GROUP DIALOGIC REFLECTION AS A PEDAGOGICAL APPROACH

FOR EARLY CHILDHOOD PRACTICUM IN MALAYSIA

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ABSTRACT

This study aims at exploring and understanding the processes involved in Group Dialogic Reflection as a pedagogical approach during pre-service early childhood practicum. Student teachers' reflective thinking has a close association with learning and improving practice. Group Dialogic Reflection is a space created for student teachers, placement mentors and supervisors to reflect collectively during practicum. This is a qualitative research using the case study method with a multiple-case design. Purposeful sampling technique was used to seek information-rich cases that will be studied in greater depth. A teacher training institution in Malaysia was selected as the Case. Four units of analysis involving eleven student teachers, placement mentors and college supervisors participated in this study. Data were collected over 20 months from April 2014 to December 2015. Sources of evidence came from interviews, direct observations and documents. Data collected were analyzed using both inductive and deductive methods. The results showed that individual reflection strategies such as journaling, and group reflection strategies such as shared reflection, peer reflection and three way dialog were used. Through a variety of seamless reflection activities, student teachers who were novice teachers were able to engage in deep reflective thinking at the integration, validation and appropriation levels. Reflective dialogs held with placement mentors and academics provided multiple perspectives to issues faced by students. Shared learning from collective dialogs became a form of situated learning that informed practice that was beneficial to the placement setting and the academic institution. Cross-case analysis and cross-category analysis of data show that there is a continuum in the facilitation style of the supervisor: the facilitative and instructive typologies. A conducive climate for deep reflection will be openness and trust toward nurturing student teachers. These elements are important in developing deeper

reflection and learning during practicum. Group Dialogic Reflection could be used as a pedagogical approach alongside conventional reflection strategies during practicum to facilitate deep reflection, creating a new vision for early childhood pre-service teachers.

ABSTRAK

**Refleksi Dialogik Berkumpulan Sebagai Pendekatan Pedagogi Semasa
Praktikum Pendidikan Awal Kanak-kanak Di Malaysia**

Kajian ini bertujuan untuk meneroka dan memahami proses yang terlibat dalam Refleksi Dialogik Berkumpulan sebagai pendekatan pedagogi semasa praktikum awal kanak-kanak di peringkat pra-perkhidmatan. Pemikiran reflektif guru pelajar mempunyai hubungan yang rapat dengan pembelajaran dan amalannya. Refleksi Dialogic Berkumpulan adalah ruang yang dicipta untuk guru pelatih, mentor di tempat praktikum dan penyelia untuk refleksi secara kolektif semasa praktikum. Kajian ini dibuat dengan kaedah kualitatif yang menggunakan kaedah kajian kes dengan reka bentuk pelbagai kes. Teknik persampelan bertujuan telah digunakan untuk mencari kes-kes yang kaya dengan maklumat yang akan dikaji dengan lebih mendalam. Sebuah institusi latihan perguruan di Malaysia telah dipilih sebagai kajian kes tersebut. Empat unit analisis yang melibatkan sebelas orang guru pelatih, mentor di tempat praktikum serta penyelia kolej yang telah mengambil bahagian dalam kajian ini. Data telah dikumpulkan selama 20 bulan dari April 2014 hingga Disember 2015. Sumber bukti telah dikutip dari temu bual, pemerhatian langsung dan dokumen. Data yang diperolehi dianalisis dengan menggunakan kedua-dua kaedah induktif dan deduktif. Hasil kajian menunjukkan bahawa strategi refleksi individu seperti jurnal, dan strategi refleksi secara berkumpulan seperti refleksi secara kolektif, refleksi rakan sebaya dan dialog tiga-pihak telah digunakan. Melalui pelbagai aktiviti refleksi yang lancar dan berterusan, guru pelatih yang merupakan novis dapat melibatkan diri dalam pemikiran reflektif mendalam di peringkat integrasi, pengesahan dan pengagihan. Dialog reflektif yang diadakan bersama-sama dengan mentor di tempat praktikum dan ahli akademik menyediakan platform untuk pelbagai perspektif bagi isu-isu yang dihadapi oleh pelajar. Pembelajaran dikongsi dari dialog kolektif menjadi satu bentuk pembelajaran

'situated' yang memaklumkan amalan yang mambawa manfaat kepada tempat praktikum dan institusi akademik. Analisis keratan kes dan analisis keratan kategori data menunjukkan bahawa terdapat kesinambungan dalam gaya pemudahan penyelia, pemudahan dan pengajaran. Iklim yang kondusif untuk refleksi mendalam ialah keterbukaan, amanah, dan tanggungjawab terhadap pembangunan guru pelatih. Faktor-faktor ini adalah penting dalam memupuk pemikiran yang lebih mendalam dan pembelajaran semasa praktikum. Justeru, Refleksi Dialogik Berkumpulan boleh digunakan sebagai satu pendekatan pedagogi bersama dengan strategi yang konvensional semasa praktikum untuk memudahkan refleksi yang mendalam, mewujudkan visi baru untuk guru pra-perkhidmatan dalam program pendidikan awal kanak-kanak.

