meet the expectations. I had to ensure that parents are settled with no anxiety and children are being prepared for school and I also support my teachers' pedagogical practices. [Yvonne/pre-PLC/I]

5.3.3 Sharing leadership tasks

When participants were asked how much of their leadership work they would share with staff members, their responses varied. Overall, they described the notion of sharing leadership in terms of delegating tasks and teachers being given opportunities for decision-making processes related to curriculum and operational matters. Lynn expressed that it was unfair to share her leadership tasks with teachers as they were already busy with planning and teaching. She also explained that certain designated duties such as attending to phone calls and planning the timetable for teachers were delegated to the experienced teachers. Even during her absence there were protocols that teachers should consult her on decision-making. She commented:

Even if I am not at work teachers can always message me to ask me for clarifications. But when I'm busy with meetings I will assign tasks to some experienced teachers. [Lynn/pre-PLC/I]

Similarly, Christy expressed that she would not involve her teachers in sharing leadership tasks since they were busy with classroom and pedagogical issues. However, she would prefer her staff members to be involved in curriculum decision-making. The centre followed an inquiry-based approach to curriculum and teachers were expected to exhibit curriculum leadership skills and knowledge when planning curriculum. She noted that teachers voluntarily helped out in planning big events at the centre. Shuwen, who worked in a large centre, described that it was vital for her to delegate some of her tasks. Tasks such as curriculum planning were overseen by the senior staff members. She commented:

I've been blessed there are teachers who are seniors who are able to take on those roles. We meet regularly may be once in two weeks so that these

level-leaders can mobilize the teachers to handle issues on curriculum planning. [Shuwen/pre-PLC/I]

I probed further to ask how teachers were empowered in making decisions. She noted that engaging the level-leaders in collective decision-making on curriculum matters was a common practice in her centre. She said:

The level-leaders share their thoughts with me on matters related to curriculum and it is a collective decision-making process...with my input and thoughts. Then this information will be disseminated to the other teachers. I should say rather this is how we do by co-constructing!
[Shuwen/pre-PLC/I]

Hazel commented that she was open to her staff members sharing her leadership tasks; however, tasks were confined to fund-raising activities, basic operational strategies related to teachers and parents' queries. She noted that it was always a collaborative environment and there was mutual agreement on the protocol for delegating tasks. She expressed:

Of course, my staff members are involved, unless it involves dollars and cents, or highly confidential information. It's about getting them involved and understanding the whole rationale and implications behind some of the tasks. [Hazel/pre-PLC/I]

Yvonne explained that she was the administrator and delegated most of the centre operations to her senior teachers as she was in-charge of standard operating procedures (SOPs). Teachers would take over enquiries or walk-in enrolments at the centre only during the absence of the senior teachers.

5.3.4 Leaders' knowledge of PLCs

When asked about their understanding of PLCs, participants responded that they did not have enough information to comment on it. Although they had read about it in the literature, they were not clear about the concepts and definition. Shuwen expressed that '*I suppose it would be like peer-sharing that takes place at my centre but I do not know the exact principles behind the concept*'. Hazel commented that she had heard about it from her friends; however, did not know the concept and was keen to learn more about it. She said:

I believe that PLC is about building that community of collaboration and trust...I think it's worth exploring...nothing much is known about PLC but learning about it will be worthwhile. [Hazel/pre-PLC/I]

During the interview, Lynn asked for a definition of PLCs and responded that such learning communities are necessary for ECE centres in Singapore. She commented:

Like you said it needs building trust...that can be very difficult because our positions have become very competitive between centres as to how well I do when compared to mine with another. This kind of collaborative learning platform is necessary in our Singapore context. [Lynn/ pre-PLC/I]

Similar to Lynn, Christy felt that ECE centres had been functioning on their own without much help. She commented, ‘*I do not have a clear idea but will be good to learn more about PLC*’. Yvonne expressed, ‘*although I’m not aware of the concept, your explanation of PLC appears to be very beneficial for professionals*’. She articulated that if it was beneficial, she would like to bring the learning to her staff members. Thus, while participants’ knowledge of PLC was limited, they appeared keen to learn about the concept.

5.3.5 Capability building for leadership

As a concluding interview question, I asked if participants had opportunities for capability building through collaborative professional learning on leadership development. Participants were disconcerted by the prevailing issues in ECE and expressed their views on the non-collaborative and competitive spirit that was prevalent in the Singapore ECE context. Further, their individual concerns collectively expressed the dearth of such learning opportunities for ECE principals in Singapore. Shuwen shared that principals in ECE needed a support network to collaborate and learn from each other; however, nothing was known except for professional development courses. She expressed that specific capability building for leaders was vital for growth. She commented:

When you say leadership development, there is so much I require. We leaders never have the time to reflect. There should be opportunities to discuss with people about curriculum, policies and current problems. I hope PLC supports that. [Shuwen/pre-PLC/I]

Lynn was very encouraged by the idea of leadership development. She was also supportive of the notion of mutual collaborative learning through PLCs. She expressed:

If PLC is one way of leadership development through collaborative learning, I believe that leadership development will definitely improve for people like me. It will be not about receiving but contributing to the group for learning. [Lynn/pre-PLC/I]

Hazel expressed that the leadership journey for principals in ECE was lonely and '*it will be good to have such capability building for principals in Singapore*'. On the same note, Christy shared that collaborative learning amongst ECE leaders would support the whole ECE industry in Singapore to overcome the ignorance and insecurity that principals grappled with. She commented:

There's always this fear and insecurity that one's ideas will be taken away... however, leaders are lonely and coming together for professional learning through collaboration is vital for the industry. [Christy/pre-PLC/I]

Yvonne pointed out that the ECE sector in Singapore emulated a competitive business model, and the notion of collaboration for professionals was eroded. She expressed that a strengthened partnership within the ECE community would help in developing best practices for children and parents. She added, '*I think leadership development through collaborative learning is necessary for the ECE sector to grow as a community of learners.*' It was significant to note that participants were concerned by the lack of collaboration between ECE professionals and were opened to collaborating for their professional learning.

5.3.6 Section summary

Findings of the pre-PLC individual interviews revealed participants' perceptions of their roles as leaders and their espoused beliefs about leadership. Participants also had varied perceptions about shared leadership. The notion of delegating tasks was believed to be part of sharing leadership with teachers; however, some participants believed that teachers should not be given additional leadership tasks beyond their workload. Data from the interviews also provided insights that participants did not have a clear understanding of PLCs. Participants deliberated on the need for professional collaborative learning and capability building for leadership development. Issues analysed before the PLC supported planning for the PLC implementation. These issues also became sources for further discussions and interactions within the structure of the PLC meetings.

5.4 Leaders' engagement in the PLC process and its influence on their leadership

This section focuses on leaders' engagement in the PLC process and its perceived influence on their leadership practices. Data for this section were drawn and analysed from similar sources as for PLC1 (as indicated in Section 4.3). Analysis of data identified the following themes: *trust* and *perceptions of PLCs* and *collaborative enquiry through PLCs*.

5.4.1 Trust

This section describes how participants understood the importance of building trust, which was an integral learning aspect of the PLC. The results describe the construction of trust within the PLC, participants' reflection on issues of trust at work and the influence of trust on their leadership practices. Participants' responses across the data sets revealed the following sub-categories: *establishing trust within the PLC, issues of trust from PLC to workplace* and *self-awareness on leadership practices*.

Establishing trust within PLC

The notion of trust amongst participants evolved based on regular interactions, their insistence on establishing professional integrity, shared interests in meeting other principals and the commonality of their values and beliefs. Further, responses also demonstrated the acknowledgement of their professional relationship established with me which may have been a catalyst for building trust based on respect and reciprocity within the PLC. During the first PLC meeting, there were exchanges of greetings and catching up with the latest news in the ECE front. Shuwen shared her experiences of a similar involvement in the Network Learning Community (NLC) organised by ECDA with EC professionals. She explained that the initiative was organised to set up a fellowship with members of the ECE profession and to share best practices for the development of the sector in Singapore. She added that the group was not exclusively for leaders in ECE but shared with teachers. The leaders in the NLC were constrained from addressing issues related to leadership or to seek help from their counterparts. The rest joined her conversation, sharing their perspectives on how an exclusive platform was necessary for leadership learning. Although some participants affirmed the possibility of being part of the PLC, there were also apprehensions about which participants sought clarity. Hazel and Lynn shared similar sentiments that they were excited to meet other principals for professional learning. Lynn commented:

I've never met or worked with principals of other centres. This PLC is an opportunity to come...together. [Lynn/PLC/M1]

Hazel responded that it was a rare opportunity and she hoped to learn from her counterparts in the field. She said, *'that's why I jumped on the idea of being part of this research although my schedule is so packed.'* On the other hand, Yvonne expressed that when she was invited to be part of the research, she suspected that this could be a covert initiative of

the government to seek information about the practices of private centres under the pretext of a research study. She was hesitant to join but gathered her courage to check it out with the intention of opting out if there was bureaucracy involved. However, to her surprise the meetings with the group confirmed that she was involved in a genuine research study. She commented:

It is the second time I'm meeting all of you from the same industry in a room, I have always worked on my own and never had the opportunity to meet others in such close context. I know there's going to be some professional sharing. If the learning was through sharing, I wonder...what can and cannot be shared? [Yvonne/PLC/M1]

Christy acknowledged Yvonne's point. Although, she was aware that the PLC was about collaborating with other principals to learn from each other, she was not sure of the agenda and wondered what she would be asked to share. She expressed that she came with the confidence that there would be some new learning since she had attended many of my professional training courses. She expressed:

When I asked my Director for approval to attend your PLC, she asked me what I will be sharing. I told her I wasn't sure but it's my lecturer who is conducting this PLC and I trust I will learn something new from her. [Christy/PLC/M1]

An ice-breaker activity was conducted for participants to introduce themselves and to share about their workplace and leadership practices. Taking into consideration that participants' understandings of PLCs needed some clarification, a briefing session was held to explain the purpose of the research, introduce the online tools and explain the definition of PLCs employed in my study. Participants were encouraged to know that they would take ownership of the PLC by sharing, discussing, interacting and bouncing ideas off each other to resolve issues. Christy picked up a line from the briefing and read out, '*leaders to be reflective of one's practices through active dialogic approaches and develop shared knowledge*'. She added that as a new leader she was trying hard to deal with many administrative and workplace personnel issues. She shared that she was happy to be part of the PLC and expressed, '*I hope to get some help through this shared dialogue*'.

Shuwen commented on the characteristics of PLC including building mutual trust, respect, support amongst members, inclusive membership, openness, networks and partnership. She shared with the group that her participation with the NLC group had a similar understanding to establish mutual respect and credibility. However, the NLC was devoted

to sharing best practices with teachers, and members never had to share personal issues or practices of principals and sharing was monitored. She commented:

If we are here exclusively about leadership practices and whatever we share 5% of the information is going to be personal. On a personal level I'm currently collaborating with two other kindergartens for teachers and children to network and learn. A common understanding prevails that information...stays within our collaborative context.
[Shuwen/PLC/M1]

Yvonne responded that Shuwen's point was encouraging and that an important consideration for the group was to establish some means of professional integrity, respecting and establishing confidentiality in relation to information shared by the members. Christy agreed with Yvonne that having some ground rules about how information shared should be preserved within the group would be beneficial.

At this juncture, Yvonne asked whether members of PLC1 were confronted with similar issues and how did they operate as a PLC group. I shared that PLC1 group had a similar discussion about the need to develop trust through setting objectives about how they would work together. Members of PLC2 agreed that it was essential for their group to establish similar consensual objectives for collaboration together with a confidentiality agreement. Table 5.2 presents the objectives established by participants of PLC2 that were shared on the online discussion forum.

Table 5.2 Shared norms established by PLC 2

Goal:	Develop professional learning community (PLC) with leaders in the ECE industry to improve leadership practices through collaborative dialogical approach
Shuwen	To establish enough trust to be non-judgemental and challenge best practices for the betterment of children's learning and staff development within the group
Hazel	To encourage authentic interaction and provide a shared context for sharing and learning that is mutually beneficial
Christy	To promote open communication, trust and to connect each other to resources – such as information, strategies and best practices – and respect the confidentiality of information shared
Lynn	To work effectively with mutual trust and consensus, sharing good practices to improve and enhance our practices positively through collaboration and treat information of others with respect
Yvonne	To establish a support platform for EC leaders building strength through collaboration, open communication and uplift each other especially during obstacles at work and practise integrity to respect information shared by others

As participants' interactions gained momentum, the 'core values' activity on leadership that was shared with PLC1 was introduced. Upon completing the exercise, participants displayed similar views and values about leadership and each participant explained how these values guided them at work as an individual. Shuwen commented:

Although we come from diverse contexts however, our core values show similarity in our views and beliefs about leadership...kind of bind us together. [Shuwen/PLC/M2]

Discussions focussed on how trust deepened relationships, and how it enabled collaboration. Christy expressed that the literature provided deeper insights to understand that trust does not happen as a result of spending time with people but was a choice made to believe in the competence, reliability, integrity and character of another person. She realised why trust was needed to be established within the PLC. She commented:

I think to trust someone one need to be trustworthy. I think people are naturally conscious, they are afraid of judgement...I suppose establishing respect and relational trust within the group was a good start [Christy/PLC/M2]

Hazel was keen to know if there were further readings or activities to learn about the notion of building trust and positive relationship for teachers. Considering participants' enthusiasm, another activity on relational trust was introduced at the third PLC meeting. The activity provided opportunities for participants to reflect on enabling conditions in building relationships and trust with their staff members to work collaboratively. After the third PLC meeting, participants' reflective journals expressed their thoughts, initial discomfort, apprehensions and learning experiences with regard to learning about and building trust.

Shuwen's online reflective journal entry expressed that the core values exercise generated a good flow of interaction and helped her to understand that members shared similar beliefs and values of leadership. These shared beliefs and values helped in building trust amongst the group members. She expressed:

Learning to trust someone has always been a risk-taking endeavour. The core values exercise made me reflect on my own beliefs and values as I listen to the rest. Once when trust sets in, sustaining the level of trust becomes an intentional role of the leader. [Shuwen/RJ]

On the other hand, Hazel expressed her feelings of anxiety and discomfort when she first became part of the PLC. She acknowledged that she needed time to develop a level of

comfort to be part of the group. Eventually, she settled as respect and collegial trust emerged within the group. She wrote:

When I was given this PLC opportunity...I recall the first time we met...there were occasions I felt uneasy, I wasn't sure if my opinions will be accepted. As we go along, I am getting more comfortable and willing to share and to seek the members' opinion. [Hazel/RJ]

Lynn was quite positive from the start and felt accepted. She described how trust evolved through continual interactions and she felt comfortable to be part of the PLC. She also expressed how trust enabled agreement and disagreement to flow with civility amongst the participants. She wrote:

I feel most are able to share a lot, at times, and I'm not saying much but that does not mean I am not trusting, I realise that trust is an important core in this PLC. [Lynn/RJ]

Yvonne expressed her self-realisation candidly. She assumed participants would be involved in covert participation and she expressed that it was not usual for EC professionals to share openly and she did not expect a genuine reciprocity and open communication to grow amongst the PLC members. She felt that trust was the binding glue for building cohesiveness and positive relationships within the group. She expressed:

I've never been in such close connections with other principals and am surprised to know that we could all connect. I had my doubts...how it can be sustained! But surprised to see that trust started to build responsively. [Yvonne/RJ]

Trust within the PLC was constructed through participants' reciprocal interactions and shared interests. Trust began to develop when participants moved away from the wondering to building a shared purpose for collaborative learning. The objectives that participants crafted for their group served as a pre-condition to guide their conversations and establish a group identity.

Issues of trust: from PLC to workplace praxis

The notion of trust built within the PLC extended to discuss issues of trust at work. Addressing the issue of building relationships and mutual respect amongst staff members revealed that learning about trust had an impact on their leadership practices. Yvonne expressed that the discussions which took place with hypothetical case scenarios in the 'relational trust' activity helped her to reflect on how she could create situations to improve

relational trust with teachers and parents. She expressed concern that, due to her busy schedule, she could unwittingly neglect establishing mindful respect and personal regard with her staff members. Yvonne felt that these were areas she needed to improve and to be a role model for her senior teachers to acquire those aspects. She commented:

I like what you said about relational trust, that it's not a set of prescribed steps but they are conditions which may have to be facilitated on my part as a principal...this can't be accomplished in a snap...the culture of personal regard is necessary and I may have to do it with role modelling as a leader. [Yvonne/PLC/M3].

Christy, being a new principal, shared her concerns over an issue with teachers' lack of collaboration. She added that in her context teachers were required to collaborate effectively when planning curriculum. She pointed out that building trust and positive relationships was necessary at the workplace. However, since she is still new to the teachers, she has to bring in the notion of building trust amongst teachers implicitly through social exchanges.

Similarly, Shuwen shared her concerns about the lack of trust between her teachers. There were constant conflicts of interest between her older teachers and novice teachers when it came to matters related to curriculum planning. The older teachers were steeped in their ways of teaching using worksheets; however, the novices were trained with new teaching practices using play and setting up learning corners. She expressed that older teachers tended to disregard ideas and suggestions on pedagogy suggested by the novice teachers. This was a perpetual problem that Shuwen had to cope with and she expressed that building trust to facilitate a cohesive teacher community was necessary. She commented:

Building a culture characterized by trust for cooperative learning and professional development is important. I need to set that trust for them to know...decisions for children's learning should be made beyond their personal interests. [Shuwen, PLC/M4]

Hazel shared an experience of a recent meeting with the management and her counterparts. The discussion at the meeting could not reach consensus due to disagreement from one of her colleagues and the experience left an impact on Hazel. She noted that there had been a lack of trust amongst the upper level leaders and contradicting beliefs and values on matters related to impending changes in the organisation. The reading on trust was an impetus for Hazel to understand the issue behind the disharmony at the management level. It made her question further whether she had worked on establishing enough trust with her staff

members or she had taken it for granted that staff members worked cohesively. She commented:

Coming back to our PLC objectives, I was then thinking out loud, indeed building a solid relationship is based on trust. The experience after the meeting at the headquarters, now gets me to relook at how my staff members are working at the centre and its impact on my leadership. [Hazel/PLC/M4]

Lynn responded that she shared Hazel's sentiments. The reading and discussions made her reflect on whether she had worked on establishing trust at her centre. She quoted from the article that emphasized "*principal's competence to demonstrate strong vision and clearly defining expectations for teachers to achieve... common goals for collective responsibility*" (Roy, 2007, p. 3). It never occurred to her that personal attention was necessary to support collaborative learning. She expressed:

I trust my staff members and believe it is mutual...however teachers' collaborative learning happens only with my intervention. I reflect...if I have focussed on establishing purposeful trust for teachers to form common goals in forging collaborative learning. [Lynn/PLC/M4]

Christy said, '*I cannot agree more to what is said in the article*'. She expressed that it was true that trust was important for collaboration and to build mutual respect between staff members. However, it was not easy to bring everyone to work together based on trust alone. She described an enthusiastic teacher who undertook all the planning for a parents' event at the centre. She explained how the teacher sent an email to the rest of the staff members stating that she had planned everything for the parents' event and she might not need help; however, she would appreciate if teachers wanted to help. According to Christy, she trusted her teachers would work collaboratively with their colleague, but the teachers' reaction was quite the opposite. Table 5.3 illustrates the conversation and suggestions that took place between the PLC members to solve this issue raised by Christy during PLC Meeting 4.

Table 5.3 Participants' discourse on challenges at workplace

Shuwen	<i>Christy, I think your teacher made it very clear in her email that she does not need help and she is very capable...if the teacher has shown initiative to undertake a task, she should also display an interest to work with others, ...this is how I would read her message and this may lead to distrust and non-cooperation</i>
Hazel	<i>Christy, did you inform the other teachers that she was appointed to undertake the lead role to do the planning? And inform the rest of the teachers that they will have to work with her collaboratively?</i>
Christy	<i>No! I thought it was unnecessary to inform the other teachers about any delegation of work but expected the rest to appreciate and show initiative to work together since the teacher had already sent an email to the rest</i>
Hazel	<i>You see, Christy, this is where the problem begins! For your staff members, the teacher could be very domineering...this will get teachers to wonder why she disseminates information when there was a principal and she has no appointed role to do this? This will not motivate people to work as a team but lead to more disbelief and distrust</i>
Christy	<i>But I always welcomed teachers' ...initiatives to help and I think this is one of the aspects of encouraging 'Distributed leadership'. When I refer to the article on relational trust, I see... the teacher's willingness to take responsibilities exemplified her 'personal regard' to go beyond her job definition but now I realise it turned out awry due to my lack of attention to the issue. I think I should have supported the teacher's enthusiasm so that everyone acknowledged it.</i>
Yvonne	<i>I think a principal cannot rely on a flat structure of leadership practices like distributed leadership on decision-making alone, both the flat and horizontal practices of leadership need to be synchronised to work in tandem. Although our ECE is relationship based... Singapore culture is such that hierarchical practices cannot be abandoned to accept distributed leadership per se. Specific job functions of employees may not be clear and can cause unnecessary problems</i>
Christy	<i>I've always assumed that teachers are professional enough to understand ... but this issue has made me reflect whether I was competent in my responsibility as a leader to communicate effectively to all teachers</i>
Lynn	<i>Christy, I think you meant well, and you were allowing the teachers to make the decisions but there is a need for change in mind set for that kind of a cultural change I suppose!</i>

Participants' dialectical discourse in the above PLC meeting clearly demonstrates how collaborative learning helped Christy to examine her assumptions through reflection and inquiry.

The principals in the group collectively helped to sensitize Christy to the issue by viewing the problem from a broader perspective, taking into consideration the cultural context and how others would perceive the teacher's attitude working in a collaborative team environment. Participants' were also sensitive in providing suggestions on how practices such as distributed leadership should be contextualised to befit the situations at work.

Building trust: Self-awareness on leadership practices

From the notion of improving trust at the workplace, the discussions led participants to reflect on their personalities and how the new learning may impact on their leadership practices. Participants used the online reflective journal to share their thoughts and learning experiences. Analysis of participants' reflections revealed that not all were focussed on their weaknesses. Unlike Christy, Hazel and Yvonne who reflected on the gaps in their practices, Lynn and Shuwen were encouraged by the readings to identify their strengths as leaders and indicated areas that may need some focus.