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Last but not least, I am most grateful to God who has given me the opportunity to pursue my dream, and has given me the strength and wisdom to complete this study. This has been the toughest challenge ever taken by me in my whole life. I am thankful to God for seeing me through.

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LIST OF SYMBOLS AND ABBREVIATIONS

ECCE	:	Early Childhood Care and Education
GDR	:	Group Dialogic Reflection
MOE	:	Ministry of Education Malaysia
TASKA	:	Taman Asuhan Kanak-kanak (Childcare Centre)
TADIKA	:	Taman Didikan Kanak-kanak (Kindergarten)
MQA	:	Malaysian Qualifications Agency
UNESCO	:	The United Nations Educational, Scientific and Cultural Organization
EFA	:	Education For All
PERMATA	:	Every Child is Precious programme for new born- four year olds
KEMAS	:	Jabatan Kemajuan Masyarakat
JPNIN	:	Jabatan Perpaduan and Integrasi Negara
SPM	:	Sijil Pelajaran Malaysia (Malaysian Certificate of Education)
NKRA	:	National Key Result Area
NKEA	:	National Key Economic Area

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CHAPTER 1: INTRODUCTION

Introduction

This chapter presents an overview of the research study on Dialogic Reflection as a pedagogical approach for reflective learning during practicum at a Malaysian early childhood teacher training institution. The sections that follow will cover the background to the research study including the context of early childhood care and education (ECCE) in Malaysia, the importance of quality teacher training and the issues and challenges around early childhood teacher training locally and internationally; and the discourses around reflection and reflection strategies. An outline of research approach such as the aims and objectives, the problem statement and rationale; as well as the direction of the research study will be included in this chapter.

Background to the Research

The UNESCO Education for All (EFA) initiatives, in its first Goal, calls for better and more possibilities to support young children (age 0-6) including their families and communities in all the areas where the child is growing, namely the physical, emotional, social and intellectual. The Malaysian government is compelled to answer the call to address all the children in Malaysia, including those who are disadvantaged or who are particularly vulnerable, children living in the rural areas and those from the minority as well as girls (Curriculum Development Centre, 2007).

Early Childhood Care and Education (ECCE) is high in the agenda of the current administration to develop our nation's greatest asset, our children, as they are potential human capital for the future economy. Early child care and education in Malaysia is divided into two age groups. The first group covers the provision of early childhood care and educational services for children aged 0 – 4 years old. This age

group comes under the jurisdiction of the Ministry of Women, Family and Community Development (MWFCD). The Department of Social Welfare under the Ministry of Women, Family and Community Development is the license issuance agency for all childcare centers (or TASKA) in Malaysia. The second group covers the provision of preschools (or TADIKA) for children aged 4 to 6 years old. This age group comes under the care of the Ministry of Education which is the license issuance agency for all preschools (or TADIKA) in Malaysia.

In Malaysia, early childhood care and education programs for children aged birth to six years old are offered by various public and private agencies, namely, Ministry of Education (MOE), Ministry of Rural and Regional Development (KEMAS), Department of National Unity and Integration (JPNIN) under the Prime Minister's Department, Permata Division, Prime Minister's Department, as well as a large number of non-governmental agencies, religious organizations and the private sector (Curriculum Development Centre, 2007). Apart from the federal government Ministries, every state also has its own Social Welfare and Education departments at the various district levels that regulate the ECCE services offered to the children and their families.

Malaysia has a population of thirty million people in 2014. In the 2010 population census, more than 9.5 million are children under the age of 18. Approximately two and a half million children are four years old and below, and two and a half million children are between ages five to nine. More than a quarter of our children are below five years of age. In 2014, the female employment participation rate had reached 53.6 per cent (Department of Statistics Malaysia, 2015). The need for childcare has grown in tandem with the increase in women's participation rate in the labor force, along with the rising cost of living that has inevitably required both parents

to work. Parents in a modern society such as Malaysia, characterized by social progress, and urbanization, are also more aware of the importance of early childhood education for both boys and girls. This is evidenced by preschool children enrolment in kindergartens that has registered an increase from 67 per cent in 2005 to 84.2 per cent in 2014 (Ministry of Education Malaysia, 2015).