Christy shared that the literature on building relational trust made her reflect on her leadership practices and she realised how trust pervaded every social relationship with people at work: *'I read that principals need to spend time considering interpersonal interactions to build trust and respect among staff'*. As a new principal, Christy explained that there was always much to do at work, and she did not see the necessity to engage with her staff members in casual conversations. She expressed that a teacher once commented that Christy could never be deterred from her focus at work. The teachers said, *'we can never be like her ...what takes us weeks and months can be done in a day by Christy!'* This remark from the teacher jolted Christy and she expressed that she needed to invest time to build mutual relationships with her teachers for them to know her more as a person than just as their principal. She expressed:

I needed to invest time in letting them see the human-side of me, engaging in non-work related conversations...is important thing to do if I want to forge a closer, deeper relationship with my staff.
[Christy/RJ]

Christy expressed how as a teacher she had the opportunity to work with different leaders. There were leaders who trusted and encouraged her competence. And there were some who were micromanagers undermining teachers' performance. She described how she unintentionally took the role of a micromanager in making decisions for the teachers,

assuming that she was doing something in the best interest of the teachers. However, a teacher's remark made her realise her mistake. She commented:

I'm a perfectionist and I tend to impose my ideas on others...an honest teacher told me that I was robbing away their voice as a teacher...and I saw in me, the micro-manager that I hated...I could be losing their trust in me...if I do not focus on building trust.
[Christy/RJ]

Although the incident happened months ago, Christy expressed that the readings influenced her to make purposeful changes and the discussions facilitated her reflections to reassess her leadership practice. Yvonne reflected on *personal integrity* and *building competence* with regard to her leadership practices. Lately, she had realised that due to procrastination many of the impending changes and improvements that were brainstormed during staff training were not implemented because of a focus on everyday centre operations. Although her senior level administrators had good relationships with the staff members, she realised that aspect alone may not help in building trust with her staff members. She realised that a concerted effort and the exercising of personal integrity could help to build competence and build trust. She expressed:

I need to follow up with my words by working on my personal integrity and build that competence in mobilising my teachers...negligence or incompetence may lead to slow erosion of trust. [Yvonne/RJ]

Hazel described how learning about aspects of trust through the PLC was an eye-opener for her and helped her to re-examine whether she was doing enough to build trusting relationships to develop collegiality amongst teachers. She had started to work informally with her teachers to develop teachers' shared values and vision. This work helped her understand what support networks were necessary to improve the working conditions for her teachers. She expressed:

Learning about ways to build trust and positive relationships with staff members was a good learning point to help teachers understand the perspective of shared values and vision and examine the gaps that needs to be closed. [Hazel/RJ]

In contrast, Shuwen and Lynn expressed that learning about relational trust helped them to focus on areas that needed some improvement; however, they were positive that their practices reflected aspects of relational trust as indicated in the reading. Shuwen expressed

that she did not see *relational trust* as two separate words. She had to take the risk to trust and build that sustainable relationship simultaneously. She described that working in an all women environment had its moments of increased vulnerability and trust being at risk. She articulated that exercising mutual respect, personal integrity and going that extra mile had been part of her leadership practices through role modelling. However, the toughest part of her journey as a principal was to sustain her own and her staff members' *competence in their core role responsibilities* to manage the everyday operations efficiently. As much as she was struggling with this aspect, the reading made her aware that she needed creative ways to meet the demands which otherwise could compromise her leadership. She wrote:

The competence in core role responsibilities had been the toughest to meet with the parents and teachers' expectations...and achieving the objectives requires concerted effort from all in the centre.

[Shuwen/RJ]

Lynn acknowledged that the readings were timely in informing her whether she was going in the right direction. She described that the readings also provided insights and strategies to enable her to examine her leadership practices and ways to influence her teachers to cultivate trusting relationships and collegiality. Her only worry was the changing context of the ECE industry and revision of policies that increased the workload of teachers, resulting in disillusionment. Building trusting and positive relationships at work had never been easy and she found it difficult to mobilise collective teamwork. The aspect of enhancing trust through teachers' competency to work collaboratively was a timely reminder to improve on her leadership practice. She expressed:

It is the trust that needs to be built for collaborative work between my teachers and an important aspect for effective leadership as well. It is being a trustworthy leader...this is where I need to keep working. [Lynn/RJ]

Participants' responses were reflective of how trust was an important predictor of effective leadership. The discussions and reflections also revealed that participants were aware of the importance of building trust with and between staff members. They were also cognizant that trust was a dynamic construct that changed over time in the ever-changing context of the ECE field. It was through the readings that participants understood the multifaceted aspects of trust essential to effective leadership. Through developing self-awareness, principals evaluated their practices and reflected on how they could improve their leadership.

5.4.2 Perceptions of PLC

Participants' face-to-face and online interactions also informed their understanding of PLCs and their influence on their leadership practices. Data provided insights to understand their thoughts about the PLC and how they conceptualised the process of collaborative leadership practices. Responses revealed the following categories: *Concept of PLCs*, *Reflective practice through PLCs* and *collaborative enquiry through PLCs*

Concept of PLCs

Participants' experiences of the PLC were generally positive; however, individual descriptions varied with distinctions regarding the method of delivery, the structure of working through complex issues, the culture of collaborative relationships and the process of building confidence and trust. Shuwen expressed that the unique quality of the PLC was not having instant answers to issues but the valuable process of interaction, reflection and sharing of perspectives that provided the confidence to conceptualise new learning. She commented on the method of delivery which included the sequence of readings followed by face-to-face and online interaction that intensified the learning. She expressed:

We don't have our answers to all the issues, it was our experiences and we shared openly...a good professional learning platform to meet and learn and not just a coffee shop talk. [Shuwen/PLC/M4]

Similarly, Hazel commented how the structure of the PLC helped her in working through complex issues. She described the PLC as an investment for professional learning for leaders. She said:

It's the collective learning style...the reading of relevant articles and the ensuing discussion and reflection which put us on a learning curve to reflect. [Hazel/ PLC/M5]

Christy and Yvonne commented on the culture of collaborative relationships that encouraged participants to share openly with each other. Christy expressed that it was the system which helped to strengthen her critical thinking. Yvonne compared the diversity of the group members' knowledge and expertise and working collectively with mutual respect as in the following extract:

Although we came from different organisations...PLC was like a natural stream and we were going with the flow...sharing fluidly. It was a matter of trust building and sharing what we do through... but as the listener we were not judgemental. [Yvonne/PLC/M5]

She also stated that the collaborative professional learning opportunity through a PLC with like-minded professionals eliminated isolation and promoted learning. She said, '*coming together as a PLC group...lit up a light in my head that I'm not lonely anymore*'. Lynn acknowledged Yvonne's comment and added that a PLC was a knowledge-based platform that fostered confidence and trust. She noted that she was pleased with herself for having acquired the confidence and trust to open up to others and this may not have happened without the PLC. She commented:

We articulate well by being open to sharing without any reservations...I could also open up to share and that was the most remarkable achievement for me. [Lynn/PLC/M5]

Although participants came with little or no prior knowledge of PLCs, their involvement and experiential learning helped them gain understanding.

Reflective practice through PLC

Participants shared that due to their day-to-day mundane routines, they seldom had time to reflect on issues related to work and their practices. However, participants expressed that the PLC provided a productive learning experience to understand the importance of seeking answers through reflection and inquiry. Participants' responses illustrated how reflective learning was encouraged by the structure of the PLC and they described their individual experiences of reflective learning related to their leadership practices and their understanding of the term collaborative leadership practices. Notably, participants also shared their enthusiasm to implement PLC-modelled reflective learning in their practice to benefit their teachers. Shuwen articulated that the only time she reflected on issues at work was through devotion time with her teachers. However, the PLC had left an impact on her and provided her with a different perspective on how reflective learning could be encouraged for teachers. The PLC structure of discussions, readings and reflections had given her the insight to implement a professional level of reflective learning. She commented:

As I mull over what was shared during the meetings it opens up new thinking and solutions and the spiral of reflection does not stop. I see that PLC could be a system for reflective learning for both teachers and principals if facilitated well. [Shuwen, PLC/M7]

She added that it was important for ECE practitioners to be involved in such interactions and reflection for their own personal benefit. When it came to pedagogical matters, teachers

had less time to do reflective thinking. However, reflective learning and thinking could be productive if it was modelled on a PLC structure. Christy concurred with Shuwen and expressed that self-reflection was a continuous spiral process and encouraged questioning. She commented:

When I see issues happening at the centre it resonates on what we discussed...it puts me on a roller coaster with several questions and I look forward to meeting again to bring the questions in for discussion. PLC is definitely a platform for deep reflective learning. [Christy/PLC/M7]

On the other hand, Hazel and Lynn took to their reflective journals to articulate how their reflective inquiry through the PLC influenced change in their leadership practices. Hazel acknowledged that reflective thinking encouraged her to view issues from multiple perspectives. Her notable experience was her self-reflection on her leadership styles. The discussion and readings on various leadership approaches enabled her to reflect on her own leadership practices. She was not aware that she could adapt various approaches to deal with different situations. Further, sharing of anecdotal experiences from the rest gave her deeper insights to consider working on her approaches. She said:

Knowing about various leadership approaches was an eye-opener. Even if I had come across this reading, I don't think I would have paid so much attention...it was the discussions, reflections and sharing from the rest that provoked my self-reflection. [Hazel/RJ]

Lynn expressed how the PLC interactions facilitated her reflective thinking to give up a practice that she adhered to. She expressed that as a principal, hardly anyone would come forward to point out her mistakes. She had a compulsive practice of contacting and updating staff members even when they were off duty. However, the sharing by one of the principals during the PLC about respecting teachers' space and time prompted her to change her practices. She expressed:

I've been annoying my teachers during their day offs and leave periods providing updates on changes via what's app...teachers appreciated the updates...but they preferred to be untouched during their holidays! I was shocked...was a good reflective learning for me to change my ways. [Lynn/RJ]

Participants described PLC as a form informal professional development that helped to improve their practices though reflective inquiry and collaborative learning.

Collaborative inquiry through the PLC

Participants' interactions and reflections provided insights into how collaborative learning through the PLC benefited and influenced their practices. Participants' experiences of collective learning were extended from their PLC to their workplaces. Participants also commented on the various perspectives of collaborative learning that influenced them. Yvonne noted that the collective learning experiences from the PLC provided opportunities to reflect on her leadership approaches. She realised that she had to change from being directive to being more collaborative. She had been running three centres and assumed that leadership could be sustained if it was kept positional. The learning enabled her to change her practices and encourage teachers to share their perspectives and to be part of the community in making decisions. She commented:

I was confident of being a good leader...before PLC I rated myself 10/10 but after PLC I see myself at 4/10. I have learnt to appreciate the composition of others which is part of the repertoire. I've started to engage my teachers in my meetings to share their perspectives. Just a turn of events! [Yvonne/Post-PLC/I]

Hazel pointed out that meetings for her teachers were always one way with information being disseminated. The PLC-facilitated collaborative learning strategy was a practical way to encourage teachers' interaction. When she changed her meeting style, staff members responded well, and their interactions were better:

Each PLC session provides a setting that is richer and more stimulating with active engagement. I see the goodness of collective learning of sharing...and have decided to restructure the meetings of my teachers at work. [Hazel/post-PLC/I]

Lynn expressed that although learning was collaborative, she was never forced to give suggestions during the discussion. She said, '*I liked the comfort of learning...sometimes just by listening to the rest*'. She added that it was the process of creating knowledge through joint construction of interests. She wished to implement this collaborative learning style with her teachers since it fostered learning. She expressed:

During our discussions...the flow of knowledge was well shared and enabled the application of what was learnt...I wish this happens to my teachers too. [Lynn/RJ]

On the other hand, Shuwen attributed the collaborative process to the facilitation technique that promoted their sharing, discussion and critical thinking. She commented on the process

of facilitation that sustained participants' focus on the learning and described it as balanced: *'not too prodding nor too hands off'*. It was an important skill that she wished to learn. She commented that teachers' collaborative learning was not strong enough during pedagogical meetings and one way to change was to adopt some facilitation techniques modelled on the PLC structure. She said:

My teachers share perspectives, but I need to intervene as the principal to implement and ensure the learning. I'd rather have this facilitation skills to promote interaction and improve their attitude.
[Shuwen/RJ]

During the last face-to-face meeting, the discussion revolved around collaborative learning and Christy shared her strategies to improve teachers' learning. Being inspired by the idea of developing teacher leadership, she engaged an experienced teacher who was willing to share her expertise with the nursery teachers. Christy told her that the objective of the meeting was to ensure everyone shared with enthusiasm and participated in the planning and discussion. She commented:

The group planning was carried out 3 weeks ago...So far, the teachers are relating well with her and there's good discussion taking place...I have been a silent observer...I see everyone sharing...I suppose it's the collegiality amongst the teachers...I see camaraderie and positive relationship building. [Christy/PLC/M7]

Christy also added that she understood the objective of collaborative leadership through her involvement in the PLC. The learning has provided insight and the real meaning about shared leadership. Christy expressed, *'I understand that sharing leadership is not about delegating rather an intentional action taken by the leader to empower teachers'*. Listening to Christy's sharing, Shuwen added that she had tried out similar collaborative learning strategies with her teachers with the help of lead teachers and found staff members quite open to the learning. However, Shuwen was keen to know how the dimension on *shared personal practice* would work. She was particularly interested in teachers observing their peers and providing feedback. She noted that dimension promotes informal learning for teachers and is very collaborative in nature. She expressed:

I brought this over to my senior teachers for discussion...my seniors are the ones who provide feedback to teachers...they feel it will be a good idea to include the teachers in but in small doses and will help them with the transition...to take ownership of their learning. [Shuwen/PLC/M7]

Hazel also shared that she was inclined to implement the dimension on shared personal practices and she discussed this with her seniors. Her senior teachers expressed that there should be a protocol and supportive conditions for teachers to carry out this within their learning team. She said:

My seniors feel that we cannot just drop it on them...though informal they need to know what to feedback on...there should be consensus and not seen as an increase to their workload. Ideal to have some simple documentation process and protocol for peer feedback. This could be made part of their collaborative learning and their KPI for annual appraisal. [Hazel/PLC/M7]

Yvonne added that she had not decided on implementing any of the dimensions in her services on collaborative leadership. However, she felt that some of the items within the PLC dimensions were influenced by Western perspectives, especially items 3, 6 and 7 within shared and supportive leadership which are: “*staff members have accessibility to key information,*” “*leadership is promoted and nurtured among teachers*”, “*the principal participates democratically with staff sharing power and authority*”. She added these practices did not fit her context where hierarchy is still preserved to improve productivity and efficiency. She expressed:

I don't think certain PLC attributes are culturally befitting but we can still adapt the dimensions to work with teachers on a collaborative leadership model like for example I can nurture leadership in my seniors and not all teachers. [Yvonne/PLC/M7]

The rest of the PLC members agreed with Yvonne about the cultural context of hierarchical values and beliefs; however, they were still keen on exploring ways to work with their teachers. After the discussion, Christy and Yvonne shared their perspectives of collaborative learning in their online reflective journal. Christy gained confidence to see the little changes that had taken place with her initiative to implement collaborative learning for teachers. She commented:

Now I see the real meaning of sharing leadership with teachers. Empowering teachers by sharing my curriculum leadership with the teacher has shown some improvement and I hope the rest of the teachers would be inspired to see the change. [Christy/RJ]

Yvonne reflected on how the discussion gave her insights into the application of implementing peer feedback strategies for teachers. She commented:

Although I was reflecting on implementing the dimension for my teachers, I didn't give much of a thought...it may need planning. The discussion that transpired during the PLC on developing teacher leadership to improve teachers' collaborative learning was something to think about, [Yvonne/RJ]

5.4.3 Section summary

The PLC focus on collaborative leadership provided participants with positive learning experiences that helped them understand the importance of trust in building relationships and its influence on effective leadership practices. Participants' engagement through the PLC enabled them to engage in reflective thinking and experience the benefits of learning through collaborative inquiry to find solutions to issues they faced at work. Finally, understanding the term, collaborative leadership practices, during the PLC process provided renewed interest in participants to explore specific PLC dimensions to improve teachers' learning and to build positive relationships through collaborative leadership practices

5.5 Implementing collaborative leadership practices

This section outlines the changes that participants made to their collaborative leadership practices. Data for this section were drawn from individual post-PLC interviews, online reflective journals and notes from my reflective diary. Interviews were undertaken to ascertain if principals' participation in the PLC process had influenced them to shift their thinking and practice in the areas of collaborative leadership and, as a result, whether there were changes in staff members' attitudes to work (see Appendix 5 for post-PLC interview questions). Participants' responses illustrated their experiences of developing insights through collaborative leadership, the benefits of learning various leadership approaches to improve their practices, the challenges involved in implementing collaborative leadership practices and teachers' attitudes to the changes implemented. Responses were inductively analysed and documented as participants' individual leadership experiences of collaborative leadership.

Participants demonstrated willingness to work on certain aspects of collaborative leadership practices. They were also aware of time constraints, teacher attitudes and hierarchical structures embedded in their services that could be impediments to their endeavours. However, they showed initiative to work on areas that would be feasible to implement within the ambit of their leadership capacity. Participants were keen to improve their own leadership approaches and develop teacher leadership to build positive

relationships and collaborative learning through selected PLC dimensions - collective learning application, shared personal practice, and shared values and vision. However, they were restricted in implementing selected criteria related to sharing and supportive leadership with teachers, due to their organisations' policies and the existing cultural values of hierarchy. The next section describes each leaders' experiences of their learning journey through the PLC and their thoughts about developing collaborative leadership practices in their services.

5.5.1 Shuwen's experiences of collaborative leadership practices

With regards to aspects of collaborative leadership, Shuwen was particularly interested in working on *collective learning and application* and *shared personal practice* aspects of the PLC framework. She felt that teachers had not had opportunities in the past for collective learning. They were mentored by level-leaders, which was a practice in the centre established by the former principal many years ago. It was very difficult for Shuwen to change their attitudes and practices and she felt she needed collaborative learning experiences to improve their teaching practices. She explained how she seized the opportunity to implement these practices during a professional development event. Some of her senior teachers had gone through a social and emotional educational training programme. Instead of the level leaders, this time she got the teachers to prepare a presentation of their learning.

Shuwen described that she was pleasantly surprised to see the teachers providing feedback and sharing strategies. She added that this could not have happened if she had not adopted the leadership approaches that she learnt during the PLC. She articulated how reading Goleman's article helped her reconceptualise her leadership approaches. She applied the affiliative approach and coercive technique to manage the teachers with diplomacy. She added, *'I was afraid if I had put this forth to them earlier on, they would have easily said, "sorry, Mrs Shuwen, I cannot do it"'*. So, it was through using a combination of leadership approaches and the learning about collaborative practices for teachers that she managed to convince the teachers.

I'm glad the articles and the PLC process has encouraged me to think of ways to approach the teachers...I wanted a change and the centre event for team building was a good opportunity to start with.
[Shuwen/post-PLC/I]

She further added that she would like to continue this collaborative learning and see this practice extend to other teachers in the centre. Shuwen also added that there were differences in teachers' learning dispositions in her centre. The novice teachers were open to sharing suggestions; however, the older teachers, entrenched in conservative practices, were not open to the peer sharing process. She believed the collective learning and shared personal practice strategies would be worthwhile exploring to change current practices. Shuwen hoped that it would encourage collaborative leadership amongst the teachers. She expressed:

Now that I've started...will have the pace to have this peer sharing every month...it helps in grooming all teachers and break the old habit of being led by the mentor. [Shuwen/post-PLC/I]

Shuwen was not sure how her staff members were feeling after their experiences with peer sharing and learning. However, she was also mindful of using appropriate leadership approaches to build her teachers' confidence and help them embrace the change. She said, *'teachers are now on a different mode, wondering if I was just delegating the work or actually nurturing them to build their capabilities'*. She further explained that after the PLC she depended less on the level-leaders and began to concentrate on building collaborative learning with the rest of the teachers to She was not able to assess if their attitudes changed although they were accepting and encouraging. She commented:

We had peer sharing and learning and I now include the senior teachers in the meetings...it was a significant change! I'm not sure if my staff members are receptive to my practices. Although...they are doing it...nothing is known yet. Change of mindset and time is quite vital for collaborative leadership practices. [Shuwen/post-PLC/I]

5.5.2 Christy's experiences of collaborative leadership practices

Christy responded that her most significant reflection occurred when she learnt about the dimensions of PLC. She expressed that some practices similar to the PLC dimensions should be evident at her centre; however, were not carried out appropriately due to a lack of skill. Her learning about collaborative leadership practices and how to implement them at the centre was seen as an asset by Christy. She planned to work on *shared personal practice* and *collective learning* for her teachers. She said:

Although we have some of the practices at the centre, they have not been carried out well. The learning of the dimensions and discussion that transpired during the PLC by other principals...gives me a clearer picture of the process. [Christy/post-PLC/I]

She explained how she intended to make the changes. Instead of overseeing all the teachers at one time as a large group, she had chosen lead teachers to mentor a group of teachers and *'I have spoken to my senior teachers about them undertaking the roles and asked them if they were ready for this'*. Christy decided that instead of meeting individual teachers she would bring teachers of the same level together to promote collaborative learning. She explained that her learning through the PLC and a recent visit to a childcare centre in Australia validated the benefits of collaborative learning. She commented:

I'm not sure it will run as I have desired, but I think it's worth giving a try and teachers are also motivated since they visited the childcare in Australia that practices a PLC collaborative learning for teachers.
[Christy/post-PLC/I]

With regards to changes in her staff members' attitudes, Christy was positive that her staff members would accept the changes. Besides her initiative, the visit to overseas centres had provided motivation for her teachers to understand the need for collaborative learning practices. Although change was happening, she described that it took place in small steps. She observed changes in teachers' attitudes and noted they were willing to share and implement what they had learnt. She commented:

They see that we are here to support and collaborate. I also see teachers trying out another staff members' ideas and being happy about it. So that's happening in a small scale. [Christy/post-PLC/I]

5.5.3 Lynn's experiences of collaborative leadership practices

In relation to applying collaborative leadership practices, Lynn noted that she aspired to work on PLC attributes related to *'collective learning application'* and *'shared personal practice'*. She wanted teachers to learn collectively and provide feedback to their peers. She was also motivated to set up meetings in her centre modelled on the PLC framework that fostered collaborative dialogue, reflection and inquiry. She felt that teachers opened up well when the curriculum meetings were led by the lead teachers. She believed that collaborative learning amongst peers had improved and she could see collegiality evolving. She noted:

I would like the sharing to focus on their teaching and learning, I may have a teacher leader to facilitate the sessions like a PLC. These sharings will be made consistent either weekly or monthly. [Lynn/post-PLC/I]

She further expressed her view that her learning about different leadership approaches was a significant learning point in improving her leadership practices. However, the most important feature was learning about building trust amongst staff members for positive relationships. She was planning how to group teachers according to their competency to form a collective learning group.

Lynn was positive that teachers would accept the changes. She described having identified two lead teachers and mentored them to conduct collective learning with teacher groups using the feedback interaction strategy. Teachers were demonstrating some positive outcomes with their peer sharing and learning. She also identified some experienced teachers and asked them if they could undertake some responsibilities. The delegation of tasks to the teachers enabled Lynn to identify and develop teacher leadership to improve collaborative leadership practices in her service. Lynn hoped that her teachers would consider this as opportunities to grow and learn beyond their current responsibilities. Although she could assess teachers' reciprocity through their performances, she was not able to evaluate the change in their attitudes as more time would be needed to understand the influence on teachers. She commented:

Definitely I think teachers do show some positive results in their attitudes although changes are minor. [Lynn/post-PLC/I]

5.5.4 Hazel's experiences of collaborative leadership practices

Hazel shared that she always been a collaborative person in making decisions with the staff members; however, there were some issues that needed to be improved at the centre. Hazel prioritised the dimension of *shared values and vision* as she felt it was important to ensure that staff members' beliefs and values were aligned to the philosophy of the centre so they could work cohesively towards a common goal. She intended to mobilize her senior teachers to work in groups with teachers to ensure that all her staff members were able to articulate their values and vision and shared a common goal at work. Her next priority was to strengthen staff members' relationships and she decided to work on *supportive conditions on relationships*.

Hazel explained that she did not inform her staff members that she would bring in learning from the PLC to make changes, rather kept it natural as part of their professional learning. She also expressed that she wished to organise a collective learning model similar to the PLC through discussions and reflections for her teachers. She felt learning could be

enhanced by articulating and engaging in reflective discussion with the help of relevant literature.

I like the strategy how you shared articles and then you made us come together to reflect on the articles...reading is something that we need to really embed in our day to day work...I wish to implement those strategies for my teachers. [Hazel/PLC/I]

When asked about her staff members' attitudes to work, Hazel noted that she had started implementing the changes with the senior teachers and was yet to work with the rest. She was not sure how her teachers felt about the changes, but she observed that they were receptive to these. She was glad to see her senior teachers being analytical in their decision-making processes and believed they were capable of responding to challenges better when they were given leadership tasks to perform. Hazel felt that giving teachers the freedom and guidance to make decisions was a positive change and if the practices prevailed, the centre would be able to survive the changes and challenges. She also commented:

I think we can't expect collaborative leadership to happen instantly...but implementing collaborative leadership supports and grooms to handle future challenges. I'm expecting to see some changes through these learning and implementation. [Hazel/PLC/I]

5.5.5 Yvonne's experiences of collaborative leadership practices

Yvonne shared that her ability to implement collaborative leadership practices was limited since it required the consensual agreement of her managing partners, who preferred top-down approaches. She commented that attempting to change practices swiftly would be challenging; however, she was confident that she could start with the teachers on peer sharing and collective learning. She decided to relinquish all her interference with the senior teacher's operations but to guide her to implement collective learning and to involve teachers in decision-making. Reading Goleman's leadership approaches article changed her mindset, and made her determined to let go of her current leadership approach in which she was inclined to force her senior staff to follow her instructions. She expressed retreating from operations would be the first step in convincing her senior staff member '*that I trust her leadership*'. She hoped that her reduced interference would help build positive relationships and trust between her senior staff and the teachers. She shared it would be ideal to set up PLC-modelled practice for her staff members to learn collaboratively. She commented:

The PLC modelled meetings may enable my teachers and seniors to open up and share without any reservations. I liked how trust helped to build that relationship in our PLC and I need this to happen for my staff. [Yvonne/post-PLC/I]

When asked whether her staff members were receptive to the changes, she said that she was confident her teachers would be empowered through sharing with each other. Yvonne recently sent a teacher on a professional development course and when she returned asked her to share some of her learning points with her peers. The teachers were inspired to ask questions and she said, *'I could see some interaction transpiring during the sharing.'* She hoped to continue this practice and lead teachers into collective learning. Yvonne expressed that her senior teacher was overwhelmed, when she approached her to confess how she had been overpowering and overruling her instructions given to teachers. By relinquishing her role, she wished to guide her senior teacher to be more collaborative. She was also aware of the deeply embedded culture of hierarchical values in the centre which may not encourage the sharing of leadership tasks with teachers:

I do have limitations in making changes but I'm confident I can work on some areas related to teachers...and will guide my senior teachers on some strategies of collective learning. [Yvonne/post-PLC/I]

5.6 Results of PLCA-R survey administered after the PLC implementation

After completing the PLC implementation, it was important to ascertain leaders' perceptions of centre-level practices based on the dimensions of PLC attributes. Participants were asked to complete the same online survey administered before the PLC implementation. The anonymous survey was completed by all five participants. Table 5.4 presents the summarised results of the survey. Results of the post-PLC online survey demonstrated that most participants agreed with the items in all the dimensions with disagreements on 15 items within the survey.

Table 5.4 Results of post-PLCA-R survey: PLC2

PLC2 Leaders N=5					
	Statements	SA	A	D	SD
<i>Shared and Supportive leadership</i>					
1	Staff members are consistently involved in discussing and making decisions affecting issues at the centre and suggestions are incorporated into decisions made by the principal/supervisor		5		
2	The principal incorporates advice from staff members to make decisions	1	4		
3	Staff members have accessibility to key information		2	3	
4	The principal is proactive and address areas where support is needed	4	1		
5	Opportunities are provided for teachers to initiate change		3	1	
6	Leadership is promoted and nurtured among teachers		2	3	
7	The principal participates democratically with staff sharing power and authority		1	4	
<i>Shared Values and Vision</i>					
1	A collaborative process exists for developing shared vision and shared values among staff		2	3	
2	Shared values are reflected in ways of working that guide decisions about teaching and learning		5		
3	Staff members share visions about improvement that clearly focus on children's learning		5		
4	Policies and programmes are aligned to the centre's philosophy and vision	2	3		
5	Decisions are made in alignment with centre's values and vision	2	3		
6	Parents/extended family members are actively involved in creating high expectations that serve to increase children's learning [development]	2	3		

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 5.4 cont'd

PLC2 Leaders N=5					
	Statements	S A	A	D	S D
<i>Collective Learning and Application</i>					
1	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work		5		
2	Collegial relationships exist among staff members that reflect commitment to centre's improvement		3	2	
3	Staff members plan and work together to find solutions to meet the diverse needs of children and their families		2	3	
4	A variety of opportunities and structures exist for collective learning through open dialogue		3	2	
5	Staff members engage in dialogue that reflects a respect for diverse ideas and that lead to continued inquiry		2	3	
6	School staff members are committed to programmes that enhance learning	1	4		
7	Professional development focuses on teaching and learning	1	4		
8	Staff members collaboratively analyse multiple sources of data to assess the effectiveness of instructional practices for children	1	2	2	
<i>Shared Personal Practice</i>					
1	Opportunities exist for staff members to observe peers and to provide feedback related to teaching practices		2	3	
2	Staff members informally share ideas and suggestions for improving children's learning		5		
3	Staff members collaboratively review children's learning to share and plan to progress the learning		5		
4	Staff members provide feedback to peers related to instructional practices		2	3	
5	Opportunities exist for coaching and mentoring	1	4		
6	Individuals and teams have the opportunity to apply learning and share the results of their practice	1	4		

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

Table 5.4 cont'd

PLC2 Leaders N=5					
	Statements	S A	A	D	S D
Supportive Conditions – Relationships					
1	Caring relationships exist among staff members and children that are built and respect	4	1		
2	A culture of trust and respect exists for taking risks		5		
3	Achievements are celebrated and recognised	4	1		
4	Staff members , parents and members of the community exhibit a sustained and united effort to embed change into the culture of the centre	1	4		
5	Relationships among teachers support honest and respectful examination of data to enhance teaching and learning	1	2	2	
Supportive Conditions – Structures					
1	Time is provided to facilitate collaborative learning and shared practice		5		
2	Appropriate technology and instruction materials are available to staff members	1	4		
3	Resource people provide expertise and support for continuous learning	1	2	2	
4	Communication systems promote a flow of information among staff members/parents and the community		5		
5	Communication systems promote a flow of information including central office personnel, parents and community member		2	3	

Legend: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

The disagreement on dimensions related to *shared and supportive leadership* was increased when compared to the pre-PLC survey. There were no open-ended comments to support this change in disagreement. However, the disagreement could be an indication of shifts in perceptions about shared leadership. Disagreement to item 7, “*the principal participates democratically with staff sharing power and authority*” by 4 participants was different from the results of the first pre-PLC survey in which all participants agreed. Participants who moved from strongly agree to agree on all items of shared and supportive leadership expressed comments pertaining to acquiring a higher level of awareness about shared leadership, the nature of supporting one another, the need for structures to share power and authority with staff members and factors needed to sustain supportive leadership as in the following open-ended comments:

I think I've always tried to carve out opportunities to involve staff members but there is an even higher level of awareness about sharing leadership now

Working together to support one another with information acquired through PLC

I think this can be done if structures at work exist to share power and authority with staff members and also provide time and space for supportive leadership to be sustainable

Except for three participants, the rest agreed on all items related to *shared values and vision*. Compared to the pre-PLC survey response there was an increase in disagreement on item 1, related to “*a collaborative process exists for developing shared vision and shared values among staff*”. The difference in response could be the increased level of awareness about shared values learnt through related literature and experience gained through the core value activity. Participants who disagreed on item 1 did not offer any open-ended comments. However, one participant who agreed commented that it was difficult to achieve everyone working collaboratively:

This is probably the hardest part and I believe it's still work in progress. I'd say that we all know about the shared values and we have a common vision but because we are all so different and unique. It really is hard for everything to get together

Disagreement from two participants on item 8, “*staff members collaboratively analyse multiple sources of data to assess the effectiveness of instructional practices for children*” of collective learning and application remained the same as in the pre-PLC survey. One participant, who disagreed expressed that:

Point 8 is still not applicable

On the other hand, a participant who agreed commented that applying the collective learning strategies with the teachers were beneficial to finding solutions to issues. For example:

Last week, we had three teachers who wanted to makeover their classrooms. Instead of having one-to-one dialogues, we got together as a team and brainstormed possibilities. It was a fruitful experience

It is also important to note that there were more disagreements in the post-PLC survey in collective learning and application than in the pre-PLC survey. One participant commented that a mentoring structure was necessary to ensure consistency if teachers were to be encouraged to work on the dimensions of shared personal practice. She wrote:

Mentoring structure is necessary to ensure this area is well supported. Teachers may articulate their commitment but the standards of delivery vary. A mentoring structure should ensure consistency

There were increased levels of disagreement on item 1 and 4, “opportunities exist for staff members to observe peers and to provide feedback related to teaching practices” and “staff members provide feedback to peers related to instructional practices” within the dimension of shared personal practices. Participants’ comments illustrated their understanding of the dimensions and their aspirations to work on them. They said:

Items on shared personal practices are something I will work on I have better understanding about staff members involved in peer learning and feedback

Responses on items related to *supportive conditions – relationships* remained the same with 2 disagreements on item 5, “relationships among teachers support honest and respectful examination of data to enhance teaching and learning”. This response could be an outcome of principals opening about their teachers’ lack of collaboration for collective learning and findings solutions to improve the conditions. On the other hand, disagreement on items 3 and 5, related to “resource people provide expertise and support for continuous learning” and “communication systems promote a flow of information including central office personnel, parents and community member” of supportive conditions-structures increased in the post-PLC survey and one participant expressed that:

Time and money are constraints to engage resource people in our centre

Results from the post-PLC online survey demonstrated that participants’ disagreement was higher in the post-PLC survey when compared to the low incidence of disagreement found

in the pre-survey. Further, results in the post-PLC survey indicate a move away from ‘strongly agree’ to ‘agree’. This outcome may suggest that participants had gained some awareness that the dimensions were PLC-specific and not generic ECE practices. Although most of the participants rated items positively, changes made to their ratings of items about collaborative leadership were minimal. Further, it was evident from their interactions that participants’ ideas about making changes to collaborative leadership leaned towards strengthening teachers’ learning on *shared values and vision*, *shared personal practices* and *collective learning strategies*. Although aspects of *shared and supportive leadership* showed a shift, implementing leadership practices with teachers occurred within the boundaries of teachers’ designated roles.

5.7 Teachers’ perceptions about the influence of the PLC process on their centre leader’s practice

This section describes the results of the focus group (FG) discussion conducted with two senior teachers (STs) or lead teachers (LTs) working with each of the respective principals. In some cases, where centres had only one ST, a LT participated in the FG discussion. A total of ten teachers participated in the group convened to ascertain their perceptions about the changes their principals made to implement collaborative leadership practices in their individual centres after the PLC process. Before beginning the FG discussions, I introduced myself and gave some background about their principals’ engagement in the PLC process which involved collective learning about collaborative leadership practices. I assured them the discussion would be kept confidential and not be shared with their leaders. Teachers felt at ease to share if they had witnessed any changes to their principal’s leadership practices.

Information was sought on the teachers’ leadership practices; their roles and responsibilities in supporting the principal; the process of collaborative decision-making with their principal; and whether there were any differences in their principal’s leadership practices after attending the PLC meetings (See Appendix 6 for focus group questions). Inductive analysis of their responses resulted in two categories: *teachers’ role in supporting the principal* and *changes to leadership practices*. These aspects will be explained supported by extracts from the data. Participants were identified by their pseudonyms: Minh (ST), Reena (LT), Kaitlin (ST), Brenda (ST), Loraine (ST), Yasmin (LT), Julin (ST), Fatimah (LT), Sarah (LT) and Ainul (LT).

Teachers' role in supporting the principal

STs were aware of their principals' participation in the study and were asked to share their role in supporting the principal and how they collaborated with the principal in making decisions and changes. Responses varied, with some STs commenting that delegation of tasks were ways of being engaged in shared leadership practices while for others, it was based on their abilities. All STs articulated that their principal was consultative in engaging them during decision-making. LTs Sarah and Ainul expressed that they had been delegated designated roles and responsibilities to support the principal. Work was shared through delegation and feedback was always provided by the principal on their performance. Ainul commented that she was involved in mentoring and helped her principal in planning curriculum. Sarah commented that her principal identified staff members' individual strengths in order to delegate appropriate tasks. Teachers were engaged in working with the community-led projects and parents' programmes. Sarah suggested that these were ways of grooming teachers to take on leadership responsibilities. ST Minh and her LT Reena explained their role was to assist their principal as level coordinators and the role of the coordinators was to act as a bridge between the principal and the teachers. Teachers would approach the level coordinators when they had issues and in turn these would be then presented to the principal by the level co-ordinators for solutions and decision making. Minh noted that there was a good support network between the teachers, coordinators and the principal. She commented:

It is always easier for me to talk to the teachers as I'm at the ground level unlike the principal who takes care of operations as a whole. Once the teachers had issues with doing learning stories and I sorted out the issue with my principal. I'm always the go between. [Minh/FG2]

ST Minh expressed that she undertook specific tasks such as mentoring new teachers. Since she was not involved in teaching, she took care of the curriculum planning and overall welfare of the teachers. However, the principal had engaged teachers to be involved in the meetings in order to understand their perspectives on issues related to work and curriculum. She felt that this open communication process helped to forge clarity between teachers, principals and the level coordinators when issues were raised. She said:

I should say the consultative meeting process now is much better and helps to know what teachers have to say. Earlier on the communication channel was between the level coordinators and the teachers but I see the principal showing initiatives to make the connection with the teachers. [Reena/FG2]

ST Julin and her LT Fatimah said that they had similar work arrangements in their service, engaging senior staff members to undertake various tasks to support the principal. Fatimah commented that they were trained as level coordinators to take over the running of the centre by default during the principal's absence. Both the STs supported the principal on tasks related to training, mentoring and induction of new staff members. They concluded it was the shared beliefs and values that glued them together.

STs Kaitlyn and Brenda both worked as a management team with their principal. Decisions were made at their level and disseminated to the teachers. Further, when asked about sharing leadership tasks with the teachers, Brenda expressed that issues were prioritised as to what should be shared with teachers. She said matters related to licensing, children's health and safety and other administrative issues were exclusively dealt by the management. However, Kaitlyn responded that, if necessary, teachers would be involved in matters related to curriculum and other issues. She commented that the centre had a prescribed curriculum with relevant resources provided for the teachers and she expressed:

However, if changes are required it will be made with proper evaluation and we decide at the management level...if it is a good idea, we accept it and take the teachers' suggestion. [Brenda/FG2]

Kaitlyn added that if teachers proved to have potential, *'we do give some roles to the teachers to undertake and they are not neglected in undertaking extra roles beyond teaching.* ST Loraine expressed that teachers at the centre concentrated on their teaching roles and no leadership tasks were shared with teachers. She felt that it was not necessary to delegate leadership tasks since teachers came forward to work together undertaking roles and responsibilities when planning for centre activities and programmes. On the other hand, LT Yasmin, who worked with Loraine expressed that their principal was open to ideas and suggestions and worked collaboratively with the teachers. It was a culture at the centre for all to work consultatively with the principal on decision-making matters. In conclusion, it was evident from the STs' sharing that their supportive roles in assisting their principal varied. In most centres, delegation of tasks was structured to share leadership practices with their principals. It was evident that the sharing of leadership practices was different as in one centre, teachers were involved in teaching roles and in another, teachers were selected based on their ability to be able to undertake leadership tasks.

Changes to leadership practices

In response to questions about whether teachers witnessed any difference in their principal's practices after attending the PLC, teachers were involved in a brief reflective conversation with their partner teacher. Participants then shared both their perspectives and perceptions about the changes they had observed. ST Minh shared the changes organised by her principal for the teachers' event. Activities were organised to build relationships amongst staff members. She added, 'a fresh change was having organised a sharing session presented by the teachers on their projects they had completed'. She expressed that it was uncommon for senior teachers to present on projects and for the rest of the staff members to provide feedback on their work. She commented:

I thought that was very productive for the teachers and the first time we were giving constructive feedback on our colleagues' work...was good change. [Minh/FG2].

LT Reena commented that the work culture at her centre could be both collaborative and directive. Although the principal encouraged staff members to provide suggestions, she would always thoroughly scrutinise and comment on decisions. Minh shared her perspectives on the changes she has witnessed lately: '*my principal has been giving me a free hand in making decisions*'. She explained how she approached the principal with some operational matters which needed to be reworked with the principal's consultation. She was surprised to hear the principal asking her to go ahead with making the changes while insisting that '*I should consult the teachers who were involved*'. Minh added that it was normal practice for coordinators to collaborate with the principal to discuss issues for the coming year. However, the principal suggested that she wished to change the practice to include the coordinators and senior teachers in a collaborative meeting to hear the teachers' perspectives on changes. She shared that it was good to see a trusting relationship being developed and the principal listening to others' suggestions. She also noted that the principal appeared to have changed her style of approach with some teachers at the centre. She expressed:

I do see some change in her leadership style on approaching difficult teachers. She's able to get them to do what she wants. Despite being open she was very persistent in giving instructions but now she seems to be open in incorporating ideas and suggestions from all of us. [Reena/FG2]

Perceptions shared by Minh and Reena demonstrated that the principal was making efforts to implement aspects of collaborative leadership practices. Both ST and LT acknowledged that the changes made to her leadership approaches were positive and healthy. The change towards inclusive and open communication acknowledged that the principal has begun to trust their suggestions and decision-making processes. In contrast, LT Sarah commented that she did not see any specific changes in her principal's leadership practices. She expressed that the principal was always an approachable person, who was open to ideas and engaged teachers with the right capability to undertake certain tasks. Further, she could not have observed the changes since she was involved in administration duties supporting the principal. However, she noticed that the principal was organising various learning strategies for teachers to prepare them for the recertification of SPARK accreditation. She expressed that *'I'm not sure if this is a change or it was a new planning by the management'*.

However, LT Ainul who works with LT Sarah had a different perspective. She observed that the principal had started to organise smaller meeting groups appointing lead teachers to work closely with the teachers. She noted that the principal mentored the lead teachers to use feedback strategies to ensure everyone was participating during the meeting, rather than providing instructions. This was a change from the previous meeting styles where instructions were disseminated, and teachers listened more than sharing. She also observed the principal using a different communication style with teachers. She described her principal asking, *"what are your thoughts and I like to hear from you"* and this was quite *unusual'*. The principal appeared to be more persuasive that teachers should share and learn collectively. She commented:

I've been also made the lead teacher to work with the teachers, I'm glad that she has trusted me that I could do the job. It is very inspiring and a kind of a...respect. [Ainul /FG2]

Perspectives shared by Ainul provided insights into the changes the principal was implementing on collective learning for teachers. In a way, she was using the collective learning strategy to build mutual trust with the teachers. It was also evident that she was applying her learning of leadership approaches in how she worked with her teachers. ST Julin and her LT Fatimah elaborated on what they had witnessed. Fatimah was delegated a particular task during an upcoming event at the centre; however, a member of the management expressed that teachers should not be left alone to undertake the responsibility but be monitored by the principal. The principal intervened and said that she trusted her

teachers and it was not necessary for her to oversee their work. LT Fatimah expressed, *'my principal was very confident and said that I would do a good job'*. Normally when instructions came down from the management, she would consider them with utmost regard. She explained that she witnessed a different leadership style of her principal supporting her teacher. She further expressed:

I was quite surprised when she replied to them politely but authoritatively...I could realise the risk she's taking and the trust she has in me...it was a very proud moment for me, and I was determined to give my best to the role that I was entrusted with.

[Fatimah/FG2].

ST Julin shared how the principal had reorganised the meeting sessions and reassigned tasks for teachers to learn from each other. She assigned the level leaders to lead the meetings for the teachers and to recognise teachers' performance at work and get them to share and learn from each other. Further, Julin explained *'she spoke with me that it's important to bond with teachers and build relationships'*. She was always concerned with the well-being of everyone at the centre and would stress that *'I take the time to talk with the teachers to support their needs and welfare to ensure we work on similar beliefs and values for children'*. LT Fatimah added that the collaborative learning techniques gave teachers a voice to share and learn from each other and *'it helps teachers to know that no one is judged, and it builds their confidence'*. STs' experiences and perceptions were insightful in understanding the changes this principal was applying at her work. Her efforts were demonstrated through her work implementing collective learning for teachers. From the sharing it was also clear that she was working on shared values and vision for teachers to build relationships. The change in her leadership approach was evident when she supported the teacher by reaffirming her confidence and trust in the teacher.

ST Loraine and LT Yasmin paused for a little while and they exchanged a brief discussion. Then ST Loraine commented that she had not seen any changes in her principal's leadership practices. She expressed that the principal remained the same, being approachable and forthcoming as that was her disposition. However, she noted that the teachers' professional development circles seemed to have changed. Sharing sessions had become smaller involving teachers of the same level rather than the usual larger group across the levels. She found that the change had increased teachers' sharing during meetings. She also noted a change in her principal's approach, valuing consensus and

teachers' input and providing constructive feedback which she felt was quite exceptional.

She expressed:

I think if you were to ask me...these are the changes that I witnessed now during professional development sharing and...her approaches in making it a point to listen to teachers and giving constructive feedback. I'm not sure if she's doing it after your PLC but teachers have begun to share and is good. [Lorraine/FG2]

LT Yasmin acknowledged Loraine's perspective on the changes made to peer learning circles. She explained that recently her principal shared a video-recorded version of her colleague's classroom teaching. Teachers were asked to provide feedback and their perspectives on her instructional practices. Yasmin noted that this could be inhibiting if it was shared in a large group; however, doing it with the same level teachers in a smaller group was manageable. She expressed:

I think this collaborative feedback on teaching practices for teachers to share is good...builds their confidence and learning is strengthened by being analytical and it's like learning twice. [Yasmin/FG2]

Yasmin's and Loraine's views suggested that their principal was keen on improving teachers' professional sharing and in turn they were appreciative of the changes as it helped to improve their teaching practices. Loraine noted that the principal was more relaxed than before and was seen being more democratic by valuing teachers' consensus to build and forge collaboration. When asked if the principals shared any leadership tasks with them, STs replied that such practices did not exist at the centre because teachers were always forthcoming to help out during events at the centre.

When I approached the last two STs, Kaitlyn hesitantly shared her perspective on the changes implemented. She explained that she was appointed to supervise the teachers and pedagogical issues at the centre; however, due to some reasons it was not executed. She expressed, '*although I have been appointed as the supervisor teachers would ignore me and approach the Director for all issues*'. But to her surprise the Director approached and said that she would be seen less and wanted Kaitlyn to take over the operations of the centre but would guide her constantly on the changes she wished to make. She expressed what the principal shared with her:

I'm not going to be involved any more. You are going to take over and you be the first point of call for the teachers...my input to you will come from the backdoor. [Kaitlyn/FG2]

Brenda articulated that her role was quite unclear at the centre; however, she commented that her Director guided her to actively involve teachers during meetings and professional learning. She shared an experience of how the Director had mentored a session that involved a teacher sharing her learning experiences after a professional development course. She encouraged the teachers to ask questions and to provide feedback. Brenda expressed, *'I could see that teachers were engaged in a learning process collectively'*. On the other hand, Kaitlin replied that she did not see much of a change but concurred that the administrator wished to hand over operations to her STs. Kaitlin commented, *'I don't think there should be serious changes to many of the practices'*. She expressed that the operations at the centre were managed well with a good built-in structure and clear roles designated to staff members. Implementing changes might lead to complex issues which could destabilise the work environment. Kaitlin commented:

I also deal with the administrative part of the centre and I don't suppose changes are always for the better. The centre has a good set up and operates well with a structure. I think collective learning for teachers is acceptable and altering other practices can be too complex. [Kaitlin/FG2]

Each ST identified a shift in her principal's leadership approach. It was also interesting to note that while both STs were willing to acknowledge the changes made to teachers' collaborative learning, they were, however, not too keen on making any structural changes. They showed a preference for preserving the existing hierarchical practices in order to maintain the stability of operations in their services.