Two important national initiatives have directly impacted on ECCE in this country. The government of Malaysia has recognized the importance of early child care and education (ECCE) for Malaysia through its tenth Malaysia Plan, National Key Result Area (NKRA) and National Key Economic Area initiatives that began in 2009, as well as the Malaysia Education Blueprint (2013-2025). Education has been categorized as the country's top priority area to be addressed as a result of various surveys, opinion polls, and dialogs conducted with the people. The NKRAs signify a combination of short-term priorities to address our country's most urgent demands and equally important long-term issues affecting the people that require immediate attention. The targets set for the Malaysian National Key Result Areas are aimed at better achieving the goal of education for all (PEMANDU, 2010). It was set to achieve a near universal preschool education goal of 97% by 2020. For childcare, it will increase from four percent of childcare enrolment in 2009 to 25% of enrolment in childcare centers by 2020 (PEMANDU, 2011).

As shown in Figure 1.1, OECD countries have reported an average of 30% of childcare enrolment for children under the age of three (OECD, 2011). Around two-thirds of OECD countries have achieved at least 70% of children aged three to five were enrolled in pre-school programs in 2008 as shown in Figure 1.2.
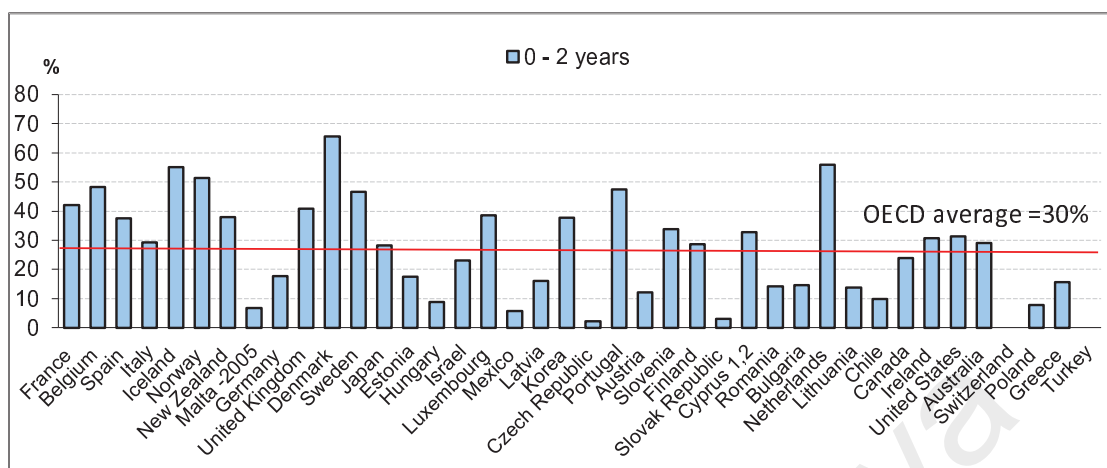
Figure 1.1 Average enrolment rate of children aged under three years of age informal childcare (2008) (Source: OECD, 2011)
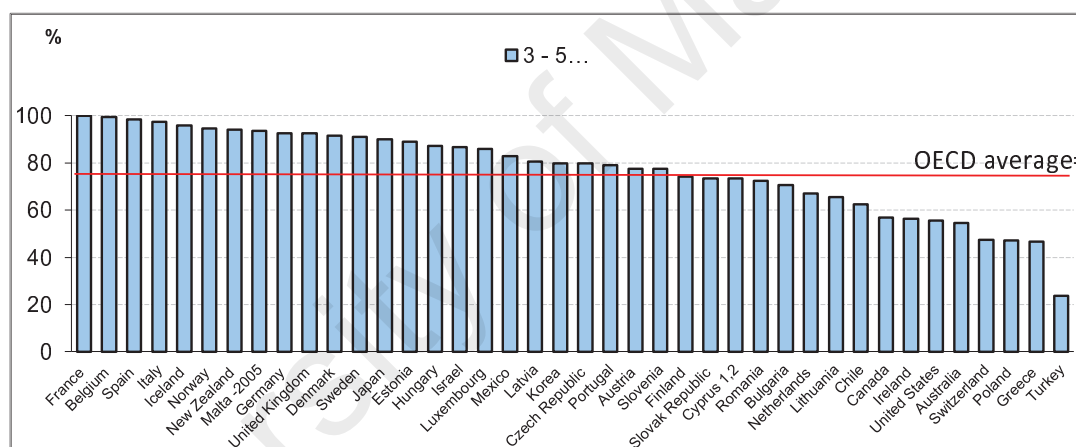
Figure 1.2 Average enrolment rate of children aged three to five years of age in pre-school educational programs (2008) (Source: OECD, 2011)

It is logical that any educational reform for the betterment of the nation should begin with early childhood education as this is the most important period in a child's life. The Center on the Developing Child, Harvard University (2007) reports that the advancement in the science of early childhood and early brain development, along with the four decade long research findings in program evaluation, have provided a very strong foundation for policymakers and political leaders to develop a common, effective, and politically viable agenda in ECCE.

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The Malaysian government has a national strategy to ensure that Malaysians can achieve the vision of becoming a developed nation by 2020, and remain economically, socially, politically, as well as technologically competitive in the global arena. "An improvement in educational outcomes is critical to building a strong and competitive workforce" (PEMANDU, 2011, p. 33). One of the key national strategies to achieving the targeted outcomes is to improve the quality of pre-school teachers and teacher assistants.

In 2010, the Ministry of Education saw an increased enrolment to 72.42% or 701,144 children who enrolled in pre-schools in 2010. In its effort to ensure wide access to pre-school education, RM10.6 million was allocated in 2011 for fee assistance to children (from low-income families) enrolled in private pre-schools across the country. The fee assistance was given to each child up to a maximum of RM150 per month for each pre-school-age child and government intervention will continue in the years to come as the country is set to train approximately 30,000 professionals for the early childhood industry by 2020, proposing a minimum qualification of diploma for all preschool teachers teaching in Early Child Care and Education (ECCE) settings (PEMANDU, 2010). This initiative created a high level demand for preschool teacher training in Malaysia. Up-skilling of the ECCE profession was very much required as 93% of existing teachers (22,500) did not have certificates in ECCE. It was anticipated that the non-accredited programs run by multiple agencies would have to be improved and streamlined (PEMANDU, 2010).

Despite the hype about the impact of ECCE programs on young children's well-being, many researchers and policy-makers around the world are increasingly aware of the vast discrepancy between what the research says about the important role of the early childhood workforce and the existing policies and practices, in public and

private domains. Not all preschool programs in research studies conducted by the more developed nations have yielded positive effects on development of young children. In fact, the typical early childhood programs at community or school agencies in the US found modest results on children's development. In some Head Start programs, children have shown improved aspects in school readiness but are still lagging behind. The critical factor found in a good quality program has always been the use of specific high quality curriculum coupled with higher teacher salaries and teachers' educational credentials. Those early childhood programs have highly educated, qualified early childhood teachers who have degrees and certification in early childhood studies (Eurofound, 2015; Gibbons & Gibbs, 2009; Mitchell & Taylor, 2015; Neuman, Josephson, & Chua, 2015).

Currently, the minimum qualification to teach is a Diploma in Early Childhood Education at public preschools, but many have obtained a higher qualification such as bachelor's degree in Early Childhood Education. At private preschools, however, the minimum qualification is still a SPM. There are 8138 public preschool and 11082 private preschools. Although these official figures do not include the unregistered private preschools, its conservative figures show that there are 13, 203 teachers who only hold SPM qualification (Ministry of Education, 2011). In 2010, 93% of the preschool teachers, with a total of 22,500 in the private sector did not hold any certificates in ECCE. For the childcare sector, the minimum qualification of a childcare provider is a Permata childcare course. There were 2400 registered childcare centers in Malaysia (Chiam, 2010.). The differences in qualifications requirements pose many challenges to the ECCE service standard provided and teacher training in this country.

The emergence of research evidence such as the HighScope longitudinal study (Schweinhart et al., 2005) not only suggest that investment in early childhood

education brings long terms benefits to children socially, academically and economically, they also advocate for highly educated, qualified early childhood teachers. Similarly, some other studies also suggest that preschool program quality is related to staff training and qualifications (Kontos & Wilcox, 2002). A strong relationship exists between teachers' educational qualifications and young children's development and learning. Although there may be some individual exceptions, generally, higher levels of formal education and specialized training lead to the use of evidence-based practices and ongoing professional commitment that make a positive impact in young children's lives (Board on Children, Youth and Families, 1992; Eurofound, 2015; Gibbons & Gibbs, 2009; Hyson, 2003; Mitchell & Taylor, 2015; Neuman et al., 2015).