5.7.1 Section summary

The focus group discussion with the STs demonstrated the influence of participation in the PLC on their principals' leadership practices. STs found the changes to be beneficial such as building trusting relationships, quality learning for teachers and acknowledging teachers' voices. Changes implemented were rather small and were at the initial stages. Therefore, the outcomes of the changes cannot be measured to gauge their influence on the staff members and leadership practices. However, the changes witnessed at the outset showed some commitment to implementing collaborative leadership practices. A significant factor in this study was the building of trust to build positive relationship amongst teachers for collaborative learning and collective decision-making. It was important to note from the STs' perspectives that principals were keen to implement aspects of collaborative leadership practices with a bottom-up approach starting with the

teachers. Hierarchy is a deep-seated element in the Singapore ECE settings and it is likely to take time to see changes happening at the structural and operational level. Although changes to collaborative leadership were implemented by four principals, these were less obvious at one centre. There was a certain level of comfort in maintaining hierarchical practices in this centre and this was reflected by Kaitlyn's and Brenda's comments that they would not embrace changes to sharing leadership practices.

5.7.2 Chapter summary

Data collected from PLC2 provided evidence of leaders taking initiatives to develop collaborative leadership through their PLC. Participants valued the PLC approach which included face-to-face, online interactions and the inclusion of relevant literature. The face-to-face meetings established relationships and interactions; the online tools enabled their reflective thinking and learning; and the provision of relevant literature facilitated the process of interaction and reflection for deeper learning. The PLC complemented the strength of each individual through collaborative learning and reduced the feeling of isolation for principals. The notion of trust was the main thrust for participants in this study to foster positive relationships to improve teachers' collaborative learning. Principals in the study demonstrated an understanding of the benefits and importance of collaborative leadership practices. Although changes made during the course of the study were small, Shuwen, Hazel, Lynn and Christy were positive about collaborative leadership practices and were pleased with their teachers' attitudinal changes. Whilst implementing changes to accept collaborative leadership practices, these principals were also cautious not to destabilise the hierarchical practices that existed in their services. Changes implemented were confined to their leadership approaches, teachers' collaborative learning practices and building trusting relationships to influence collaborative leadership practices. Except for the constraints that Yvonne encountered, the rest were committed to developing collaborative leadership practices in their services.

Chapter 6: Discussion

6.1 Chapter overview

This chapter presents a cross case analysis of key themes emerging from the two case studies. Little is known about the use of PLCs in the Singapore ECE sector; hence the aim of this study was to understand the extent to which PLCs supported collaborative leadership practices in the Singapore ECE context. The discussion of the results will be organised around the research questions in the following sequence:

- Participants' engagement in the PLC process and their shifts in collaborative leadership practices
- Teachers' perceptions of the impact of the PLC process on their centre leader's practices
- Barriers and enablers that influenced the development of collaborative leadership practices through the PLC.

This chapter draws from the wider school and management literature on collaborative leadership and PLCs to augment the limited ECE focussed literature when interpreting and discussing the findings.

6.2 Participants' engagement in PLCs and shifts in their thinking about collaborative leadership practices

This section focuses on participants' engagement in the PLC process and shifts towards developing collaborative leadership practices. The first part of this section describes how *trust* was the precondition to relationship building and an enabler for PLC collaboration and highlights the significant differences in the establishment of trust between the two groups. The next part discusses the reflective process, which illustrates participants' transition from a sense-making process to *reflective practice*. This is followed by discussing participants' *perspectives of PLCs* and *development of collaborative leadership practices*. Each of these sections contributes to an understanding of how participants' shifts in thinking evolved to develop collaborative leadership practices in both PLCs. Themes and sub-themes that emerged from data are italicised to highlight the important aspects of the findings.

6.2.1 Trust

Trust was the key mediator in building collegial relationships amongst the members of both PLC1 and PLC2. Over time, the building of trust in both PLCs facilitated co-operation and collaboration. Trust is an integral part of establishing positive adult relationships in an educational context (Handford & Leithwood, 2013) and also a critical component in the implementation and effectiveness of PLCs (Bryk et al., 2010). In the early stages of the study, members of both PLCs displayed discomfort, concern and apprehensions as participation required sharing of personal experiences and practices, something that was uncommon amongst ECE principals in Singapore. Despite participants' collegial familiarity and professional association, their apprehension and the fear of being judged were barriers to developing trusting relationships. However, over time trust was developed in both PLCs and was supported by several factors, namely: willingness to be vulnerable; establishing shared values and beliefs; and the setting of group norms.

Willingness to be vulnerable

Findings showed that participants of both PLCs lacked inter-dependence, which is a pre-condition to developing trust and collaboration within PLCs (DuFour et al., 2006). . In the early stages, participants' discomfort led to disengagement and adoption of a self-protective stance rather than building relationships with each other. Participants were concerned both with my trustworthiness and that of their colleagues in the group. Principals of PLC1, in particular, were anxious about sharing any information related to their leadership practices for fear of being judged by their colleagues and presumed that it may not reflect well on their management's organisational practices. When referring to establishing trust, Tschannen and Garies (2015) suggest that "trust is characterized by the extent to which one is willing to rely upon and make oneself vulnerable to another and to do so with a certain sense of ease or comfort" (p. 259). These authors assert that building trust involves taking the risk of being vulnerable and the willingness to rely on a person with confidence that one's interests will not be judged or harmed. It appeared that facilitation was fundamental and as the facilitator of the PLCs it was essential to establish my trustworthiness by demonstrating some degree of vulnerability to ensure participants felt safe to develop trusting relationships.

As part of my facilitation, I modelled openness by divulging personal information related to my own leadership challenges and failures, expecting participants to reciprocate. Whitener (1997) describes this as "the norm of reciprocity" (p. 396) and refers to trust as a

reciprocal exchange process. When trust develops, cooperative behaviours such as sharing information, and relying on other team members are more likely to emerge (Costa & Anderson, 2011). My openness encouraged participants' willingness to reciprocate. A sense of trustworthiness was developed with gradual increases of exchanges fostering the development of trust amongst participants within both PLCs. Further, discussions that took place around the literature by Lencioni (2003) facilitated participants' thoughts on developing trust. With time, participants began displaying a sense of ease and developed confidence to share their insights. Unexpectedly, a turning point occurred when one of the participants of PLC1 courageously displayed openness in sharing issues and challenges she had experienced at work (see Section 4.3.1). Her willingness to take the risk of allowing herself to be vulnerable surprised the rest in the group; however, it also led to the development of empathy amongst the participants and inspired them to contribute with fewer inhibitions. The following comment reflects one of the participant's reactions to her peer's risk-taking behaviour of sharing her challenges:

This PLC process was new for us principals, we have never done this before. I don't think we were encouraged to share with our peers. I was particularly very worried how this is going to be but Mei's courage to open up...broke the silence...and when the rest started to share their issues...I was really shocked...that we all have similar problems and we can share to find solutions! [Su Ling/PLC1/Post/I]

Comparatively, there was no such significant moment in PLC2; however, a steady and progressive building of trust was demonstrated within the group. They were inspired to learn from my personal stories and how I perceived every challenge as a progressive learning experience. Further, Shuwen, an experienced participant in PLC2, with several years of teaching and leadership in ECE was enthusiastic about sharing her challenges and achievements. She shared that her perspectives changed after reading the literature on building trust. She reinforced how vulnerability-based trust was significant to building a functional team for learning and could help leaders to see their blind spots and shortcomings. Her motivation and competence motivated the rest of the participants of PLC2 in developing a sense of mutual trust. Hazel (PLC2) added, '*listening to you and the reading by Lencioni was a motivation to gain confidence and I agree that a little vulnerability is necessary for people to build trust in their team.* Hardin (2002) suggests people are more willing to make themselves vulnerable to another if they perceive that person to be worthy of their trust. This point clearly reflected the views of participants in PLC2 as they were willing to build a vulnerability-based trust by sharing their

shortcomings, weaknesses and seeking help from each other. Shuwen's comments further highlighted the vulnerability that existed amongst PLC2 members as they developed a trusting relationship:

I could see how trust was formed in our group and what I admired was the vulnerability to trust another and opening up to share our challenges. It was helpful to learn from another. I need to see this vulnerability evolving amongst my teachers...that's where I'm moving after PLC. [Shuwen/PLC2/Post/I]

Findings showed that vulnerability was one of the key elements of trust that enhanced making connections and eventually establishing effective communication between individuals within both PLCs. This aligns with Latta and Buck's (2007) assertion that, "when one makes the active choice to make oneself vulnerable there is greater opportunity of reframing knowledge and seeking strength from others" (p. 194). However, participants of PLC1 were cautious and slower in exhibiting their willingness to be vulnerable, when compared to PLC2. Findings of this study are supportive of studies from the school literature (Costa & Anderson, 2011; Tschannen-Moran & Garies, 2015) and PLCs (Mitchell & Sackney, 2009). These studies found vulnerability to be an important antecedent to developing trust for collaborative learning. In addition, findings of this study are consistent with previous research on PLCs that trust plays an essential role in fostering effective communication and building mutual relationships (Hoy, Gage & Tarter, 2006).

Establishing shared values and beliefs

An early challenge in building trust was to establish shared beliefs and values amongst participants of both PLCs. Participants were encouraged to share their leadership stories (which constituted their achievements, hardships, values and beliefs) with the group, to build a sense of shared purpose. In addition, the core values exercise unified them around similar key tenets of leadership beliefs and values (see Sections 4.3.1 & 5.3.1). Findings reveal that these activities helped both PLCs in developing a sense of shared values "leading to binding norms of behaviour" (Hord, 1997, p. 3), in building trust and mutual relationships as members of their PLC. Victoria's description of sharing leadership stories and Hazel's reference to the core values activity illustrated how the activities helped in developing shared values:

The sharing of our individual leadership stories gave me a sense of relief and helped to build collegiality in our group...I was worried initially but knowing that all of us share similar

issues...made us empathise for each other...that help is needed and we should be doing this together to solve them. [Victoria/PLC1/RJ]

I don't think all of us could have connected easily without the core values exercise...really opened my eyes to know that we were all connected in our beliefs and values. Sharing our stories helped us to know we were on the same page. [Hazel/PLC2/RJ]

Developing shared values and beliefs empowered participants of both PLCs to agree to working collaboratively to improve their practices as demonstrated in several other studies (Cherrington & Thornton, 2015; Hipp & Huffman, 2010).

Developing group norms

Participants' willingness to establish shared norms through goals and objectives further reduced their tensions and apprehensions, and further supported their confidence to develop trust. The process of developing group norms for both PLC1 and PLC2 (see Tables 4.2 & 5.2) helped to establish boundaries. These boundaries included maintaining the confidentiality of information shared within the PLCs, and mindfulness to respect each other during the collaborative discussions. Mei's (PLC1) and Lynn's (PLC2) descriptions of establishing shared norms illustrated how it further supported in establishing trust within the PLCs:

I think setting the guidelines was a helpful process...which helped us to form the trust knowing what we share stays in our group because we don't want this to end up in gossiping and carrying tales about the issues to the management...and that was assuring. [Mei/PLC1/Post-I]

There was respect within our team and were positive when giving feedback to each other...the objectives set for our PLC group was a good reminder to maintain our collegiality and help us to form trust .(Lynn/PLC2/Post-I)

Similar to other studies, establishing group norms enabled participants to share expertise, facilitate reciprocal exchanges and professionally debate ways to improve their practices by establishing trust (Stoll et al., 2006; Thornton & Cherrington, 2015).

While there were some differences, participants of both PLCs shared similar sentiments about teachers' lack of trust and non-collaborative work attitudes. Participants confessed that due to an overload of work commitments, they had never focussed on building trust amongst teachers and had assumed that trust would develop by default in their services.

Reflecting on these challenges helped participants to re-examine their leadership practices.

The following comments of participants are illustrative:

Trust is elusive, most of the time we think teachers have it but as we discuss about it, I see where the problem is in my case. I haven't thought about it so much and I don't think our leadership courses reinforces much on how we need to work on challenges that we face with teachers. [Mei/PLC1/M4].

I know that trust is important for teachers to work cohesively...the activities and the article by Pat Roy was an interesting read leading to understand the importance of what leaders should do. It is true I don't see professional interaction amongst some of my teachers and intention to work collaboratively...somehow, I've got to bring it across to my teachers to change the situation. [Christy/PL2/M3]

Building trust required time and effort for participants of both PLCs; however, over time the trust built between participants enabled them to work cohesively on solving problems and provide feedback on each other's challenges and issues. Siti's comments on building trust within PLC1 illustrated her reflective learning during the process:

Without all the activities...I don't think we would have formed trust in our group...It is uncommon for us to share our problems with each other as principals openly, I appreciated the collaborative learning and how to form trust...a paradigm change for professional growth. [Siti/PLC1/Post-I].

Further, Yvonne also acknowledged that her learning about trust gave her the confidence to open up. She shared that she would like to apply this to work with her teachers, and commented:

I'm always fearful of being judged and this is my first collaborative learning with people of similar capacity...I've learnt how to share with trust within a group, if it works here...this is something I need to exercise in my centre [Yvonne/PLC2/Post-I]

My facilitation and participants' reaction to the activities, discussions and further reading of literature helped in overcoming the challenge of building trust within both PLCs. Learning about trust further enabled participants to explore issues related to trust within their services. Topics on building trust amongst their teachers continued with on-going recursive critical reflections on their leadership practices and strategies to address the challenges in their services.

6.2.2 Reflection to reflective practice

Participants' engagement in shared dialogue and discussions in both PLCs led to an iterative process of collective inquiry through reflection. The process of reflection evolved as participants raised issues and challenges at work, leading them to question their leadership practices, their lack of strategies, staff members' willingness to work cohesively and ways to address the challenges. Findings revealed that participants' reflections during the PLC meetings remained at an operative level of describing and evaluating their experiences, sharing stories, exchanging ideas and making sense of their experiences rather than promoting changes through critical reflection. Ng and Tan (2009) posit that this process of sense-making is low in reflectivity and compares it to Argyris and Schon's theory of single loop learning, describing sense-making as a habitual response of "tapping on the knowledge of others to solve problems without critical reflections" (p. 40).

According to Argyris and Schon (1974), single loop learning is a fix-it model in which people make adjustment to overcome mistakes, and which is ineffective for long-term solutions because the underlying assumptions are never examined. When PLC participants reflected on their challenges, they looked for antecedents to their problems and sought solutions to fix them rather than working on strategies for systemic change. Thus, it was necessary to help participants examine their issues analytically and create awareness, leading them from sense-making to critical thinking (Ng & Tan, 2009). Argyris and Schon (1996) assert that reflective practice is means to more effective action and is akin to double-loop learning which involved deconstructing and examining participants' assumptions, values and beliefs through questioning and considering alternative ways of reconstructing their challenges to find solutions. Relevant literature and discussions provided opportunities for participants to analyse issues from different viewpoints and develop new knowledge from those experiences.

Argyris and Schon (1974) defines double-loop learning as a profound process where "underlying organizational practices, policies and objectives" (p. 116) are questioned as part of the problem solving. Participants of PLC1 identified and deconstructed issues related to teachers' non-collaborative work attitudes, lack of mutual trust amongst staff members, and their own lack of communication with staff members and micromanaging challenges due to organizational constraints. They acknowledged that hierarchical structures delineated and regulated power relationships between principal and the staff members. Excerpts from reflective journals and the face-to-face meetings of PLC1 illustrated participants' shifts in critical reflection:

I have been reflecting on my leadership practices...taking things for granted that trust will happen no matter who I am...but the relationship between teachers and with me is affected. I see the problems arising from my way of thinking. I need to work on my communication skills and take into consideration teachers' abilities and dispositions. Change needs to come from me, if I wish to see better relationship amongst my teachers.
[Victoria/PLC1/M3]

When I learnt about the core values activity, I applied it... assuming trust could be built but it didn't work. I was expecting immediate results. After the critical reflections my thinking shifted...I could see the underlying problems with my staff members. I like the questions that were asked by Sukuna to redirect my thinking. It's the cultural prejudice of hierarchy which I may have to unearth from the bottom...to build shared values for positive relationships amongst teachers. [SuLing/PLC1/RJ]

Similarly, participants of PLC2 analysed the prevalence of fragmented relationships amongst staff members due to a lack of trust, and staff members' dependence on taking directions from their principal. Excerpts from Christy and Lynn illustrated their learning through reflective practice:

The critical reflections on building trust was a big learning curve...when I look at my teachers' lack of trust and not working collaboratively...gets me to think if I had ever been a good role model for my teachers to form trust. I don't see any protocols that are in place in my centre for trust to develop as mentioned in the article! It needs a bottom-up approach to change.
[Christy/PLC/M4]

The lack of trust between my staff members was my biggest challenge. I need to know what my teachers' values and beliefs are before I ask them to strictly follow the centre's philosophy...knowing the mission and vision of the centre may not build trust I need to examine how I can integrate teachers' beliefs and values to the centre's mission and vision...there should be synchrony and I need their collective understanding. I don't think I have learnt about building trust practically in any of my leadership courses.
[Lynn/PLC2/RJ]

Facilitating participants' reflective practice was an on-going process during the study. Goleman's (2000) literature on leadership approaches helped participants of both PLCs to acknowledge their lack of effective leadership approaches and to critically reflect on how their leadership styles could have contributed to the challenges they experienced. These learning behaviours align with Argyris and Schon's (1996) process of double-loop learning

that “if learning is to persist, managers and employees must look inward...[reflecting] critically on their own behaviour, identify the way they often inadvertently contribute to the organisation’s problems and they change how they act” (p. 99). The various examples provided in the literature enabled participants to integrate information into their leadership practices and develop new knowledge of effective leadership approaches (see Sections 4.3.1 & 5.3.2).

Collaborative inquiry through PLC discourse

Furthermore, participants’ understanding about collaborative leadership began to shift when they were introduced to Hipp and Huffman’s (2010) shared leadership dimension of PLCs. Discussions around the survey dimensions developed participants’ collaborative inquiry through examining the cultural appropriateness and applicability of the PLC dimensions in their services (see Sections 4.3.2 & 5.3.2). The following dialogue during a face-to-face meeting with PLC1 illustrated participants’ collaborative inquiry that emerged around the cultural factors of the PLC dimensions:

Mei: I see that some of the collaborative leadership practices in the PLC dimensions may not be applicable...due to practices of hierarchy in our organisation...may not accept such open practices and teachers themselves are not ready yet!

Maria: I understand what Mei intends to explain; however, change is inevitable...sooner or later we have to move forward in making changes to our leadership practices if we look at the dimensions most of them are also good for teachers collaboration and for them to take responsibilities. If we are keen, we can probably be strategic using them in our context within our existing structure. It’s about getting teachers ready...time to change

Victoria: I agree with Maria...I think developing teacher leadership is an approach that we have to consider since we are expanding so fast. The PLC dimensions may not be culturally befitting to our organisation...but when I reflect further, we can find ways to turn around this to fit our context...improving collaborative learning for teachers

Both participants of PLC1 and PLC2 had similar perspectives on empowering teachers in making decisions. Shuwen, Lynn and Christy (PLC2) were concerned about teachers being followers and that it would take so much effort to change the culture and enable teachers to be empowered decision-makers. Hazel commented:

the idea of taking on leadership positions in our culture comes with a price...assuming that one should be given power for such

positions...teachers feel they do not have the power to make the decisions...building confidence in teachers is necessary. It depends on us leaders to set the culture of openness, vision and directions for teachers to develop and motivate their decision-making skills.
(Hazel/PLC2/M4).

Collaborative inquiry was an on-going process, helping participants of both PLCs to examine their practices, ask questions and determine action steps reconceptualising their beliefs about leadership practices. Collaborative inquiry in learning communities is integral to unearth, re-examine and challenge thinking and practices (Katz, Earl, and Ben Jaafar, 2009). Findings of this study align with other PLC studies that suggest the importance of inquiry in a collaborative learning environment that enables participants to investigate, question, challenge assumptions and extend their thinking (Mitchell & Sackney, 2009; Schaap & De Bruijn, 2018).

6.2.3 Perspectives of PLCs

Both theoretical and practical concepts of PLCs were virtually unknown to the participants at the beginning of the study. In particular, little was known about the use of PLCs in the ECE context, unlike its counterpart in the school sector in Singapore (see, for example, Hairon, 2016; Hairon & Dimmock 2012; Ning, Lee & Lee, 2016). Although participants of PLC1 were familiar with the term, they had little or no knowledge of its characteristics or professional benefits. Participants' engagement in the PLC process enabled them to discover the concepts and benefits (see Sections 4.3.2 & 5.3.2).

Eaker, DuFour and DuFour (2002) suggest that PLCs serve as a structure for educators to share a "sense of connectedness" (p. 53), thereby reducing isolation. Findings suggest that participants identified PLCs as a supportive structure and a form of job-embedded professional development. According to Zepeda (2012), job-embedded learning is associated with learning from real life problems encountered by teachers and administrators through continuous professional learning. Findings of this study are consistent with research that associate job-embedded professional development in learning communities where opportunities for conversations, reflections and inquiry are created. (DuFour, et al., 2005). These studies highlight that adult learners take control of their learning within job-embedded professional development when dealing with real life situations.

Supportive collaborative networks

Participants of both PLCs shared that they experienced many demands and pressures at work due to paperwork, accountability to parents and staff issues. Although work was shared with their senior teachers, it was the responsibility of the principals to constantly monitor and ensure tasks were accomplished. Although surrounded by people at work, they lacked the opportunity to consult with trustworthy peers. Whilst principals of PLC1 had opportunities to meet with area managers for weekly consultations and monthly meetings with other principals, these relationships were congenial rather than promoting collaborative inquiry. Principals of PLC1 experienced a work culture that avoided probing other's ideas and actions for fear of conflict, and which limited collaborative inquiry (Uline, Tschannen-Moran, & Perez 2003). In contrast, participants of PLC2 had few opportunities to engage with other principals for collaborative work or learning. Generally, principals in both PLCs felt that they lacked a supportive network within which to develop and grow.

Participants of PLC1 saw their PLC as a supportive structure for professional growth and felt that the process of providing feedback and sharing each other's expertise through collaborative learning could serve as a learning model for all principals in the organisation. They felt that such a model could help them to develop collaboratively instead of the existing competitive climate in which principals were expected to demonstrate individual excellence (see Section 4.2.5). This is in line with Gaspar's (2010) finding that principals preferred a PLC model of professional learning that could be customized to meet the needs of the members through collaborative inquiry and collective responsibility.

For participants of PLC2, the learning community was a source of respite from their professional isolation. It provided a platform for professional learning to discuss issues related to leadership matters and maintain a professional support network in the ECE context. Participants' perceptions that a PLC reduced professional isolation echoed Drago-Severson's (2016) findings that collaboration through PLC was foundational to decreasing principals' sense of isolation. Drago-Severson found principals claimed increased satisfaction in meeting, discussing and finding solutions with like-minded peers, who faced similar challenges at work. Participants from both PLCs in this study reported that the PLC environment provided a supportive structure for professional growth.

Shared personal practice

Participants valued the process of collaborative inquiry and reflective practice, which helped them gain awareness and examine their day-to-day issues at work. Findings suggested that participants of both PLCs increased their confidence and developed openness to receiving feedback and suggestions from peers. Shared personal practice is an integral part of learning communities and is characterised by conversations about educational issues, a collaborative effort of examining practices with colleagues and “tacit knowledge constantly converted into shared knowledge through interaction involving the application of new ideas for problem solving” (Stoll, 2011, p. 106). The focus of participants’ professional dialogues in this study were around matters related to their leadership practices. Participants had an inquiring approach to learning about best practices and solutions to their challenges. They appreciated the feedback and suggestions provided by their peers, which helped them reflect on changes. Victoria and Hazel perceived that learning through inquiry encouraged them to change their practices.