The Center on the Developing Child at Harvard University (2007) also found that qualified early childhood educators come with a good understanding of child development, and proven teaching and learning methods – which are the key to raising the quality of early childhood care and education. Besides, one of the effectiveness factors for early childhood care and education programs to work is having qualified and appropriately compensated personnel (Eurofound, 2015). The education of early childhood practitioners is positively related to program quality, and subsequently, program quality is related to outcomes for children (Early & Winton, 2001; Miller & Cable, 2011; Mitchell & Taylor, 2015; Neuman et al., 2015). In other words, the quality of teachers and childcare providers contribute directly to better outcomes for the children (Sylva et al., 2003). How well student teachers are trained in their reflection skills determines the extent to which early childhood practices could be transformed at the workplace for quality practices (Lindon, 2012; Miller & Cable, 2011).

The Programme Standards for Early Childhood Education was developed by the Malaysian Qualifications Agency with an aspiration to produce competent, ethical, professionally qualified early childhood educators. The new program standards are witness to new milestones in the early childhood education landscape in enhancing the professional status of early childhood educators. It is expected that a critical mass of quality early childhood educators will be produced. The core knowledge and competencies identified are the areas of child development; curriculum and learning environment; administration and management; families and the community; as well as professional development (Malaysian Qualifications Agency, 2014).

Practicum, termed as professional practice in the program standard, is aimed at developing effective and competent early childhood educators with knowledge and competencies, who can apply knowledge to practice. Student teachers are expected to prepare lesson plans, organize activities and learning environments and work with peers, supervisors and staff at the placement centers. Reflection is listed as one of the learning outcomes for undergraduate student teachers. It involves active listening, where student teachers refer questions and concerns to their mentors and supervisors; it also involves feedback that improves practice during practicum where student teachers apply self-reflection, problem solving skills and creative thinking in the early childhood care and education programs.

Reflective practice helps pre-service early childhood student teachers to respond to the complex nature of the workplace (Noble, 2007; Nolan, Raban, & Waniganayake, 2005; Raban et al., 2012). Reflection has been used as a yardstick for professional competence across numerous professions, including teaching (Larrivee, 2008). As Schön aptly put it, "reflective practice is a dialogue of thinking and doing through which I become more skillful" (Schön, 1983, p. 31).

There is a general consensus that a specific body of knowledge and skills in early child care and education is the most important part of the teacher training program to ensure that student teachers are well equipped for their jobs. However, there is an increasing emphasis on reflection skills so that they can continuously seek improvement and evaluate effectiveness of programs (Miller & Cable, 2011).

Reflective practice ranges from analyzing a single aspect of a lesson to considering the ethical, social and political implications of teaching practice (Larrivee, 2008). A reflective practitioner uses the reflective process for daily decision-making and problem-solving involving a repertoire of knowledge, dispositions, skills, and behaviors on the job. Reflection allows one to immerse in the learning and development process through examining one's own professional practices including experiences, thoughts, feelings, actions and knowledge. Otherwise, teaching would become a mechanistic process day in and day out (Raban et al., 2007).

Based on an extensive literature review, the researcher has referenced various definitions evolving over several decades and has found the most common that can be divided into three distinct levels of reflection that is initial level focusing on teaching functions, actions or skills; more advanced level considering the theory and rationale for current practice; and higher order where teachers examine the ethical, social and political consequences of their teaching, as well as the ultimate purposes of schooling. Larrivee (2008) has developed the assessment tool for four levels of reflection she has termed as pre-reflection, surface reflection, pedagogical reflection, and critical reflection.

Moss and Petrie (2002) stress that critical reflection should be the core activity of early childhood professionals as it requires the individual to evaluate critical incidents in their daily work and evaluation that comes from it. This becomes the

critical factor to improving practice and knowledge about working with young children. It concerns primarily the ability to reflect honestly on one's practice considering multiple perspectives and approaches to inform the work done, objectively examining practice to implicate positive change in response to the changing needs of the child, the family and society (Ebbeck & Waniganayake, 2005). The early childhood field also has a unique feature where many theories, approaches and methods of teaching young children exist, such as High Scope, Froebel, Montessori, Reggio Emilia, Waldorf, just to name a few. Early childhood practitioners the world over are still searching for the most appropriate pedagogical solution for educating young children. As Sumsion (2003) argues, some theories are romantic notions of idealistic approaches to working with young children. These romantic notions of early childhood practices, which usually come from western culture, may not withstand the complexity, uncertainty, and insecurity of working with young children and their families in the social, demographics and cultural diversity of the Asian context where these theories are applied.