The sharing...was a good way to learn from my colleagues. I appreciate their views on my practices...I've always been operating on my own but learning from my peers how they approach their teachers and their interpersonal skills has helped me to put on my thinking cap and re-examine my practices. [Victoria/PLC1/RJ]

Learning of new practices and acquiring feedback from others...reflecting on the issues...were helpful. I never had this opportunity before...having the opportunity to share challenges and reflecting collaboratively to seek solutions from others' experiences were practical to my work...this is the kind of active learning that principals need. [Hazel/PLC2/Post-I]

Professional sharing between participants in both PLCs indicated that they were willing to build shared knowledge by openly sharing (Stoll et al., 2006) their practices. Shifts in learning were evident when practices were shared openly during their collaborative dialogues. Participants asked relevant questions and were inclined to share ideas. Su Ling’s and Hazel’s views on shared personal practice illustrated their learning moments:

In our usual meetings we don't get to learn from other principals of their best practices, and I used to wonder...why Maria was always doing better than the rest. Her sharing in your PLC about how she invites resource people to help her teachers cope with special needs children and how she empowers her teachers to collaborate with other centres on sharing curriculum ideas...is something I've learnt. [Su Ling/PLC1/RJ]

The idea of 'peer feedback and learning from each other with classroom observation' was a good idea. I'd never think of doing it! It's a not a usual practice at any centres in Singapore. Christy's initiative to do a video of a classroom observation and getting her teachers to feedback...was a bold move and...was a learning moment. [Yvonne/PLC2/Post-I]

Self-directed learning

Findings in this study revealed that leadership learning within PLCs was self-directed (by participants) and practice-centred. Participants reported that engagement in their PLC facilitated a self-directed learning process of reflecting on their learning of new knowledge and experimenting with it. Examples of self-directed learning in both PLCs included participants deliberating on improving their leadership approaches, reflecting on literature and discussions during the face-to-face meetings. Participants acknowledged that learning through collective inquiry was engaging and this contrasted with attending passive workshops and courses, where information was provided by external sources. Participants described their learning as active, contextualised and focused on finding solutions to challenges in their daily work activities. Participants of both PLCs highlighted that due to demands on their time and work, they seldom reflected on their practices. However, their PLC engagement provided opportunities to reflect through conversations, shared knowledge and inquiry. The following comments indicated the reflection and self-directed learning experienced within PLCs were valuable learning moments:

This is the first time I experienced my personal leadership issues... being tabled for professional discussion to find solutions...I was able to take control of the learning to see if they were workable... and most helpful was the reflective process...helped to take control of my learning. [Maria/PLC1/post/I]

When strategies were discussed... I was able to link those to my own experiences and...I've been able to apply the learning at work...moreover [this] helps me to self-direct my learning...when I encounter an issue at work the collective reflections during PLC actually directs my reflection...a practical way of learning than learning through PD courses. [Christy/PLC2/post/I]

Knowles (1975) suggests that adult educators are self-directed learners and they reflect critically about their experiences through a reflective learning process. Carpenter (2015) further asserts that engagement in a collaborative PLC environment supports adults' self-

directed learning to improve and transform their practices. Similarly, findings of this study demonstrate that engagement in PLC had a positive influence on leaders, helping them to direct their learning through reflective inquiry, collaborative discussions and sharing of practices. Participants also articulated that self-directed learning helped them to take control of their learning, find creative solutions to problems at work and be able to construct knowledge that helped them to improve their practices and transform their learning experiences. These personal experiences also motivated participants to consider whether they could implement such learning experiences by involving teachers in a PLC oriented collaborative learning approach in their services.

6.2.4 Developing collaborative leadership practices

This section discusses participants' development of collaborative leadership practices in their services. Findings revealed that the process of collaborative inquiry, reflective practices and the process of shared personal practice about collaborative leadership practices supported participants to confront the embedded beliefs and values in their practices. Both the cultural values that guided participants' leadership beliefs and the hierarchical structures in their organisations led participants to evaluate the cultural appropriateness of the PLC survey dimensions on collaborative leadership practices. This section begins by discussing the leadership competency of *organisational awareness* that enabled participants to evaluate the circumstances and constraints to implementing collaborative leadership practices. The next part demonstrates participants' *self-efficacy* to discuss how adaptive changes to collaborative leadership practices were implemented.

Organisational awareness

Findings revealed that participants of both PLCs had reservations about implementing changes related to some dimensions of collaborative leadership practices in their services. They were reluctant to alter the existing values, norms and practices in their services. Participants understood the forces within the hierarchical structure and the guiding values that operated among people within their organisations. Goleman, Boyatzis and Mckee (2013) define this competency as organisational awareness and suggest that a leader demonstrating organisational awareness is “politically astute and attuned to accurately interpret the distribution of power in an organisation” (p. 10). The following comment illustrated participants' viewpoints:

Implementing the full dimension of PLC-oriented collaborative leadership at the centre may be challenging. We may need the structure

and time to make these changes. I think it should come from the management level as you know that we have certain process of system at work. [Victoria/PLC1-Post/I]

Concerns were further reinforced amongst the principals of PLC1 when one of the participants shared her experience. Before effecting changes in her practices, Mei approached a member of the management and shared her perceptions about the benefits of my research study. She took the initiative to seek the opinion of the staff member to implement some of the strategies learnt during her PLC involvement. However, the staff member discouraged her and told her that it could upset the organisational structure or practices. The following excerpt illustrated the feedback she received from the management:

I shared with the management about using some strategies learnt during the PLC to organise some changes with my teachers...unfortunately the response was not so positive... she told me that I should think carefully before making changes to the structure and roles of teachers' responsibilities. It may be perceived that I'm pushing my workload to the teachers! [Mei/PLC1/M7]

Participants of PLC2 were also concerned about disrupting the existing structures in their services. These participants were subtle in their selection of PLC dimensions that could improve teachers' collaborative relationships and learning. The following comment from Yvonne (PLC2) illustrates the constraints she encountered:

I have other partners running the centre and there are workplace structures with specific roles and responsibilities for all staff members...it can be challenging to change everyone's mindset about collaborative leadership...these partners are people not in EC...and I can't change their deep-seated beliefs. I'd rather work with the teachers to see the changes. [Yvonne/PLC2/Post-I]

Participants were aware of the implicit leader-follower culture that existed in their services between teachers and principals. Further the demands placed by the management clearly structured and delineated teachers' roles and responsibilities. Steeped in the foundational ideologies of a paternalistic leadership culture of Confucian ethics and beliefs (McDonald, 2012), participants were apprehensive about challenging the cultural values of leader-follower practices. Participants were also concerned that their efforts to implement collaborative leadership practices could undermine the hierarchical beliefs and values of

the organisation. Nevertheless, participants of both PLCs demonstrated a determination to work around these constraints.

Self-efficacy

Participants were aware of the lack of time, teachers' workload and cultural beliefs that may limit the implementation of collaborative leadership practices. However, they displayed self-efficacy to overcome setbacks in order to influence change (Bandura, 1997) and demonstrated an internal locus of control to take responsibility over those things they could control and influence (Manichander, 2014). Thus, participants were willing to implement collaborative leadership practices related to teachers' collective working and learning in order to improve their relationships and aspects of teacher leadership practices. They preferred a long-term orientation to changes related to teachers' working collaboratively and to ways to diversify teachers' expertise to develop teacher leadership. Findings also suggested participants' preferences to work on dimensions related to *shared values and vision, collective learning and application, shared personal practice* and certain criteria of *shared and supportive leadership* to help their teachers accommodate new skills of collegial learning, de-privatization of practice, teacher leadership skills and above all to build trust amongst teachers for a cohesive collegial relationship. Some participants of both PLCs felt that the top-down management structure in their services did not provide opportunities for teachers to emerge as leaders; however, participants felt that empowering teacher leadership was necessary to improve overall practices in their services. Participants' explained how they were motivated to change their leadership approaches and how it influenced teachers' behaviour:

If you ask me whether I brought in any learning from PLC...it was the soft skills of leadership approaches to build trust and relationship with the staff members...I do see some results...teachers are more open now It's not that big...I changed my approach and communication style to encourage peer sharing and changes are happening... [SuLing, PLC1/Post/I]

There's an age-old practice in my centre that sharing of professional development should be done by the first level leaders...which I'm trying to change. I had to empathise and coax my second level teachers...that their sharing will inspire the rest in the team...This is when I used Goleman's technique to be affiliative and had to be diplomatic to motivate teachers who wouldn't open up. [Shuwen/PLC2/Post/I]

This study established that collective learning within their PLCs influenced participants' organisational awareness to respect and maintain the cultural beliefs and values; however, to also look beyond the external constraints to improve teachers' professional learning. Findings are in agreement with the work of Drago-Severson (2012) who discovered that collaborative learning in schools increased principals' personal efficacy to manage adaptive challenges and support teachers' learning and development. Furthermore, findings in this study relate to Anderson and Schneier's (1978) research that leaders with internal locus of control are confident and directive in controlling their external environments to achieve expected outcomes.

The outcome of collaborative engagement in PLCs was evident through individual participants' shifts in thinking and implementing changes to their leadership practices. As changes occurred within the PLCs, it is also integral to understand how learning transformed in both PLCs. As indicated earlier in Section 2.8, this study used the tenets of Mezirow's transformational learning theory to analyse how learning through PLC helped to transform and influenced leaders to embrace changes to their leadership practices. Therefore, the next section will explore the dimensions of using Mezirow's transformational learning theory in this study.

6.2.5 Analysis of Mezirow's transformational learning theory

This study employed the framework of Mezirow's transformational learning theory to explore how engagement within a PLC environment shifted participants' thinking about collaborative leadership practices. Transformational learning theory postulates that learning is transformative only when learners are able to critically examine and revise the information they have assimilated from others (Taylor, 2007). Within the paradigm of transformative learning lies the idea that learners are not transformed in isolation and that learning requires "observations, insights, and challenges" from others to identify and analyse issues through reflective discourse (Brookfield, 1995, p.5). As indicated earlier (see Section 2.8) the congruency between the tenets of transformative learning theory and the characteristics of PLCs made it viable to draw together participants' experiences through PLC. The similarities of learning process in both Mezirow's transformative learning theory and PLC characteristics helped to explore how learning occurred and was transformed through interactive discourses within the collaborative learning context.

Exploring the tenets of transformative learning theory in both PLC1 and PLC 2

Central to the idea of transformative learning process was participants' *frames of reference*: their points of view influenced by beliefs, values and assumptions. It was firmly embedded in their belief system that within a structured hierarchical system, leadership in their services was collaborative and that it was shared with their staff members. However, information from readings and sharing of knowledge about collaborative leadership within PLCs; collaborative dialectical discourses; and the need for change in leadership practices to cope with the challenges in their services helped participants to reconstruct their meaning perspectives of their leadership practices. Most significantly it was the development of relational trust which was built within the PLCs that provided participants with a concrete platform to learn without anxiety and to critically analyse the learning generated within their trusting relationship. Similarly, this concept of building trust is also perceived integral in transformative learning which fosters adults' confidence to engage in critical reflection without apprehensions or fear (Taylor, 2012).

Collaborative Inquiry or reflective discourse is considered fundamental for adults' learning in transformative learning (Mezirow, 2003). The collaborative discourses that took place during the face-to-face PLC meetings provided deep reflection, through sharing of knowledge and practices. This process helped participants in both PLCs to agree and disagree on issues related to their practices and to build shared consensus by providing feedback and finding solutions to their challenges at work (see Sections 4.4, 5.4 & 6.2). However, changes in their perspective or frames of reference began to take shape when participants were engaged in *reflective practice* within each PLC's. Initially the process of reflection lacked depth and participants were engaged in sense-making rather than deep critical reflective process (see Section 6.2.2). This sense making, according to Mezirow, in terms of transformative learning is similar to content and process reflection (Kitchenham, 2008) (see Section 2.8.3). Nevertheless, my facilitation was important in elevating participants from a sense-making process to critically examine, deconstruct their challenges and question their practices. Within the transformative learning perspective, Mezirow explains this as premise reflection that leads to profound perspective transformation, leading one to question the relevance of the problem based on one's assumptions, beliefs or values (Santalucia & Johnson, 2010).

With shifts in participants' thinking about collaborative leadership practices, the final tenet of transformative learning was taking *action* to change their practices. According to

Mezirow, the tenets of transformative learning effects personal transformation through praxis (Taylor, 1998). These were evident in participants taking action to make changes to their practices. Shifts in thinking and changes to their practices were affected through subjective reframing by looking inwards through a transformative learning process (Brookfield, 2002) (see Sections 4.5 & 5.5). Mezirow (2000) also reminds that cultural aspects which prescribe specific values and beliefs within an organisation, workplace and lifestyle should be taken into consideration when taking actions to change practices. This was evident when participants considered the values of hierarchy within their services to make relevant changes to collaborative leadership practices

6.2.6 Section summary

The process of establishing trust within the two PLCs highlighted significant tenets essential for building trust in PLCs within the distinctive context of this study. Notions of inter-dependence, trustworthiness through vulnerability, establishing shared values and beliefs, and setting of group norms were fundamental for developing trust in both PLCs. Although, there were differences in building trust between the two PLCs, eventually learning about trust shaped participants' perceptions about trust for collaborative professional learning within PLCs and its importance in building collegiality amongst teachers in their services. The iterative process of collective inquiry and collaborative dialogue through their PLCs facilitated participants to critically reflect and thereby determine which cultural aspects stood as barriers to implementing collaborative leadership practices. Further, collegial support that evolved through their PLC provided participants with the confidence and self-efficacy to work around these barriers by choosing selective dimensions of PLCs to implement in their services. Furthermore, Mezirow's transformative learning theory helped to understand how these changes were analysed using a theoretical concept. Thus, it can be argued that PLCs served as a supportive collaborative network structure for participants to understand how learning could be contextualised and self-directed to improve practice through reflective professional inquiry.

6.3 Teachers' perceptions of the impact of PLC processes on their centre leader's practices

This section discusses the findings of focus group (FG) meetings with senior teachers (STs) and lead teachers working with principals in the two PLCs to ascertain the influence of PLC learning on their principals and changes perceived in their services. The acronym ST

will be used when indicating their responses. STs were asked about their principal's leadership practices pre-PLC and the changes experienced after PLC. The following themes will be discussed: *teachers' views on leadership practices* and *shifts towards collaborative approaches*.

6.3.1 Teachers' views on leadership practices

Findings indicated that STs of both FGs highly valued the more consultative approach of their principals in their services. However, their views about how leadership practices were shared contradicted the perceptions of their principals. When initially asked to describe the leadership practices, STs of both FGs provided responses stating that practices were generally collaborative, being respectful of each other and they worked as a team. However, when probed further STs provided details of their roles in decision-making, and the nature of sharing leadership practices with their principals. The following three sub themes will be discussed: *roles and responsibilities of STs*, *sharing leadership with teachers* and *decision-making*

Roles and responsibilities of STs

When asked about their specific roles and responsibilities as STs in their services, responses were fairly similar across both FGs. STs' responsibilities were clearly delineated in terms of their roles within the formal structures proposed by the management and they were held accountable for the work delegated by their principals. STs' (but not lead teachers) roles and responsibilities were distinctly classified as: conduits to disseminate information between the principal and the rest of the staff members; managerial tasks related to operational matters; and instructional leadership roles including monitoring teachers' curriculum planning and mentoring of novice teachers. STs from both FGs described their role as supporting principals and ensuring the efficiency and effectiveness of the centre's operations. Data suggested that power relations existed within a top-down hierarchical structure. Hannah's (FG1) description of her role was acknowledged by the other STs of FG1:

communication between me and my principal is mutual...our work culture is like a pyramid...the principal at the top, I take instructions from the principal and delegate them to the teachers then vice versa...it's a cyclical process.
[Hannah/FG1]

Reena (FG2) had a similar perception of the practices that existed within her service. She explained that her centre was large, and the principal made major decisions. However, they

had a layered system with work allocated to team leaders in each layer, who monitored teachers under them. She reiterated that, “*discussions and decision-making happens at the bottom with team leaders at each level and if any change is required we bring it up to the principal for her consideration*”. STs related that decision-making in their services rested with the principal and as STs their responsibilities included assisting principals to ensure the smooth operations of the centre but not to lead changes in practices.

Sharing of leadership with teachers

There was consensus amongst STs in both FGs that leadership tasks were rarely shared amongst other teachers as teachers’ time was dedicated to classroom planning and teaching. STs of both FGs clearly demarcated the roles of teachers as limited to the classroom environment and involvement in centre projects or events. For example, Kaitlyn (FG2) explained “teachers are evaluated to see if they have the potential to undertake any extra work...because they’re already busy with classroom and lesson planning. However, everyone works collaboratively during centre events”. Similarly, Lorraine (FG2), a lead teacher, said that teachers in her centre were not involved in major leadership tasks and her principal retained the decision-making power; even matters related to curriculum came under the purview of the principal. She added, “of course we work collaboratively during centre events and projects, but I don’t see anyone sharing her leadership tasks”. STs of FG1 echoed similar perceptions of teachers’ practices being confined to the classroom and leadership belonging exclusively to the principal. Interestingly, STs were clear about the roles and responsibilities of teachers, unlike the principals of both PLCs who believed that leadership practices were shared with teachers. These different perceptions were clarified when STs pointed out that principals consulted teachers in matters of curriculum, when changes were warranted in their practices. Thus, making shared decisions with teachers on matters related to curriculum could lead principals to believe that leadership practices were shared with teachers. It was interesting that STs did not share similar sentiments with principals regarding decision-making processes as they felt that teachers’ decision-making processes were limited and contrived as discussed in the next section.

Decision-making

STs’ initial responses about decision-making processes between them and the principal were described as shared decision making, open communication and consultative or them making collective decisions. However, when probed further, anecdotes shared by STs illustrated that principals made strategic decisions and both STs and teachers were

consulted on operational matters. It was also evident from the STs' responses that the scope of their roles was limited. When critical issues arose, STs were advised to seek assistance from the management or to leave the matter to rest until the principal resumed office. There was also variation amongst the STs about their dependency on principals to problem solve. Some principals expected dependence whereas others were quite open to teachers taking the initiative to solve problems as long as they were kept informed.

There was unanimous agreement that principals were supportive of both STs and teachers in making decisions on matters related to curriculum and teaching practices. However, principals closely monitored teachers' decision-making to ensure they adhered to the MOE's curriculum framework and the centre's curriculum policy. The characterisation of leadership practices described by STs in their services resonates with Hargreaves (2011) concept of loose-tight coupling systems. From the mainstream school literature, Hargreaves distinguishes the coupling system in three forms: "professional, institutional and inter-institutional" (p. 688-689). As established in this study, professional coupling refers to teachers' autonomy in curriculum matters and institutional tight coupling is characterised by top-down management structures with specific roles designated for staff members.

Although principals suggested a collective form of shared leadership practice in their services, STs' responses expressed a counterview. Findings also suggested that positional leadership practices were prevalent with principals having a top-down bird's eye view on all matters and STs having limited opportunities to practise leadership. In general, leadership practices of principals in both PLCs were hierarchical at the strategic level and more collaborative at the operational level. These formal processes of distributing practices from the superior to subordinate, provided the security of a well demarcated system of governance with clear boundaries to accountability reflecting Singapore's wider school system (Hairon & Goh, 2014).

6.3.2 Shifts towards collaborative approaches

Apart from STs perceptions and experiences of leadership practices in their services, I endeavoured to seek whether teachers observed changes in their principal's practices after their participation in the PLC study. STs of both FGs were informed about their principal's participation; however, not the content of the PLC learning. STs were specifically asked during the FG discussions to reflect on their principal's leadership practices. STs had noticed some shifts in principals' thinking and practices that influenced changes in their

existing leadership practices. There were variations in STs' responses on the changes observed. Findings will be discussed based on STs' perceptions of the changes namely: *changes in leadership approaches, supporting teachers' leadership skills and de-privatisation of teaching practices.*

Changes in leadership approaches

Learning about various leadership approaches prompted participants of both PLCs to reflect on their individual leadership styles and make changes at their workplaces (see Sections 4.41- 4.4.5 & 5.4.1 – 5.4.5). However, not all STs confirmed the changes observed in their principals' leadership approaches. The following responses from STs describes how principals adopted affiliative, democratic and authoritative approaches of Goleman's (2000) leadership styles. Minh (FG2) described her principal's initiative in forging consensus from a group of middle level teachers to share their learning after a professional development course. This was an unprecedented practice at the centre. Knowing teachers' reluctance in committing to this new plan, her principal assured them that she trusted their expertise, decision-making and skills in guiding other teachers through collective learning. It was evident from Minh's responses that her principal used a combination of affiliative and democratic approaches and she added, *"I think she was buying in teachers' cooperation and participation...surprisingly I see the difference and teachers working co-operatively with the principal.*

Similarly, Julin (FG2) described the change in her principal's attitude whilst defending her teachers against the management's lack of confidence in organising the year-end concert. Julin felt that it was unusual for her principal to risk going against the management's suggestions. The principal was confident that teachers were capable of working with the community to organise the event. Julin added, *"when management discouraged her proposal, my principal replied calmly but authoritatively that she trusts her teachers would do a good job...I'm glad she stood for us at the right time"*. Julin's description clearly revealed her principal adopting an authoritative approach to direct the management's attention to teachers' capabilities rather than conceding to their view. In FG1, Hannah and Shi Min related shifts they noticed in their principals' approaches. Shi Min observed that her principal changed from being a strict leader concerned with performance output and efficiency to forging relational approaches and attempting to rebuild trust with the team. It seemed clear her principal had moved from being a pacesetter to embracing democratic and affiliative leadership approaches.

Likewise, Hannah shared that her centre had issues with younger teachers having low morale and working co-operatively with older teachers. She noticed her principal negotiating, making flexible arrangements, coaxing and allowing the novice teachers to decide how they would like to share their learning and urging them to voice their concerns. The principal's approaches resonated with the style of a democratic leader "by listening to employees' concern... and learns what to do to keep the morale high" (Goleman, 2000, p. 85). These examples from the STs corroborated with principals' desire to work on their leadership approaches; however, not all STs articulated changes to their principals' practices and approaches. Reasons could be the short time span between the completion of PLC meetings and time provided to implement changes to their leadership practices. Principals adopting flexible leadership approaches in this study were consistent with Goleman's (2000) analogy of leaders using different leadership styles "like an array of clubs in a golf pro's bag...over the course of the game, the pro picks and chooses the clubs based on the demands of the shot" (p. 79) for effective results.

Supporting teachers' leadership skills

An experience commonly shared by most STs was their principal's initiative in encouraging and supporting teachers' leadership practices by fostering relationships amongst teachers through collaborative learning, nurturing shared decision-making, forging a shared sense of purpose and distributing responsibilities to teachers to lead learning. STs explained how shifts occurred through the efforts of *encouraging collaborative peer learning, establishing a common consensus of shared values and creating opportunities for teachers to lead.*

Encouraging collaborative peer learning

STs from both FGs shared shifts in distributing responsibilities to teachers. Teachers had been encouraged to participate in collaborative learning models of providing and receiving constructive feedback during joint professional learning. Whilst everyone shared some changes made by principals to support peer learning, Charlene of FG1 shared that these changes were not enormous; however, she had witnessed a transition from a passive professional learning practice to relational forms of learning. Teachers were encouraged to share their ideas without inhibitions and were guided with questions to encourage reflective thinking. She added, "*teachers are given more airtime for discussions, reflections and are encouraged to share*". She also shared how her principal had been breaking teachers' learning circles into smaller groups for effective collaborative learning.

Similarly, Rita (FG1) commented that the principal rarely headed the learning circles in her service now. Rita had been mentored to manage the learning circles for teachers. Rita expressed her principal's confidence in her. She reported her principal saying: *"I think teachers are very comfortable with you and I see a lot of interpersonal interaction, I will step in only when needed"*. In FG2, Julin and Fatimah, shared about a work in progress in their service for teachers' collaborative learning. Their principal had discussed reorganising teachers' learning through partnership, changing their profile to active learners rather than receivers of passive learning. Julin expressed that her principal wanted a combination of increased collaboration and responsibilities amongst teachers and Fatimah responded, *"time and teachers' attitude changes are the main factors to implementing this, it's a tall order but my principal is determined."*

Establishing a common consensus: shared values

The notion of cultivating a shared sense of purpose amongst teachers mobilised two principals in the study to find ways to work with teachers on articulating and establishing their shared values to build a sense of collegiality. Responses shared by Fatimah and Julin of FG2 illustrated that their principal was keen on findings ways to draw an alignment between teachers' personal values and the centre's mission and vision. The principal proposed to the STs holding informal coffee talks with teachers to discuss teachers' personal philosophies related to their work and beliefs about ECE. Fatimah expressed, *"we do have some conflicts amongst teachers"* and Julin added, *"probably this could be one of the reasons she's trying to instil in us that we all should have values that we commonly share to walk this journey"*.

A parallel experience was shared by Stephanie of FG1. She commented on her principal's attempt to improve trust and relationships amongst teachers. The principal introduced an activity during a professional learning session. She motivated teachers to articulate their values and beliefs. However, teachers' responses were limited, and her principal was not successful in carrying out the activity. Her principal explained to Stephanie that she was trying to implement what she learnt during her PLC participation. Stephanie added, *"she feels that knowing teachers' values and beliefs will be one way to have shared values to working together"*. She added, *"my principal is looking at ways of working on this process again"*. Not all STs across both FGs reported their principals working on establishing teachers' shared values and vision with some reporting that they had not heard about shared values from their principals.

The effort of two principals in the study to work on re-establishing teachers' shared values and vision was a small step but indicative of their attempts to implement change. This finding is consistent with Van Neikerk and Botha's (2017) study which suggests that to maintain effective value-based school leadership, "principals need to accentuate the importance of shared values among staff members by engaging in an intra-dialogue to find a dissonance of values in relations to self, others and the school's values" (p. 141).

Creating opportunities for teachers to lead

Principals' purpose in nurturing teacher leadership in this study was to foster mutual collaborative learning amongst teachers. Findings showed that STs of both FGs witnessed their principals planning and supporting experienced teachers to undertake the role of lead teachers to initiate collaborative learning. Since STs already held formal responsibilities, principals chose experienced teachers to lead the learning circles. Two experienced teachers, Rita from FG1 and Ainul from FG2, shared their experiences of undertaking the role of lead teacher. These experienced teachers did not hold a formal title as STs; however, were informally identified as lead teachers by their principals. Both lead teachers had similar experiences of a mentoring process provided by the principals to prepare them for the role. Both shared that they were highly motivated, and their confidence improved, knowing they had been validated and recognised for their abilities.

Ainul (FG2) responded that her principal wanted her to maintain the sense of collegiality and build trust, peer support and relationships amongst the group of teachers she would be working with. Ainul stressed that her role was to lead her colleagues as a collaborative team and to sustain a horizontal relationship with the teachers. She added, "*I need to lead and be led by the teachers and my principal reiterated that the objective of my role was to foster collaborative decision making and supporting peer learning*". On a similar note, Rita (FG1) was mentored to be flexible with her colleagues and, most importantly, to maintain a warm relationship and to be approachable to build trusting relationships. The types of professional learning activities for teachers agreed upon with the principal were improving peer learning through group and pair discussions, giving and receiving constructive feedback and being non-judgemental of others. Rita (FG1) added, "*I cannot tell if there's improvement, but efforts have been put in place and hopefully teachers will work without prejudice...because we do have problems in our centre*"

Lead teachers identified by principals in this study were informal leaders who were willing to extend themselves beyond their classroom roles to support other teachers in collaborative

learning. These teachers were respected for their teaching capabilities, ability to collaborate non-judgementally with others and disposition to respect the views of others (Danielson, 2007). Findings of this study are similar to studies built on the premise that school leaders are responsible for creating a collaborative culture with shared leadership practices (Hallinger & Heck, 2010; Hipp & Huffman, 2010) that involves “a redistribution of power, opening up possibility for all teachers” (Harris, 2010, p. 24). Evidence from this study suggests that empowering teachers to take on leadership roles enhances teachers’ self-esteem, motivation, improves confidence and collaboration amongst teachers. Similar findings have been confirmed by several studies on developing teacher leadership from the school improvement literature (Danielson, 2007; Muijs & Harris, 2003).

Apart from appointing lead teachers to support the improvement of teacher leadership, STs of FG2 acknowledged that principals were beginning to show signs of stepping back, allowing STs to have autonomy in decision-making and also expecting more interactions and shared discussions between the STs and teachers. STs who shared these experiences acknowledged a sense of self-efficacy and improved confidence. Minh (FG2) felt that the change in her principal’s mindset encouraged her to know that the principal had trust and confidence in her. Minh expressed:

The nursery class timetable was very congested and asked her if I could have a discussion with her to make the changes. She asked me to work on it if change is necessary but said, “but I’m not the one you should be consulting, rather the teachers at the ground...have a discussion with them and ask them for inputs and feedback...we can go ahead with the changes next year if everyone is agreeable”.
[Minh/FG2]

Kaitlyn (FG2) was emotional whilst sharing her experience of her Director’s shifts in thinking. Although Kaitlyn was the supervisor of the centre, her Director oversaw the service’s operations. Due to the Director’s presence, teachers would ignore Kaitlyn and approach her for all matters. However, with the change in her Director’s thinking about implementing shared practices, Kaitlyn felt good to know that teachers would not cut her off anymore. Kaitlyn shared the following message conveyed by her Director:

You are going to take over and you will be the first point of call for the teachers and my input will be from the backdoors and not directly given to the teacher...we have always been top-down I want you to change this climate, let suggestions come from teachers and allow them to make shared decisions...I know it’s not easy to do it but I trust you can.
[Kaitlyn/FG2]

Conversely, STs in FG1 had not observed changes in their principals' support of STs' leadership capabilities. STs' roles and responsibilities were defined and structured by the management and principals were confident in their work performances. STs of FG1 explained that their principals had carefully and systematically considered the development of teachers' leadership skills without breaching the human resource policies and ensured that teachers were willing to assume leadership roles. The concept of principals supporting teacher leadership in this study is aligned with the theory of distributed leadership (Harris, 2010; Thornton, 2006). Harris (2003) emphasizes that collaborative practices of distributed leadership rest "upon collective action, empowerment and shared agency" (p. 217). In other words, it is a democratic process of developing and encouraging teachers to take active roles in the school leadership work, participate in decision-making and shared professional practices (York-Barr & Duke, 2004).

De-privatisation of teaching practices

Learning about the concept of de-privatisation of teaching practices from the PLC survey motivated principals from both PLCs to consider improving teachers' confidence, reflective practice and shared teaching practices. The majority of STs had not witnessed any changes at the time of the FG discussions; however, the topic of de-privatising practices provoked varied views and perspectives during the FG discussion. Nisa (FG1) and Yasmin (FG2) shared their experiences of their principals implementing a new peer observation strategy during their professional learning meetings. Nisa (FG1) felt positive about the change introduced by the principal. Nisa was asked to share her instructional practices on a particular curriculum topic during a professional meeting and others were encouraged to provide constructive feedback. She added that the principal's aim was to motivate novice teachers to participate in shared dialogue and inquiry. For Nisa, the learning experience was insightful and made her reflect on her practices. She added, *"teachers were happy sharing ideas, asking questions and to give constructive feedback...I was able to identify my areas of improvement...my principal may take it to the next level, for teachers to learn through classroom observation"*.

Similarly, Yasmin (FG2) shared her principal's initiative of introducing a novel way of observing a pre-recorded session of classroom teaching. Although the group of teachers enjoyed the learning experience, she added that teachers were not forthcoming when her principal asked if she could administer peer observation in the future. Lorraine (FG2) who

is Yasmin's colleague shared that "*not all teachers would agree to open their classroom to others...making themselves vulnerable...especially novice teachers critiquing an experienced teacher and I, myself may not welcome this! I think that is why my principal has been trying out this peer observation with the group of new teachers*". There were mixed feelings from the group of STs on this topic in both FGs. Farah (FG1) noted that she may not be supportive of this initiative if her principal suggested classroom observation by peers. She added this practice may affect the teachers' confidence levels, especially if novice teachers were to provide feedback on an experienced teacher's teaching capacity. She further explained that establishing learning through shared practices such as peer observation may influence teaching practices. She added:

We cannot change people's attitude...there is a traditional belief that only someone from the top has the ability to observe and critic a teacher's classroom. The teacher herself may not be ready or confident to be observed or to be the observer. [Farah/FG1]

On a similar note, most participants of FG1 pointed out that not all teachers would be willing to accept such endeavours due to their beliefs in top-down practices where classroom observations have been the domain of the principal. STs suggested that changing teachers' attitudes should be supported by the management's advocacy or with policy initiatives. The above examples shared by STs of both FGs illustrated that only one principal from each PLC had been proactive in piloting the dimension of de-privatisation of practices. It was also evident from STs' responses that principals took measured steps in order to ascertain teachers' readiness for the change. Principals were cognizant that such practices were rare in the Singapore EC context and advocating change needed thoughtful planning and support. From an educational perspective, when addressing teachers' professional learning Fullan (2007) argues that a radical change is necessary, which involves "de-privatising teaching" (p. 35). He maintains that improved practices occur when teachers have opportunities to "to observe other teachers, and are observed by others" (p.36). Similarly, Little (1995) argued that peer observation and mutual reflection amongst teachers leverages instructional improvement and generates leadership abilities in teachers. However, Fullan also points out that breaking traditional practices of teachers' classroom privacy can be difficult due to structural and cultural barriers.

6.3.3 Section Summary

Overall, teachers' views about leadership practices in their services were contrary to the assumptions of principals that leadership was shared and a collective effort which included

teachers in decision-making processes. Both STs and lead teachers had a clear understanding that leadership was a top-down process in their services. The roles of STs and teachers were clearly delineated to describe the roles and responsibilities. Thus, opportunities for teachers to share leadership tasks with principals and empowerment for decision-making skills were not prevalent. According to the STs and teachers in both the FGs, leadership was hierarchical at the strategic level and more collaborative at the operational level through delegation of tasks and directives given by the principals. However, STs' views about the shifts in their principals' leadership practices illustrated how the engagement in the PLC had influenced collaborative leadership practices. Although changes made were moderate, findings explained how these principals showed initiative to improve their leadership approaches, develop teacher leadership to empower teachers in decision-making, build positive relationships amongst and with teachers, and encourage the de-privatisation of teaching practices and collaborative peer learning.

6.4 Barriers and enablers that influenced the development of collaborative leadership practices through PLCs

This section discusses the enablers and barriers to developing collaborative leadership practices through PLCs. Findings across all data sources and my personal experiences as the facilitator of this study revealed the barriers and enablers that influenced principals' efforts to implement collaborative leadership practices in their services. Identifying these enablers and barriers may help alleviate the challenges and support the essential features of successful PLCs, and in turn facilitate the development of collaborative leadership practices in future. Three key themes: *time*, *cultural aspects* and *PLC processes* will be discussed to describe the enablers and barriers evident in this study.

Time

Lack of time due to workload and the time lag between the completion of PLC meetings and implementing change to develop collaborative leadership practices were perceived as barriers by principals in this study. Some principals were hesitant to initiate changes due to the lack of dedicated time. Although time was a barrier, most principals in the study used it as an enabler, taking the lead to implement small changes in their services beyond the constraints. For these principals, changes were implemented as a natural part of teachers' professional learning without disrupting teachers' workload. Hazel's (PLC2) experience showed how she made creative use of coffee breaks with teachers to understand their personal beliefs and values through informal chats. She commented:

I see the importance of implementing shared values and vision amongst teachers but doing it as an activity for the realignment is not practical due to lack of time...I've got to be creative in using informal time to bring this over to the teachers.[Hazel/ PLC2/Post/I]

Similarly, having learnt about various leadership approaches, Victoria (PLC1) was determined to try them out with the teachers at the new centre. She commented on spending time with teachers to initiate changes for collaborative leadership practices. She said:

I have learnt to embrace changes to my leadership style and I want teachers to know I'm approachable beyond my strict personality... we have started to have chats and makan⁴ time together. I need to find time to do that to build that rapport instead of waiting for it to happen. [Victoria/PLC1/Post/I]

As the facilitator of both PLCs, I found time the most challenging factor in convening meetings for the principals. Face-to-face meetings for both PLCs were planned after office hours to avoid disruption to their work. However, it was difficult to schedule meetings as most days principals were busy after work due to extended meetings with their management or with personal commitments. These challenges impacted on both the timing of the meetings and principals' ability to attend all meetings with a consequential effect on their engagement in the online activities. This study found that time barriers negatively impacted principals' PLC engagement and their initiatives to effect changes in their services. The finding also highlights that allocating time for collaborative professional learning through PLCs is essential. Time is a significant predictor in creating and sustaining effective professional learning communities (Bolam & McMahon, 2004; Stoll et al., 2006). Time is integral in building trust, relationships and for making changes to practices through reflective inquiry. Furthermore, the constitutive dimensions of this PLC study included observation, collaborative discussions, interviews and analyses of artefacts such as related literature which required sufficient time to capture the PLC phenomenon. In addition, investigating the outcomes of the PLCs on collaborative leadership practices in EC leaders was also dependent on time. Therefore, time is a fundamental resource that should be scheduled for professional learning opportunities through learning communities to foster growth and development.

Internationally, there is increased attention to PLCs as an effective form of professional development in building capacity of staff members and sustainable improvement for

⁴ Makan is a colloquial term in Singapore for having food together. A common term used by all races

organisations (Stoll et al., 2006). With the ministerial move towards improving ECE teachers' professional learning in Singapore through continuous professional development (Chan, 2013), PLCs could serve as an effective strategy for supporting ECE policies for professional development. Studies show that traditional professional development courses provided externally do not meet teachers' professional needs (Apple, 2009; Wei, Darling-Hammond, Andree, Richardson & Orphanos, 2009). Such courses are limited in the application of skills in the classroom unlike informal collaborative learning opportunities that facilitate sharing of expertise, knowledge and authentic learning experiences. However, with the increase in principals' and teachers' workloads, collaborative learning communities such as PLCs could be perceived as adding increased workload to their already busy schedules. Therefore, policy initiatives or support through institutional structures are desirable for providing allocated time to implement effective PLCs for educators in the Singapore EC context.

Cultural aspects

Some of the challenges in implementing collaborative leadership and empowering principals through PLC were culture-bound. The Singapore Asian cultural context of hierarchy played a central part in challenging, promoting and shaping the PLCs in this study. Cultural beliefs and values acted mostly as barriers against the development of collaborative leadership practices. In the Singapore context, policies for ECE are primarily driven by the MOE and MSF through ECDA, the inter-ministerial agency (Tan, 2017). Early childhood services operated by public, private and anchor operators are guided by these ministerial policy initiatives when setting up administrative structures and governance in their services. From the perspectives of the principals in this study, it can be surmised that the practices in the Singapore ECE landscape mirror the hierarchical practices embedded in the wider school context. When describing practices in the school context, Hairon (2006) posits that decisions are made by the principal and members of the senior management and teachers take directives and initiatives from the top, placing their trust in the senior management.

Hairon contends that the dominant style of school leaders reflects the political characteristics of Singapore's administrative culture based on the concept of economic pragmatism coupled with the Asian Confucian values of a top-down structure for efficiency. He further adds that these cultural practices "do not only exist in school settings but throughout the Ministry of Education as a whole by virtue" (p. 517). Findings from this

study showed that practices in the EC services followed a pyramidal structure of governance as in the wider school context. Governance approaches were similar for both PLCs; however, with the private operators the administrative practices between the management and principals were more consultative, providing principals with a certain extent of decision-making power. The culture of teachers taking directives from principals inhibited the notion of principals' sharing leadership with teachers. Principals in both PLC1 and PLC2 were limited in being able to execute changes and make decisions about policies and practices. With this social and cultural context of top-down governance within early childhood services, initiating collaborative leadership can be paradoxical and a challenging process.

Findings suggested that learning about the benefits of collaborative leadership through their PLC was a welcome change for the principals. However, the embedded cultural beliefs that existed within the management, principals and teachers' value systems acted as a barrier, reducing the effects of collaborative leadership practices. Principals of both PLCs appeared to avoid the concept of sharing leadership with teachers for fear of destabilizing the existing hierarchical structure in their services (see Sections 4.2.3 & 5.2.3). They were aware that within a hierarchical structure, sharing leadership responsibilities with teachers may be interpreted as relinquishing their responsibilities. Principals of PLC1 alluded to the disapproval from management and to further confirm this, Mei (PLC1) shared a caveat given by a staff member of the management. She was discouraged from implementing any major changes to her leadership practices which may have been perceived as pushing her work onto teachers. Such efforts may undermine leadership efforts and teachers may not welcome the change. On the other hand, PLC2 principals implied that teachers may not be ready to share leadership responsibilities and may perceive these as added responsibilities. The following comments from Lynn (PLC2) illustrated her perceptions of teachers sharing leadership:

Certain dimensions in the PLC survey calls for sharing power and authority involving teachers in making decisions about most centre issues...these may not happen in our culture, there is hierarchy - some decisions are made at the management level and disseminated to the teachers...there are responsibilities which I'm solely responsible...so teachers may not welcome the idea of sharing leadership tasks... to take responsibilities and may assume that I'm pushing my work load to them. [Lynn/PLC/M7]

Findings also suggested the majority of principals from both PLCs made some strategic changes in their services. However, Daisy (PLC1) was less keen than others on

implementing any changes. She maintained that leadership was well organised in her service through the delegation of roles and responsibilities to teachers. She did not openly challenge the conceptual ideas shared during the PLC meetings, rather was positive throughout the study. Her passivity to change and reasons were not openly shared. Daisy (PLC1) suggested a lack of time, personal issues and teachers being involved in projects at the centre as reasons for not initiating any changes. In contrast, Yvonne (PLC2) faced constraints from her managing partners, who showed a preference for top-down practices. She shared that making changes could be disruptive to the centre's administration and possibly not accepted by the managing partners. However, she made efforts to initiate changes from her perspective as the director of the centre, reducing her involvement in the centre in order to provide more space for the supervisor to exercise her leadership practices. Principals' willingness to develop shared decision-making with teachers was also bound by hierarchical values and beliefs. They were open to teachers making decisions within the parameters of pedagogical matters and some administrative issues but were not keen about empowering teachers to make decisions on matters related to leadership and major operational issues. Principals of both PLCs shared the traditional culture of teachers taking directions from principals in their services. They also suggested that this normative order of taking directions from the top would discourage teachers from improving their decision-making practices. One possible explanation for this challenge is that principals knew that ultimate decision-making and accountability lay with them. Furthermore, not all decisions could be made with teachers nor could teachers be given the full reign of freedom in decision-making. Decision-making for teachers was bound within their scope of work. Hairon and Goh (2015) refer to this approach as "bounded empowerment" (p. 707), practiced amongst the school principals in Singapore. This approach enabled teachers' decision-making in a limited manner and ensured that their decisions had principals' knowledge and approval.

Similar to the findings in Hairon and Goh's study, principals in this study also maintained a bounded empowerment approach. They shifted their thinking to empower teachers through collaborative decision-making processes only on matters related to curriculum, teaching practices and simple operational issues in the services. The pervasive nature of social and cultural beliefs, which influences the governance of the ECE landscape in Singapore, seemingly limited the principals' ability to change their attitudes about collaborative leadership practices. Unpacking the cultural beliefs and values that were barriers to the implementation of collaborative leadership practices in the study has

revealed greater awareness of the contextual issues surrounding ECE leadership practices in Singapore. Further, as suggested by Dimmock and Walker (2000) caution should be exercised when adopting Western culturally-bound leadership theories of practices in a non-Western educational context. Hairon and Goh (2016) draw a similar caveat that culture is a significant predictor of leadership theories in the educational context and is “related to environmental factors, assumptions and constraints” (p. 697). These authors point out that making cross-cultural reference to the tenets of a Western culturally-bound theory within a non-Western educational context may undermine the value of cultural influence, which informs the effective practices and policy implementation within the distinct context

PLC processes

The PLC processes used in this study involved *online, face-to-face participation* and *my role as the facilitator*. The purpose of online participation was to facilitate and further support principals’ learning from the face-to-face meetings through discussion forums and reflective journals. Experiences of principals varied, with the use of online participation seen as both a barrier and enabler in supporting the development of collaborative leadership practices. Learning through face-to-face meetings was seen as an enabler and was the most preferred mode of learning for all participants in the study. My role as the facilitator in this study served as an enabler in the study and was multifaceted. Tasks ranged from building trust within the communities, supporting and generating opportunities for learning by stimulating reflection, being a good listener and providing access to relevant resources and continuous feedback.

Online participation

Findings suggested that participants of both PLCs preferred the online reflective journal compared to the discussion forum. Participants cited several reasons for not actively participating in the online discussion forum. Lack of time was the main issue inhibiting participation followed by the fact that discussion forums were open to all principals. Some participants of both PLCs were concerned that their postings could be taken out of context or misinterpreted if the messages they intended were not clearly conveyed. The learning management system which hosted the online participation was accessible to participants of PLC1 via their intranet at work and through the internet for PLC2. However, due to network and server related issues there were problems that limited engagement in online activities for both participants of PLC1 and PLC2. Whilst the discussion forums were made asynchronous for flexibility of participation, Christy (PLC2) felt that due to lack of

participation, threads were not followed-up to develop ideas further and so she lacked the motivation to contribute further. Such issues have been recognised by previous researchers in the area of blended learning approaches (Curtis & Lawson 2001; Nicholson & Uematsu, 2013). The lack of spontaneity of exchanges in asynchronous online activities may compromise participants' reflections and considerations. The following comments from both PLCs gives some insights to their non-participation:

The group was not very active on discussion forum. Going online is very tough because we need the discipline... not really ideal...I may not be disciplined to do that and our work is already so technology based and don't want any more of it. I need to get out of the environment to socialize. [Su Ling/PLC1/Post/I]

The discussion forum needs discipline and should be following a thread of ideas posted, although interesting...this is not easy. First thing my time is limited...so it's not a favourable one. [Hazel/PLC2/Post/I]

On the other hand, participants of both PLCs preferred the online reflective journals. Findings suggested that it helped them to reflect deeply, re-examine their practices and the feedback provided enhanced their learning. The reflective journals enabled participants to link their learning to the challenges in their services and reflect on ways to address issues and formulate new learning. The platform served as a risk-free venue to explore, think, and practice skills learnt during the face-to-face meetings. Further, they felt safer doing the reflective journal since it was individualised and not shared with other participants. The following comments are illustrative:

The self-reflective journal was a good for me to reflect...both the readings and the questions helped me to reflect further, "what have I learnt?" and "what have I achieved by learning from others?" It was very helpful and there were no strict criteria to meet...we were allowed to scribe what we thought after every meeting...was workable and that was helpful. [Victoria/PLC1/Post/I]

The self-reflective journal helps in reflecting deeper and when we come face-to-face it provides some meat and structure for the discussions otherwise PLC could have been a coffee talk. I enjoyed the sequence...we reflected on our practice and the structure provides us a reading background and when it comes to implementing it, we can see it taking flight. [Shuwen/PLC2/Post/I]

Findings suggested that all participants valued the online reflective journals, which improved individual understanding of the concepts and theories discussed during face-to-face meetings and information from relevant literature. Different modes of reflective writing were demonstrated by participants in the study. Some used a deep reflective writing style recording their thinking and further exploratory questions whereas others wrote short journals keeping their reflections implicit. Findings resonate with studies that the use of reflective journals in blended approach learning communities promotes deeper learning and reflection (Garrison & Vaughn, 2008; Thornton, 2009).

Face-to-face participation

Participants of both PLCs preferred the face-to-face interactions which were the key enabler for participants' enhanced learning, reflection and professional inquiry in developing collaborative leadership practices. Clear preferences emerged amongst participants of both PLCs for real life interactions that fostered dynamic relationships and social interactions rather than virtual participation. Participants revealed that face-to-face interactions helped them to understand their colleague's intentions and emotions through their body language, gestures, tone and cues embedded in one's communication style.