Furthermore, the dynamics of power and ideology among student teachers, placement mentors and college supervisors during practicum, and how it works to impact on the pedagogical processes need to be examined and understood (Cohen, Hoz, & Kaplan, 2013). Certain underlying assumptions and practices may seem easier to adopt, but will be damaging to the children's long term interests (Brookfield, 1995). Therefore, pre-service teachers needs a platform to explore new possibilities where one would de-construct and re-construct new epistemological understanding in practice that is informed by theory, research and practice, rather than merely reproducing knowledge. Pre-service teachers, placement mentors and college supervisors reflecting collectively will open up opportunities to examine the possibilities without having to be constrained by individual beliefs and value systems

(Noble, 2007). The following section will explore why Group Dialogic Reflection will be a valuable research venture in early childhood teacher education.

Problem Statement

Much has been said about the importance of early childhood education that potentially develops the human capital that we wish to harvest. Investments have been made in the physical infrastructure, curriculum and training for educating young children in Malaysia. With early childhood education being an emerging new field of knowledge, and the quality of practice differing in various settings, it poses serious challenges for pre-service teachers who are going into the practicing field during and after their teacher training programs. If reflective practice is such an important element in training early childhood educators, then this research study in Group Dialogic Reflection deserves serious attention on several practical and theoretical grounds which will be discussed in the following sections.

Firstly, student teachers have difficulty integrating theories into practice. Many practicum classrooms do not reflect the research-based or reformist vision of the lectures that pose problems for trying out new approaches (Cavanagh & Prescott, 2010a; Zeicher, 2011). For instance, they may experience practices that privilege transmission models of education where classrooms are teacher-centered, didactic and academic oriented, with an emphasis on ensuring basic skills are transferred (Hallinger & Lee, 2011; Majzub, 2013; National Scientific Council on the Developing Child, 2007). Such practices can be at odds with what student teachers have learnt during their teacher education courses. Unless they are able to critically reflect on the experience, they may face difficulty integrating theory into practice. One example of this are student teachers who are not encouraged to apply child-centered approaches learnt during their course in early childhood classrooms, although they are expected

to perform practices drawn from different theoretical perspectives and theories of learning and teaching. Many of the early childhood environments are still less than desirable, in that they lack stimulation and offer little opportunity for exploration and support for autonomy and experiential learning. For instance, children are expected to sit quietly, involved in regimented activities following a strict timetable. This could leave student teachers feeling confused, dejected and isolated in their attempt to put theory into practice. Many students do not receive the right amount of support, physically and emotionally to carry out the lesson plans as they have set out to because of the lack of understanding on what they want to achieve with the children during practicum. How do you help them bridge that gap between theory-in-use and espoused theory in early childhood practices (Argyris, 1977; Cohen et al., 2013) to bring about coherence in practice?

Schön (1987) has long criticized the dominance of technical rationality in teacher education, where student teachers are expected to use theoretical knowledge acquired during their lectures and apply it in well-structured scenarios. For instance, the researcher's first Montessori Diploma lecturer had always challenged her students to think beyond the Montessori steps that they learnt. As a novice teacher, the researcher had tended to stay faithful to the method taught following the prescribed steps. It was a challenge to think of the intent of those activities in response to the varying needs and interest of the children, on which activities worked and which did not work, and why. When the researcher became a teacher educator, this exercise was evidently an important component in making students think about their practice. More so now as the children are living in a society undergoing rapid changes socially, culturally, economically, and so forth. Therefore, student teachers need appropriate help and guidance to connect theory and practice and improve practice through

reflection (Allen & Wright, 2014; Etscheidt, Curran, & Sawyer, 2012; Shulman & Shulman, 2004).

Secondly, student teachers who are novices with limited experience in the care and education of young children may be incapable of critical or deep reflection without adequate support (Finlay, 2008; Korthagen, Loughran, & Russell, 2006; Larrivee, 2006; Nolan, 2008). Hurdles may come from the nature of reflection that demands emotional engagement in examining and questioning one's personal beliefs and values; stepping outside of one's comfort zone; extra time spent in the process, and so forth (Etscheidt et al., 2012; Finlay, 2008; Gibson & Purdy, 2012). Student teachers are also expected to shift from a self-focus to children and others in transitioning from student teachers to classroom teachers, both as a process of learning toward the end of their practicum and an outcome of reflection (Ward & McCotter, 2004; Toom, Husu, & Patrikainen, 2014). And yet, many of them still struggle with reflective writing and its interpretations (Toom et al., 2014). Teacher training programs need to support the reflective thinking of early childhood student teachers by offering a pedagogical approach which provides opportunities to reflect more deeply during their pre-service practicum.