For most, the physical interactions helped address feelings of isolation, clarifying doubts and questions through professional dialogue and peer feedback. Lynn (PLC2) commented *"implementing collaborative leadership was not an easy task for me with so many issues in the pipeline because I was due for SPARKS certification and I don't think some of the nuances in practices can be learnt though online discussion"*. She added when she listened to Shuwen's practices of nurturing teacher leadership, it gave her the impetus to work with her teachers and helped her to prepare for the accreditation process. She attributed her learning to the collaborative process of listening, asking questions, clarifying and seeking suggestions during face-to-face participation.

The following excerpts further illustrate participants' comparative views between face-to-face and online participation:

We need to spin off from each other during face-to-face to examine the feasibility of practices. Technology can be helpful but when you miss the clarity...things may go wrong. Especially all of us come from the same organisation and we know how the setting works for collaborative leadership so helping each other with personal interaction is preferable.
[Maria/PLC1/Post/I]

The face-to-face interaction clarified many issues during discussions...the readings, leadership practices and the many inquiries each of us had. We talk about what it means to us and clarified understanding and misunderstandings. Most of my doubts...questions were answered during the collaborative conversations...I don't think...easier done through online discussion and of course having dinner with everyone was enjoyable. [Christy/PLC2/Post/I]

The design of the PLC and its activities were intended to facilitate relationships and learning through a blended approach with both face-to-face and online participation. Except for the online reflective journal, participants were not keen on participating in other virtual learning activities. Although participants perceived the online reflective journals valuable in extending their reflective inquiry, participants preferred face-to-face meetings for establishing a sense of community and providing a more effective forum for collaboration than online learning.

6.4.1 Section summary

Exploring enablers and barriers in this study undertaken in the Singapore EC context may help researchers to focus on how they could optimise the enablers and mitigate the impact of the barriers in future studies. Time, cultural aspects and PLC processes played distinct roles either as barriers or enablers in the study. Lack of time was the most crucial issue for both participants and the facilitator in the study. Time was a barrier for participants to initiate changes to collaborative leadership practices. As the facilitator I had to negotiate and compromise with the participants' limited time available for PLC participation. A very important factor was the cultural aspect which created a barrier to implementing collaborative leadership practices within the Asian Singapore hierarchical educational context. Although this has been a finding in wider school leadership studies in Singapore, it was not previously known if this was prevalent in the EC context. Finally, participants' feedback on the blended learning approaches in the study offered insights into how their collaborative learning through PLC in the Singapore EC context could be developed. The next section will illustrate how my role as facilitator and researcher was defined and operationalised in the study.

6.5 My dual role as facilitator and researcher

I assumed a dual role as the researcher and facilitator in this study. The subjective nature of being an interpretive researcher provided me an opportunity to co-construct knowledge with the participants. Nandhakumar and Jones (1997) describe such processes as “engaged data gathering methods” (p. 119). Such processes attenuate the boundary between the

researcher and participants providing intensive interaction to gain additional insight about the research context. My role as facilitator in the PLCs included both active interaction and facilitating discussions with participants. As facilitator, I assumed several roles: as an administrator sending emails; encouraging participants' face-to-face engagement; sending messages via phone as reminders to motivate their online participation; establishing norms for communication; as a catalyst for their collaborative dialogue and reflective inquiry; as an active listener to mediate questions for reflection; following discussions wherever they led and maintaining threads of topics during face-to-face participation; monitoring participants' emotions; providing relevant resources for further reading; and providing continuous feedback during online participations.

When not engaged in the process as a facilitator, I stood back as an unobtrusive researcher to observe and interpret participants' experiences. Undertaking a dual role as an unbiased observer and simultaneously playing an active role as the facilitator in shaping the research context was, at times, challenging. Thornton (2010) argues that there is little literature exploring the dual role of a facilitator/ researcher in a research inquiry. The dual role cannot be made discrete and it "demands mental agility on behalf of the researcher in regularly flipping between the roles, and social dexterity in avoiding drawing the attention of other actors to the change" (Nandhakumar & Jones, 1997, p. 126). Thus, researchers need to engage in reflexive analyses to examine their impact and to clarify one's own assumptions and behaviours, and position in the research inquiry (Finlay, 2002). The use of my researcher's journal helped me to capture the biases and feelings that influenced my position as a researcher and facilitator (Watt, 2007). Effort was required to form trusting relationship with the participants. Gaining the trust and confidence of the PLC participants enabled me to access participants' leadership experiences that they had not revealed during the interviews.

As suggested by Thornton and Yoong (2011), as the facilitator, I assumed the role of trusted inquisitor in establishing a trusting relationship with PLC members and between participants. This trust-based relationship provided the platform to challenge participants' thinking about their leadership and helped them to unpack issues and challenges, and in turn helping me, as the researcher to gain deeper insights about participants' their leadership practices. However, it was essential to strike a balance to maintain objectivity between my role as a researcher and my overt role as a facilitator in leading participants during their PLC work.

Meeting the participants for the pre-PLC interviews was my first opportunity to exercise my role as a researcher with them. I was well known to the participants of both PLC groups as an academic in ECE. I was anxious that participants may have reservations to share, regarding their participation in the study. Despite their heavy work schedule and personal commitments, principals indicated that they would try to do their best to participate in the study. These aspects made me feel very vulnerable as a researcher, wondering if I could sustain their interest and participation throughout the study. Unlike the members of PLC 2 who participated voluntarily in the study, members of PLC1 had been encouraged to participate in the study by their management. I was concerned about the impact of this on my study.

However, my prolonged engagement, meeting up with the participants individually to explain my role, the intent of my study and my interest in examining the challenges and issues that leaders' encounter gave them reassurance that I was 'listening to them'. In turn, this helped to ease my anxiety. My relationship with the participants was cordial and allowed me to cautiously set foot as a researcher to question, probe, lead, retreat and interact with the participants during the pre-PLC interview sessions. At the same time, as a facilitator I took the role of a guide and mentor to guide their learning. As the study progressed, I also realised there were limitations to data collection procedures and implementation of the study that are discussed later in Section 7.2.3.

6.5.1 Chapter summary

The discussion of the findings organised and presented through the research questions gave insights into how participants developed shifts in their thinking about collaborative leadership practices through a PLC process. Participants' engagement in PLCs were supported through the characteristics of PLCs, namely: reflective practice, collaborative inquiry, and sharing of professional knowledge and practices to improve situations in their practices. Collaboration through the PLCs was made possible by establishing trust, the connective tissue which helped to build a positive relationship amongst members in both PLCs. The learning process which evolved in the PLCs facilitated participants' understanding about the importance of building trust for positive relationships. Participants found the PLC to be a valuable platform for professional learning and a supportive collaborative network for building professional leadership capability. Learning through their PLC was an impetus to transfer their learning experiences to their services to improve teachers' collegiality and building positive relationships. STs' perceptions about their

centre leader's changes in leadership practices indicated that leaders made some small changes to their practices with respect to their leadership approaches, teachers' collaborative learning through teacher leadership and their determination to build trust in their services through social exchanges and activities.

My role in establishing the PLCs, both as a facilitator and as a researcher, helped build understanding of the factors that contribute to developing PLCs for professional learning. Furthermore, my critical reflections about my role as a facilitator within the PLCs supported fostering collaboration, as a critical friend and helped facilitate collaborative dialogues. In contrast, my role as a researcher helped me further to step back, reflect and monitor the impact of my influence in the study. As Berger (2013) suggests, researchers in a study need to "increasingly focus on self-knowledge and sensitivity; better understand the role of the self in the creation of knowledge; carefully self-monitor the impact of their biases, beliefs and personal experiences on their research and maintain the balance between the personal and the universal" (p. 2). Barriers and enablers were identified to determine how these impacted the study. The limitations and enabling conditions of the study will be further explored in Chapter 7 to enable discussion of the implications of the study and directions for further research.

CHAPTER 7: Conclusion

7.1 Chapter overview

This concluding chapter begins by providing an overview of the research process, the research questions, and key findings of the study. The next section of the chapter discusses the contributions of this research and the implications of the study for future practices. The limitations of the research are then acknowledged and finally, recommendations for future research are identified.

7.2 Overview of the research process

This section on the research process includes summary of the research objectives, and the design of the study including the research questions.

7.2.1 Research objectives

The main aim of the study was to examine how collaborative leadership practices could support leadership development in the Singapore ECE context through the use of PLCs. It explored how ECE leaders who participated in PLCs developed their collaborative leadership practices. Two PLC groups were established as units of analysis within a single case study. Besides exploring participants' collaborative learning within PLCs, the study aimed to ascertain teachers' views as to whether there were changes in their principals' leadership practices after their PLC participation.

7.2.2 Research design and findings

The research design for this study involved developing appropriate research questions to effectively address the research problem, and choosing methods of data collection and data analysis in order to achieve the research objectives. This section describes the key findings from the main question and sub-questions.

Main research question: In what ways do PLCs support the development of collaborative leadership practices in the Singapore ECE context?

Key findings from this overarching research question were obtained from the survey, face-to-face PLC meetings, online activities and teachers' perceptions about their leaders' shifts in practices. Results of this study reinforce the views espoused in international literature on PLCs in schools (Harris & Jones, 2010; Stoll et al., 2006; Tam, 2016) and the ECE sector (Cherrington & Thornton, 2015; Kreig et al., 2018; Thornton & Cherrington, 2018) regarding the importance of shared leadership through PLCs. Given the dearth of scholarly

research, little is known about the role of PLCs and collaborative leadership practices in the Singapore ECE context. However, findings of this study were significant in understanding how PLCs can serve as an effective platform to support and develop collaborative leadership practices in the Singapore ECE context.

Whilst leaders were agreeable to participating in the PLC groups, there was no precedent for coming together as a PLC group. Participants were initially apprehensive about collaborating and their shared learning lacked focus. As a researcher, I took the role of facilitator to lead participants' learning. My active role as facilitator encouraged participants to collaborate and the process of setting group norms and shared values, establishing trusting relationships and a shared learning focus began to evolve. However, when the facilitation approach became less directive, participants were more focussed in their shared learning and more self-directed during PLC discussions.

Studies have also emphasized the role of facilitators in moving from actively creating conditions to being passively supportive (Margalef & Roblin, 2016; Thornton & Cherrington, 2014). The importance of the facilitator's role was pivotal in this study and provided an insider perspective of what it means to be a PLC facilitator, and the ways of contributing to the effective functioning of PLCs. The role was not fixed but dynamically evolved over time as an advisor, critical friend, silent listener, confidante, planner of meetings, resource person and most importantly to discreetly balance the dual role of the 'insider' and 'outsider' perspective as a facilitator and researcher to guide the learning process and at the same time to evaluate the learning in PLCs (Avgitidou, 2009; Cherrington & Thornton, 2015)

This study also sought to illuminate the value of considering an indigenous approach when examining leadership in the Asian educational context. Findings also stressed the importance of taking into account the contextual factors and conditions where PLCs were located. A top down hierarchical phenomenon entrenched in maintaining power distance between leaders and teachers within the educational contexts was deeply valued in this study. Participants' practices and beliefs attributed to the Asian cultural values of "collectivism, power distance and Asian pragmatism" prevalent in the Singapore educational context (Hairon & Goh, 2014, p.172). Although participants were encouraged to implement collaborative leadership practices in their services, they expressed sensitivity to preserving the socio-cultural values of hierarchy and Asian pragmatism. Findings from participants' discussion highlighted the misalignment of implementing Western perspectives of PLC practices within their contexts, where Asian cultural values of

hierarchy were influential. This trend in findings is highly consistent in cross cultural leadership studies from the wider school literature (Hairon & Dimmock, 2012; Hairon & Goh, 2015; Li & Tu, 2018). Principals in this study were cautious in avoiding some dimensions of shared leadership practices found in the PLC survey that may threaten the existing hierarchical practices in their settings. On the other hand, principals chose to adapt the leadership practices to improve their own leadership approaches, develop teacher leadership practices, and build collaborative relationships amongst teachers to strengthen their professional capacity.

Within this main research question, the following sub-questions were developed and answered:

Sub-question 1: How does leaders' engagement in a PLC process shift leadership thinking and practices?

Learning about the notion of relational trust helped participants to form trusting relationships that improved the effectiveness of the PLCs. Participants also developed increased awareness of their leadership practices, learnt about various collaborative leadership approaches, and critically examined the effectiveness of their own leadership practices. The trusting relationships developed allowed them to express vulnerability with each other. They were willing to share their challenges and failures and seek help from other group members to resolve issues. Specific characteristics of PLCs emerged during their engagement in the process such as inquiry and articulating thinking whilst questioning and clarifying leadership practices, agreeing to disagree in a meaningful way during discussions, reflecting on each other's practice, collective learning, testing out practices in their services and sharing their outcomes with members, and de-privatisation of leadership practices.

Sub-question 2: What are teachers' perceptions about the impact/influence of the PLC process on their centre leader's practices?

Teachers' perceptions included their leaders' practices experienced both before and after engagement in their PLC. Findings showed that to a certain extent, there was alignment between teachers' views and centre leaders' thoughts about developing collaborative leadership practices to improve teacher leadership practices and relationships amongst teachers for collaborative learning. Teachers from both sub-units of the PLC groups acknowledged how their principals changed their leadership approaches and improved communication skills. Teachers indicated that their principals worked to establish teachers'

shared values and vision, and build relationships and collegiality amongst teachers for collaborative learning. Although small, other changes included empowering teacher leadership roles, working towards de-privatisation of teaching practices and improving teaching practices through peer observation and sharing.

Sub- question 3: What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?

The barriers and enablers in this study included the role of the researcher and facilitator and constraints on the ability of the participants to fully engage in the PLC process. Although both my role as a facilitator and researcher contributed to the development of PLCs in the study, there were also challenges encountered in maintaining the roles. Despite the 8-months invested in this study, changes to collaborative leadership practices was moderate rather than extensive and constraints were many for the research participants. It was not feasible for principals to implement some changes due to constraints from management, lack of time to prepare teachers' mindset for the changes and participants' embedded beliefs and values about the hierarchical culture in their services. Participants were reluctant to challenge hierarchical practices as they feared that doing so may disrupt the operations at the centre and may undermine their leadership status. Time was also a barrier to attending face-to-face PLC meetings and it also acted as a constraint for participants' engagement in online activities.

7.2.3 Contributions of the research

This study makes a number of contributions to the field including theoretically, methodologically and empirically. First, from a theoretical perspective, this study drew on PLC literature and Mezirow's transformative learning theory to understand the process of learning about collaborative leadership within the Singapore ECE context. According to Mezirow (1980), transformation of past experiences grounded in human communication is needed for transformative learning. The use of Mezirow's theory in this study helped to understand the nuances of adult's learning such as eagerness to learn relevant leadership related topics; the need to connect with like-minded people in order to expand their learning; willingness to share experiences without any inhibitions so that transformation takes place for improved practices; and the need for collaborative dialogical approaches for critical reflective practices. Both transformative learning theory and PLCs rest upon the notion that shifts in thinking and personal transformation through praxis occur through the dialectical relationship between members in a collaborative learning context (Servage,

2008). Therefore, this study contributes to the ECE PLC literature from a theoretical perspective in the Singapore context using the theoretical frameworks of PLCs and Mezirow's transformative learning theory.

Second, this study contributes methodologically to an understanding of the potential of interpretive case study research using PLCs to develop a collaborative culture of professional learning in the Singapore ECE context. The multiple elements involved in this research approach including both qualitative and quantitative aspects, provided a rich description of the experiences of these principals as they learned about collaborative leadership through their participation in PLCs. Bringing together participants in PLCs in this study and then researching their participation and leadership learning and development, helped participants to deconstruct challenges collaboratively, and to seek ways to problem solve by capitalising on each other's knowledge and through critical reflection and inquiry. Participants in both PLCs found their engagement in the PLC productive and that it served as a source of professional development to improve their leadership practices. The facilitator had a key role in this methodological approach and is similar to the role taken in earlier studies (Thornton, 2009). The use of a survey drawn from Western approaches to leadership was not appropriate in some respects for the Singapore ECE context as it did not take into account Asian values and perspectives. A methodological contribution of this research is therefore that it is important that data collection tools reflect indigenous approaches to leadership.

The final main contribution of this study is empirical. This approach counteracted the impact of marketization in the Singapore ECE context and encouraged collaborative professional learning. Due to the impact of marketisation in Singapore, collaboration amongst leaders is not well understood and the lack of leadership growth in Singapore has been highlighted. While PLCs had previously been promoted as an appropriate professional support network to strengthen teacher and leadership expertise in the Singapore school context (MOE, 2009), little was known about the value of such supportive networks for professional development in the ECE context. Despite previous leadership training, participants in this study had limited knowledge about how trust worked as a connective tissue for building positive relationships in their services. Findings also illustrated how participants assumed sharing and delegation of leadership practices as similar constructs. The misconception about sharing and delegation was unpacked to understand what contributes to sharing of leadership with teachers through PLC in this study. The acquisition of knowledge to support teachers' collaborative learning was a

significant learning point for leaders in the study. While there were constraints to the development of collaborative leadership practices and the distribution of the leadership because of the marketization and the hierarchical leadership culture in Singapore, this study provides empirical evidence that professional collaboration through PLC has the capability to shift practices in ECE.

7.2.4 Implications of this study

This study has implications for future learning including the use of PLCs for professional learning; and the development of collaborative leadership practices that improve the quality of leadership practices in the Singapore ECE context. The findings showed how participants perceived PLCs as a platform for professional learning that promoted collegiality and served as a form of professional network to improve ECE practices in Singapore. Implications for both PLCs and leadership development of collaborative leadership will now be discussed.

Implications for learning through PLC

The structure of the PLC model which included face-to-face and online participation provided participants with opportunities, through their collective learning, to take action to resolve issues at work. The online participation provided opportunities for participants to reflect deeply on their learning and practices. Furthermore, discussions on relevant literature, testing out ideas at work and reflective learning from other's practices were highlighted as important learning processes for ECE professionals. Thus, similar PLC policy initiatives to those established by MOE for schools in Singapore would benefit ECE professionals. Therefore, informal collaborative learning opportunities in the form of PLCs that facilitate sharing of expertise, and co-construction of knowledge through collaborative learning opportunities have implications for improved practices in the future. Secondly, skilled facilitators are important in leading meaningful PLC discussions. My previous experiences in facilitating action research for teachers were helpful in undertaking the role of the facilitator in this study. Effective facilitation skills are important therefore it may be useful for ECE professionals who endeavour to organize PLCs for their teachers should acquire relevant training in facilitation skills. Overall, greater attention is necessary when designing training programmes on collaborative leadership for ECE leaders which should include a focus on PLCs.

Implications for the Singaporean context

This study addressed constraints in examining the cultural nuances of leadership practices in the Singapore ECE context influenced by the concepts of economic pragmatism and Asian Confucian values of hierarchy. Leaders were aware that their cultural beliefs and values were challenged by the concepts of collaborative leadership practices through their PLC involvement. Principals of both PLCs avoided the concept of sharing leadership with teachers for fear of destabilizing the existing hierarchical structure in their service. The use of a PLCA-R survey based on Western leadership model was a misalignment as it did not acknowledge the Asian values and perspectives that have shaped leadership in the Singapore ECE context. This constraint has implications to adopting an indigenous approach to leadership in the local context to unpack and understand leadership practices in the Asian educational context. Therefore, a policy initiative at the ministerial level would be ideal to introduce PLC as a network platform for professional development and collaborative learning in the ECE sector that reflected the Singapore cultural context.

7.2.5 Limitations of the study

This section acknowledges limitations of the research. The study focused on developing collaborative leadership within the ECE sector in Singapore and not on any other types of leadership development. Unlike leadership development for positional leadership that focuses on improving leadership skills, abilities, knowledge, conceptions of power, and influencing others towards shared organisational goals, this model of collaborative leadership development within ECE promotes shared decision making, and shared leadership practices in a less hierarchical setting. The study involved 11 EC leaders from two categories of EC services and with two senior teachers who worked with the respective leaders. The sample size is small and is not representative of the wider population of EC leaders and teachers in the Singapore context. Therefore, the findings of the study cannot be generalised.

A notable limitation of this study was the relatively short period of time for conducting the research process and collecting data. Making changes in the human environment takes time as it involves preparing teachers' mindset and their attitudes towards change. Moreover, due to the busy routines at the centre it was not easy for the principals to meet with the teachers and to prepare them for implementing changes. Furthermore, the time lag between the completion of PLC meetings and implementing changes to work on their leadership practices was short to see the outcomes. An additional limitation was the use of online tools

for reflection and discussion. Participants preferred the face-to-face meetings and were less keen on participating in online activities. Lack of time, workload and the sense of feeling overwhelmed by technology were barriers to their engagement in these activities.

7.2.6 Directions for further research

PLCs have gained much popularity in the educational context for school improvement and student achievement (Hipp & Huffman, 2010). The focus of this study was the development of collaborative leadership through PLCs. Future research on PLC has the potentiality to focus on curriculum and pedagogical matters, teachers' professional learning, action research projects, and mentoring and coaching novice teachers and leaders in the Singapore ECE context.

Second, in order to see significant results in a PLC study an extended period of time is recommended for the PLC research process to evaluate the changes. The notion of trust plays an integral part in developing successful PLCs and in this study that it took several months to build trust for my participants to reduce anxiety and to value collegiality. When learning through a PLC, it takes time to make changes and PLC members need sufficient time to build shared knowledge, collaborate through discourse and implement what they have learnt to achieve the outcomes. Therefore, it is recommended that future studies in the Singapore ECE context should plan for a considerable timeline to develop PLCs in order to see effective results.

Third, it was evident in my study that participants were not keen on participating in online activities. Participants reported being overwhelmed with the use of technology at work for administrative and management tasks, and the only online activity they were interested in was the reflective journal. Therefore, future research should explore in what ways a blended learning approach through PLCs can be made more effective for effective collaborative learning.

Fourth, in the absence of a localised instrument in Singapore, this study drew on PLCA- R survey. A significant contribution of the study was the finding that aspects of the survey were not that suitable for the Singapore ECE context. Future research studies investigating the phenomenon of leadership practices through PLCs in the ECE sector should consider an appropriate survey tool that reflects the Asian beliefs and values about leadership. Furthermore, instead of using a 4-point Likert type rating scale, future research should also consider the use of a criterion-referenced rating scale that may help practitioners to measure and determine the stages of change as it develops through PLCs. Lastly, several empirical

works in ECE studies have stressed the importance of leadership practice in ECE as a collaborative process rather than a positional one. Future research could explore how collaborative leadership practices can be better aligned to Asian cultural values of hierarchy to better accommodate their application in the Asian ECE context.

7.2.7 Concluding comments

This study has demonstrated the complexities of developing collaborative leadership practices through PLCs in the Singapore ECE context. Leaders' engagement in PLCs increased their awareness of their leadership practice and resulted in shifts in thinking about collaborative leadership practices. This occurred through the PLC learning processes: forming a sense of trust through collegiality; reflecting on each other's leadership practices; learning through collaborative discourse; collective learning and agreeing to disagree through reflective inquiry; and shared personal practice.

In conclusion this research has provided an understanding how collaborative leadership practices can be constructed in the Singapore ECE context. As the findings suggest principals were unaware of PLCs and their benefits. However, their participation in this research has illustrated how principals were motivated to play a key role in collaborative professional learning on issues and challenges that mattered to them most and, by doing so, to effect change in their services. Changes made by the principals in the study were not to improve capability or competence but rather showed their willingness to risk testing out their learning to find solutions to challenges in their services. Thus, this research provides evidence in support of policy initiatives to establish professional development through PLCs in the ECE sector.