Thirdly, up to now, there is still a lack of agreement on how to implement empirically and theoretically supported reflection in teacher education. Many student teachers still face challenges with reflective writing and interpretations (Toom et al., 2014). Even though reflective practices among pre-service teachers for teacher development; improving student learning, and educational relevancy and reform is well documented (Darling-Hammond, 2006; Dewey, 1910; Hayden Moore-Russo, Mark, 2013; Korthagen, Loughran, & Russell, 2006; Loughran, 1999; Schön, 1983;

Zeichner, 1987), researchers have yet to find the most appropriate pedagogical and methodological tools to appropriately support and guide student teachers' reflection.

Furthermore, the lack of a clear definition of reflection and vague criteria in assessing the quality of reflective thinking pose further problems in researching and implementing reflective activities in teacher education programs (Hatton & Smith, 1995; Lee, 2005, Rodgers, 2002; Nolan, 2008; Oakley, Pegrum, & Johnston, 2013). Also, there are limited empirical research studies focusing on pedagogical approaches in integrating reflective practice and practicum experiences, as well as the role of the placement mentors and college supervisors in engaging student teachers' reflective thinking (Cohen et al., 2013). Most studies on reflective practice for pre-service teachers centered on the types and developmental or hierarchical levels of reflection (Hatton & Smith, 1995; Larrivee, 2008; Ward & McCotter, 2004); processes that may involve evaluation and assessment of reflective thinking (Nelson & Sadler, 2013; Nolan & Sim, 2011); or the use of various reflective strategies to promote reflective thinking such as journals, online learning platform, guided reflection, peer reflection, verbal reflection, dialogs and conferences; as well as critical success factors for reflective teachers, and so forth (Calderhead, 1987; Hume, 2009; Lai & Calandra, 2007; Samuels & Betts, 2007; Zeichner, 1987).

Some recent scholars have begun to research on the criteria for assessing student teachers' reflection levels in teacher education (Cavanagh & Prescott, 2010; Nolan & Sim, 2011; Kember et al., 2000; Larrivee, 2008; Lee, 2005; Ryan & Ryan, 2013; Toom et al., 2014). Some studies found the types and levels of reflection inadequate for describing the reflective criteria and lack reliability, and some data sources come from limited contexts (Kember et al., 1999; Lee, 2000; Larrivee, 2008; Mezirow, 1991). From Schon (1983)'s reflective practice that is focused on solving problems in practice, and to ''frame and reframe'' those problems, recent scholars

have echoed and developed cyclical models of reflection (Clarke, 1995; Korthagen & Kessels, 1999; Reiman, 1999). Some recent studies narrowed to certain emphasis on reflection such as situated reflection in the context of practice in teaching and teacher education (Boud, 2010; Korthagen & Kessels, 1999; Loughran, 2002; Reiman, 1999; Malthouse, Roffey-Barentsen, & Watts, 2014) Research evidence is beginning to suggest that when teachers reflect alone, no matter how much realization takes place, it has limits in bringing about change in action. Some studies have now looked at sharing of reflection in small groups and seeking multiple perspectives to better understand the problems to improve the quality of teacher reflection (Boud, 2010; Hatton & Smith, 1995; Husu, Toom, & Patrikainen 2006; Loughran, 2002; Stegman, 2007; Toom et al., 2014).

Teacher education is expected to develop student teachers who have higher levels of reflective thinking skills, who reflect in meaningful ways about their practice, consider the effect of their work with children, and develop lifelong learning habits. However, as what Toom et al. (2014) argue, reflective practice does not happen in a vacuum. Husu (2008, in Gibson & Purdy, 2012) suggests that in teaching practice, *"reflective analysis does not come naturally; it requires dialogue"* (p. 19). It was argued that instead of reflecting in isolation, reflection could be facilitated through interactions with others in an organized and systematic way. Many questions remain unanswered, however; for instance, how pre-service teachers could be supported to engage in reflective practice, what are the effective approaches to adopt, who models reflective practice at the placement, and so forth.

Student teachers who are distanced from other significant adults in the environment will soon find themselves becoming isolated from others, prevented from discourses, support as well as a constructive relationship with colleagues. Eventually, it costs a missed opportunity to bring about changes within the organization (Boud,

2010; Sumsion, 2003). Every teacher's thinking has to be confirmed, modified, or stimulated to new levels of understanding by reflecting aloud in groups or through shared journals in open, supportive communities of learning. If left unsocialized, individual reflection can close in on itself, producing detached, idiosyncratic teachers. Therefore, for changes in action to happen, reflection must be a collective undertaking (Valli, 1997; Husu et al., 2006; Toom et al., 2014). New teachers who are unable to break through their situation at the workplace may get burnout and disillusioned, leading to low job satisfaction, poor morale, lower job performance as well as higher turnover (Kilgallon, 2006; Productivity Commission, 2011; Sumsion, 2003).