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APPENDICES:

Appendix 1a: Management - Information letter



FACULTY OF EDUCATION

Information letter for management

Research project: Developing collaborative leadership practices in the Singapore early childhood context (ECE) through professional learning communities (PLCs)

Dear Sir/Madam

I am Sukuna S. Vijayadevar, PhD student at the Faculty of Education, Victoria University of Wellington, New Zealand. As part of my doctoral study, I am conducting research examining how collaborative leadership practices can support leadership development in the Singapore ECE context through the use of PLC. This research has ethical approval from the Victoria University Human Ethics Committee

This sheet gives you information about this study. If you have any questions or would like to receive further information about the research, please contact me at sukuna.vijayadevar@vuw.ac.nz. You can also contact my supervisors, Dr. Kate Thornton at kate.thornton@vuw.ac.nz, Tel: 64 (04)463 9776 and/or Dr. Sue Cherrington at sue.cherrington@vuw.ac.nz Tel: 64 (04) 463 9552

The research has been approved by the Victoria University Human Ethics committee. If you have any ethical questions about this research please contact Dr Allison Kirkman, Chair of the Human Ethics Committee, Victoria University of Wellington (Allison.Kirkman@vuw.ac.nz, Tel: 64(04) 4635676

Purpose of my PhD research

This research aims to contribute to the understanding of leadership in ECE in the Singapore context. It will examine leaders' perspectives about their individual leadership practices and how their involvement in a PLC process supports collaborative leadership practices for effective leadership development in ECE.

Research questions

In what ways do PLCs support the development of collaborative leadership practices in the Singapore ECE context?

Specific questions

- *How does leaders' engagement in a PLC process shift leadership thinking and practices?*
- *What are teachers' perceptions about the impact/influence of the PLC process on their centre leader's practices?*
- *What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?*

Research context

Professional learning communities (PLCs) is a concept widely used in the school improvement literature and which has potential as a leadership model to improve the quality of service provision in the early years. PLC as a professional development model helps to develop trust amongst staff members, effective communication at work, self-awareness to reflect on leadership practices and cultivate collaborative inquiry for leadership development. In order to research if PLCs support the development of collaborative leadership practices the members of the PLC must be engaged in professional learning focused on their leadership practices. In this research the professional learning focus will use a blended approach that includes face-to-face meetings and online interaction to discuss issues, share practices and to build a sense of community and relationships. Further online activities such as discussion board and web chats will allow participants to reflect, network and post their thoughts in order to collaborate with the group. It is anticipated that this research involving a PLC model with a blended learning approach will be implemented for a period of six months to determine its effectiveness.

Research participants

As part of my research I am inviting 6 principals and 18 senior level teachers (three teachers working with each of the respective principals) to participate. Centre principals and teachers from your organization will be chosen because together they meet the criteria for participating in research aiming to develop collaborative leadership practices through the support of PLCs. There is an opportunity for 6 principals and 18 senior level teachers from each organisation to participate in this research. However, if there are more volunteers for this research a random selection will be conducted to choose the required participants for the research. Participation in this research is entirely voluntary.

Research process

My study involves establishing two PLC clusters involving principals and their teachers from two child care providers. The PLCs will be conducted as two independent clusters involving participants from the same child care provider. This is to maintain the cohesiveness of the group so as to build relational trust and share leadership practices focused on specific tasks that are consensual to the group. The attached 'Draft Research Schedule' gives you an idea of what this might look like over the eleven months period during which the research takes place.

Leaders/Centre principals participating in this research will be involved in the following components:

- Initial meeting with researcher for briefing on online survey participation
- Undertake pre and post online survey before and after the PLC programme
- Individual interviews with centre principals before PLC
- Regular face-to-face PLC meetings will be carried once a month for 3 hours from February 2015 – August 2015 facilitated by the researcher
- As post activities to the PLC meetings participants will be involved in online activities at their convenience within two weeks after each PLC meetings. Using a dedicated, secure Learning Management system, a central webpage will provide general resources relating to professional learning communities to all participants across both PLCs. Each individual PLC will have a link to its own dedicated secure webpage where members will be able to access further resources directly related to their professional learning focus, contribute

to a group discussion page, and document their reflection, ideas and solutions to issues they discuss on an individual secure reflective journal page. The central webpage will be password-protected with access limited to the relevant participants, myself and my supervisors

- Individual interviews with centre principals following the conclusion of the PLC programme
- Focus group interviews involving all six principals

Teachers participating in this research will be involved in the following components:

- Initial meeting with researcher for briefing on online survey participation
- Undertake the pre and post online survey
- Post PLC focus group meetings to ascertain their views of leadership practices in the individual centres after the PLC process

Data collection procedures

- An online survey completed by participating centre principals and teachers at the start and end of the research. An adaptation of Hipp and Huffman (2010) survey which was used by Thornton and Wansbrough (2012) will be used in my research
- Individual semi-structured interviews with leaders before and after PLC to determine if their PLC participation resulted in any changes in their leadership practices
- Focus group meetings with leaders after the individual interviews after the implementation of PLC
- Focus group meetings with teachers after the PLC
- Field notes transcribed from video recordings of PLC meetings
- Individual online reflective journals maintained by centre principals available between centre principals and the researcher
- Discussion forums available between centre principals and the researcher

Confidentiality and access to information

The information participants provide is strictly confidential. Your centres and the research participants will not be identifiable. Pseudonyms will be used to ensure the participants' confidentiality. All material collected will be kept confidential. No other person besides me, my supervisors (Dr Kate Thornton and Dr Sue Cherrington), and a transcriber who will be required to complete a confidentiality form will have access to the data. Data will be destroyed five years after the end of the project.

Information collected will be kept confidential as electronic files on the researcher's password protected computer and summaries of the research findings can be requested. Feedback will be obtained by sending participants transcripts of their own individual interview for review and verification.

Participation

Participants may withdraw from the research project for any reason at any stage prior to the data analysis (by October 2015) and any data provided would then be destroyed.

The participation for the management would involve:

- Agreeing that the researcher, Sukuna S. Vijayadevar will be given access to work with the principals and teachers, who wish to participate in the research.
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentation arising from the study

The participation for the principals would involve:

- Being available for PLC meetings both face-to-face and online, focus group meetings, individual semi-structured interviews and completion of online surveys before and after the PLC programme.
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentations arising from the study

The participation for teachers would involve

- Taking part in the focus group meetings with the researcher Sukuna S.Vijayadevar after the PLC process for centre principals
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentations arising from the study

The participation for teachers would involve

- Taking part in the focus group meetings with the researcher Sukuna S.Vijayadevar after the PLC process for centre principals
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentations arising from the study

Publication of results

The data collected in this research will be used for publication purposes including academic or professional journals, conference papers and appropriate articles and for the inclusion in the PhD theses which will be deposited in the Victoria University of Wellington library.

Your consent for this study is highly valued. Please complete, sign and return the attached consent form by (date) if you agree to allow your principals and teachers to participate in this study.

Thank you,

Sukuna S. Vijayadevar

Email: Sukuna.Vijayadevar@vuw.ac.nz

Appendix 1b: Management - consent form



FACULTY OF EDUCATION

Consent form for management

Research project: Developing collaborative leadership practices in the Singapore early childhood (ECE) context through professional learning communities (PLCs)

Please read the statements below carefully before indicating whether you agree or do not agree for the principals and teachers of your centres to participate in the research. Please sign and date the form.

- I have been given, and have understood, an explanation relating to the nature and purpose of this research. I have had the opportunity to ask questions about it
- I give permission for the researcher to collect data for this research through a blended learning approach that includes face-to-face and online interaction consisting of, an online survey, audio and video recordings of PLC meetings, individual semi-structured interview, focus group interviews, online reflective journals and discussions forums
- I understand that the data collected will be kept secure. Only the researcher, research supervisors and transcriber (who will sign a confidentiality agreement) will have access to the data
- I understand that the names of individual principals and teachers will not be attributed to specific data in any publications or presentations arising from this research, instead pseudonyms will be used
- I understand that the data collected will only be used in the thesis, professional and academic journals or in educational or research conference presentations
- I understand that participation in this research is entirely voluntary and that the participating principals and teachers may withdraw from this study without giving a reason up until the conclusion of data collection. Any data provided by them would then be destroyed
- I understand that participants will have a chance to check the accuracy of any interviews
- I understand that transcripts and tapes and raw data will be destroyed five years after the conclusion of the project

I agree / do not agree (please delete as appropriate) to our staff members participating in the research project.

Name _____

Signature _____

Date _____

Email address _____

APPENDIX 2a: Principal - information letter



FACULTY OF EDUCATION

Information letter for centre principal

Research project: Developing collaborative leadership practices in the Singapore early childhood context (ECE) through professional learning communities (PLCs)

Dear Principal,

I am Sukuna S. Vijayadevar, PhD student at the Faculty of Education, Victoria University of Wellington, New Zealand. As part of my doctoral study, I am conducting research examining how collaborative leadership practices can support leadership development in the Singapore ECE context through the use of PLC. This research has ethical approval from the Victoria University Human Ethics Committee

This sheet gives you information about this study. If you have any questions or would like to receive further information about the research, please contact me at sukuna.vijayadevar@vuw.ac.nz. You can also contact my supervisors, Dr. Kate Thornton at kate.Thornton@vuw.ac.nz, Tel: 64 (04)463 9776 and/or Dr. Sue Cherrington at sue.cherrington@vuw.ac.nz, Tel: 64 (04) 463 9552

The research has been approved by the Victoria University Human Ethics committee. If you have any ethical questions about this research please contact Dr Allison Kirkman, Chair of the Human Ethics Committee, Victoria University of Wellington (Allison.Kirkman@vuw.ac.nz, Tel: 64(04) 4635676)

Purpose of my PhD research

This research aims to contribute to the understanding of leadership in ECE in the Singapore context. It will examine leaders' perspectives about their individual leadership practices and how their involvement in a PLC process supports collaborative leadership practices for effective leadership development in ECE.

Research questions

In what ways do PLCs support the development of collaborative leadership practices in the Singapore ECE context?

Specific questions

- *How does leaders' engagement in a PLC process shift leadership thinking and practices?*
- *What are teachers' perceptions about the impact/influence of the PLC process on their centre leader's practices?*
- *What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?*

Research context

Professional learning communities (PLCs) is a concept widely used in the school improvement literature and which has potential as a leadership model to improve the quality of service provision in the early years. PLC as a professional development model helps to develop trust amongst staff members, effective communication at work, self-awareness to reflect on leadership practices and cultivate collaborative inquiry for leadership development. In order to research if PLCs support the development of collaborative leadership practices the members of the PLC must be engaged in professional learning focused on their leadership practices. In this research the professional learning focus will use a blended approach that includes face-to-face meetings and online interaction to discuss issues, share practices and to build a sense of community and relationships. Further online activities such as discussion board and web chats will allow participants to reflect, network and post their thoughts in order to collaborate with the group. It is anticipated that this research involving a PLC model with a blended learning approach will be implemented for a period of six months to determine its effectiveness.

Research participants

As part of my research I am inviting you as a centre principal to participate in this research. Centre principals and teachers from your organization will be chosen because together they meet the criteria for participating in research aiming to develop collaborative leadership practices through the support of PLCs. Participation in this research is entirely voluntary.

Three senior teachers working with each principal will be also invited to participate in the online survey and post focus group interview to ascertain their views of leadership practices in the individual centres.

Research process

My research will involve implementation of two PLC clusters involving centre principals from two different child care providers. The PLCs will be conducted as two independent clusters involving participants from the same child care provider. This is to maintain the cohesiveness of the group in building relational trust and share leadership practices focused on specific tasks that are consensual to the group. To achieve an in-depth understanding I plan to include a variety of data gathering methods in the research process.

There is an opportunity for 6 principals and 12 senior level teachers from each organisation to participate in this research. However, if there are more volunteers for this research a random selection will be conducted to choose the required participants for the research. Participation in this research is entirely voluntary.

Your research participation in PLC meetings, Individual interviews and focus group interviews

- Our first introduction meeting will last for an hour in December 2014. The purpose of this meeting is to brief you about the research process which involves a pre and post online survey, face-to-face PLC meetings and online activities. I shall provide details about the secure Learning Management system for online activities
- Before the implementation of PLC meetings you will participate in a pre-online survey and I shall organise an individual semi-structured interview to gain information about your current leadership practices in January 2015

- After the interview I shall schedule five phases of PLC meetings which includes both face-to-face and online activities from February – August 2015
- After completing the PLC programme a post individual interview will be held to gather your perspectives about the PLC process and leadership practices
- The final data collection activity will be to complete a post online survey

Confidentiality and access to information

The information you provide during this research is strictly confidential. Your centre and your participation will not be identifiable. Pseudonyms will be used to ensure the participant's confidentiality. All material collected will be kept confidential. No other person besides me, my supervisors (Dr Kate Thornton and Dr Sue Cherrington), and a transcriber who will be required to complete a confidentiality form will have access to the data. Data will be destroyed five years after the end of the project.

Information collected will be kept confidential as electronic files on the researcher's password protected computer and summaries of the research findings can be requested. Feedback will be obtained by sending participants' transcripts of their own individual interview for review and verification.

Participation

Participants may withdraw from the research project for any reason at any stage prior to the data analysis (by October 2015) and any data provided would then be destroyed.

In summary, your participation as a principal would involve:

- Being available for PLC meetings both face-to-face and online activities, individual semi structured interviews and completion of online survey before and after the PLC programme.
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentation arising from the study

Publication of results

The data collected in this research will be used for publication purposes including academic or professional journals, conference papers and appropriate articles and for the inclusion in the PhD theses which will be deposited in the Victoria University of Wellington library.

Your consent for this study is highly valued. Please complete, sign and return the attached consent form by (date) if you agree to participate in this study.

Thank you,

Sukuna S. Vijayadevar

Email: Sukuna.Vijayadevar@vuw.ac.nz

Appendix 2b: Principal - consent form



FACULTY OF EDUCATION

Consent form for centre principal

Research project: Developing collaborative leadership practices in the Singapore early childhood (ECE) context through professional learning communities (PLCs)

Please read the statements below carefully before indicating whether you agree or do not agree for to participate in the research. Please sign and date the form.

- I agree to participate in the PLC meetings that includes face-to-face and online activities
- I agree to participate in the online survey, individual interviews and focus group meetings
- I understand that the PLC meetings and interviews will be video recorded and transcribed
- I understand that my participation is entirely voluntary
- I understand that the data collected will be kept secure. Only the researcher, research supervisors and/or transcriber (who will sign a confidentiality agreement) will have access to the data
- I understand that my name will not be attributed to specific data in any publications or presentations arising from this research, instead pseudonyms will be used
- I understand that the data collected will only be used in thesis, professional journals or at educational conferences
- I understand that I can withdraw from the research project for any reason at any stage prior to the data analysis and that any data provided would then be destroyed
- I understand that I will have a chance to check the accuracy of any interviews and observations
- I understand that transcripts and tapes and raw data will be destroyed five years after the conclusion of the project

Please indicate your preference for involvement in the research (tick as appropriate):

- I have had the project explained and have had the chance to ask any questions. I do not give consent to take part in the research.
- I have had the project explained to me and have had the chance to ask any questions. I agree to participate in the above research.

Name_____

Name of centre_____

Sign:_____

Date:_____

Principal request for research summary (tick as appropriate)

I wish to be given a summary of the research findings (please tick as appropriate).

Yes

No

APPENDIX 3a : Teacher - information letter



FACULTY OF EDUCATION

Information letter for teacher

Research project: Developing collaborative leadership practices in the Singapore early childhood context (ECE) through professional learning communities (PLCs)

Dear teacher,

I am Sukuna S. Vijayadevar, PhD student at the Faculty of Education, Victoria University of Wellington, New Zealand. As part of my doctoral study, I am conducting research examining how collaborative leadership practices can support leadership development in the Singapore ECE context through the use of PLC. This research has ethical approval from the Victoria University Human Ethics.

This sheet gives you information about this study. If you have any questions or would like to receive further information about the research, please contact me at Sukuna.Vijayadevar@vuw.ac.nz. You can also contact my supervisors, Dr. Kate Thornton at Kate.Thornton@vuw.ac.nz, Tel: 64 (04)463 9776 and/or at sue.cherrington@vuw.ac.nz Tel: 64 (04) 463 9552

The research has been approved by the Victoria University Human Ethics committee. If you have any ethical questions about this research please contact Dr Allison Kirkman, Chair of the Human Ethics Committee, Victoria University of Wellington (Allison.Kirkman@vuw.ac.nz, Tel: 64(04) 4635676

Purpose of my PhD research

This research aims to contribute to the understanding of leadership in ECE in the Singapore context. It will examine leaders' perspectives about their individual leadership practices and how their involvement in a PLC process supports collaborative leadership practices for effective leadership development in ECE.

Research questions

In what ways do PLCs support the development of collaborative leadership practices in the Singapore ECE context?

Specific questions

- *How does leaders' engagement in a PLC process shift leadership thinking and practices?*
- *What are teachers' perceptions about the impact/influence of the PLC process on their centre leader's practices?*
- *What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?*

Research context

Professional learning communities (PLCs) is a concept widely used in the school improvement literature and which has potential as a leadership model to improve the quality of service provision in the early years. PLC as a professional development model helps to develop trust amongst staff members, effective communication at work, self-awareness to reflect on leadership practices and cultivate collaborative inquiry for leadership development. In order to research if PLCs support the development of collaborative leadership practices the members of the PLC must be engaged in professional learning focused on their leadership practices. In this research the professional learning focus will use a blended approach that includes face-to-face meetings and online interaction to discuss issues, share practices and to build a sense of community and relationships. Further online activities such as discussion board and web chats will allow participants to reflect, network and post their thoughts in order to collaborate with the group. It is anticipated that this research involving a PLC model with a blended learning approach will be implemented for a period of six months to determine its effectiveness.

Research participants

As part of my research I am inviting you as a teacher, who has a position at a senior capacity to participate in this research. Your participation in this research will provide an opportunity to understand your perceptions and involvement in leadership practices at your work place. Participation in this research is entirely voluntary.

Research process

My research will involve implementation of two PLC clusters involving 12 centre principals from two different child care providers. Six principals of your organization will be involved in the research process. To understand the leadership practices in the participating centres 2 teachers who work with the participating principals from each centre (a total of 12 teachers) will participate in this research project. You will be involved in the following research process:

- In a post PLC focus group meeting with other teacher participants working in child care centre from your organization

Your research participation

- Our first introduction meeting will be held in December 2014 and will last for 30 minutes. The purpose of this meeting is to brief you about the research process
- Our second meeting will be a focus group meeting held between the third week of September to the second week of October 2015

Confidentiality and access to information

The information you provide if you participate in this research is strictly confidential. Your centre and your participation will not be identifiable. Pseudonyms will be used to ensure the participants' confidentiality. All material collected will be kept confidential. No other person besides me, my supervisors (Dr Kate Thornton and Dr Sue Cherrington), and a transcriber who will be required to complete a confidentiality form will have access to the data. Data will be destroyed five years after the end of the project.

Information collected will be kept confidential as electronic files on the researcher's password protected computer and summaries of the research findings can be requested.

Feedback will be obtained by sending participants transcripts of their focus group interview for review and verification.

Participation

Participants may withdraw from the research project for any reason at any stage prior to the data analysis (by October 2015) and any data provided would then be destroyed.

The participation for you as a teacher would involve

- Taking part in the focus group meetings with the researcher Sukuna S.Vijayadevar after the PLC process for centre principals
- Agreeing that the data collected can be used by the researcher, Sukuna S.Vijayadevar for the purposes of her PhD study and any publications and presentation arising from the study

Publication of results

The data collected in this research will be used for publication purposes including academic or professional journals, conference papers and appropriate articles and for the inclusion in the PhD theses which will be deposited in the Victoria University of Wellington library.

Your consent for this study is highly valued. Please complete, sign and return the attached consent form by (date) if you agree to participate in this study.

Thank you,

Sukuna S. Vijayadevar

Email: Sukuna.Vijayadevar@vuw.ac.nz

Appendix 3b: Teacher - consent form



FACULTY OF EDUCATION

Consent form for teacher

Research project: Developing collaborative leadership practices in the Singapore early childhood context through professional learning communities

Please read the following:

- I agree to take part in the online survey
- I will be available for focus group meetings with other teachers working in the same organization
- I understand that my participation is entirely voluntary
- I understand that the focus group meetings will be video recorded and transcribed
- I understand that the data collected will be kept secure. Only the researcher, research supervisors and/or transcriber (who will sign a confidentiality agreement) will have access to the data
- I understand that my name will not be attributed to specific data in any publications or presentations arising from this research, instead pseudonyms will be used
- I understand that the data collected will only be used in thesis, professional journals or at educational conferences
- I understand that I can withdraw from the research project for any reason at any stage prior to the data analysis and that any data provided would then be destroyed
- I understand that I will have a chance to check the accuracy of my interview responses
- I understand that transcripts and tapes and raw data will be destroyed five years after the conclusion of the project

Please indicate your preference for involvement in the research (tick as appropriate):

- I have had the project explained and have had the chance to ask any questions. I do not give consent to take part in the research
- I have had the project explained to me and have had the chance to ask any questions. I agree to take part in the above research

Name_____

Name of centre_____

Signature_____

Date_____

Staff request for research summary (tick as appropriate)

I wish to be given a summary of the research findings.

- Yes
- No

Appendix 4

GUIDING QUESTIONS FOR PRE PLC- INDIVIDUAL INTERVIEW ECE LEADERS

- 1. How would you describe your work as a leader in Early childhood education (ECE)?**

- 2. Can you describe your role as a leader and how do you go about performing your role on a daily basis?**

- 3. How do you define your leadership practices?**

- 4. What are the values and vision of your centre and how are they shared amongst your staff?**

- 5. How much of your leadership roles/tasks do you share with your staff members?**

- 6. When you and your colleagues encounter challenges and issues in curriculum delivery/accreditation / parental involvement/ or issues on including children with special needs in your centre what steps do you take to solve the problems?**

Appendix 5

GUIDING QUESTIONS FOR POST PLC INDIVIDUAL INTERVIEWS -ECE LEADERS

a) How did the PLC process influence participants to cultivate collaborative leadership

1. What did you find useful about the PLC meetings?
Probe: How do you think it will benefit ECE professionals? Do you think it can be practiced within your centre for further development?
2. In what ways did the PLC process support the development of collaborative leadership in your practice?
Probe: How were your contributions accepted by the rest? What qualities are essential for members to come together to share their ideas during a PLC
3. Do you have any suggestions to improve the PLC process?

b) What are the barriers and enablers to the development of collaborative leadership practices implemented through PLC?

1. Do you think there was equal participation from all the members of your group during the face to face and online participation?
Probe: If 'yes' give how did it motivate you? If 'No' how did it discourage you?
2. **What characteristics/features of the PLC model helped you to forge collaboration with the members of your group?**
Probe: How did you address conflicts of interest? What happens when there is disagreement between or among members about how to solve a problem? What encouraged you to mutually agree with ideas and thoughts of your members?
4. Did the PLC process help you to arrive at solutions to the challenges you have at work?
Probe: If 'yes' what solutions did you apply to see the change and if 'No', what were the impediments?

c) What impact does participation in the PLC process have on the collaborative leadership?

1. How critical was the collaborative leadership practices during the PLC improve your personal leadership practices

Probes: How do you know? Has your practice changed because of collaboration?
Have you seen changes in the professional practice of your staff members due to the change in your practices?

2. How do you think the collaborative model for leadership development can be sustained to help ECE leaders improve their leadership practices?

Probe: What are your thoughts? How should the stakeholders support EC leaders in this endeavour

Appendix 6

GUIDING QUESTIONS FOR FOCUS GROUP INTERVIEW QUESTIONS FOR SENIOR TEACHERS

- 1. How do you describe the leadership role in your centre?**

- 2. What is your role in supporting your leader/principal?**
Probe questions:
Elaborate your specific roles and responsibilities
Are you motivated to take over the leadership role in the future?

- 3. How would you describe the work culture at your centre between you and your principal?**
Probe question: How much of collaborative decision making do you do at work?

- 4. Has there been any difference in your principals' practices currently after he/she attended a workshop that I conducted recently?**
Probe questions:
If any , can you describe as to how it has impacted you?
What are your thoughts about it?