As mentioned earlier, although most research evidence indicate that the reflective process is a crucial component of the practicum process, there is little consensus on the conditions required to promote reflective practice at the work place or at placement centers. Placement centers consist of people guided by human intentions and decisions. What do early childhood pre-service teachers reflect upon, and what are the processes that help to develop reflective skills in the Malaysian context? The gaps identified by the researcher are the lack of research on reflection within the context of their practice (Kitchener & King, 1981; Ross, 1989; Ward & McCotter, 2004). Even if they are in the context of practice, they lack the cyclical aspect of framing and reframing problems (Galvez-Martin et al., 1998) as most of them are involved in incident-based reflection. Some studies have multiple dimensions to reflection, but are lacking in offering the strategies to promote reflection of teachers, or encourage sharing of reflective thoughts at the workplace or in the community of practice (Clarke, 1995; Hatton & Smith, 1995; Korthagen, 1999; Korthagen & Kessels, 1999; Nolan & Sim, 2011; Ward & McCotter, 2004; Stagman, 2007).

Finally, very few studies involve reflection using dialogs, particularly in the Asian context, although there are some attempts to have more frequent dialogs in post

practicum seminars (Lee & Tan, 2004; Maarof, 2007). Only a few researchers have used Group Dialogic Reflection as a tool for improving the practice within the community of early childhood education in the west (Noble 2006; Ortlipp, 2003; Raban et al., 2007; Roskos, Vukelich, & Risko, 2001).

The gap in practice, knowledge and empirical studies mentioned earlier has urged the researcher to re-conceptualize reflective practice in early childhood practicum within the context of the Malaysian ECCE professional landscape, taking into account the trainee teacher needs. It is hoped that reflection can help trainee teachers to become better teachers as they drop unthoughtful habits not in the children's best interests. Given that many practicum and reflective practices are borrowed from the west, it will be important to have an Asian perspective to the knowledge base and practice.

Research Aim and Objectives

The main aim of this research is to explore and understand the processes in Group Dialogic Reflection (GDR) as a pedagogical approach for reflective learning during pre-service early childhood practicum in a Malaysian teacher training institution. The specific objectives of the study are as follows:

i. Identify opportunities for student teachers to engage in reflective thinking during practicum.

ii. Explore opportunities that facilitate deep reflection in student teachers, individually and collectively.

iii. Examine the facilitation process in group dialogic reflection that supports student teacher' reflective thinking and practice.

The Research Questions

The research questions that will guide the study are as follows:

i. What are the opportunities for student teachers to engage in reflective thinking during practicum?

ii. How do these opportunities facilitate deep reflection in student teachers, individually and collectively?

iii. How does the facilitation process in group dialogic reflection support student teacher' reflective thinking and practice?

Rationale for the Research

The following section discusses the rationale that supports the research study. As discussed in the preceding paragraphs, Malaysia is moving forward in its effort to improve early childhood care and education enrolment and quality. Teachers who are the anchors to quality outcomes have a unique place in the ECCE ecosystem in this

emerging profession. As the NAEYC has stated, "it is through caring, committed, and competent early childhood professionals that young children and their families will experience the excellent curriculum, the appropriate teaching strategies, the thoughtful assessment practices, the supportive services, and the effective public policies" (Hyson, 2003, p. 4).

Research into delivering high-quality early childhood teacher training programs will be an important research venture in response to the increasing demands and expectations for early childhood practitioners. It is high time to make important decisions about what is authentic in our understanding about children, and the practices of early childhood practitioners who are serving the young. In other words, capacity building and improvement of early childhood practices are the emerging needs for ramping up of the quality of early childhood services in Malaysia, which will bring about a direct impact on the young regardless of their geographical background whether rural or urban, socio-economic status, religious and cultural practice, and language.

More and more qualified professionals will be graduated each year in Malaysia. as presented in the following Figure 1.3:

	Number of children aged (0-4) years	Existing 4% that receive childcare	Age groups (years)	Number of children that receive childcare	Ratio of childcare providers	Existing childcare providers	
2 0 1 0	3,291,800	131,672	(>3)	79,003	1:5	15,801	21,068
			(3 - 4)	52,669	1:10	5,267	
Forecast:							
	Number of children aged (0-4) years	8% targeted to receive childcare	Age groups (years)	Targeted number of children to receive childcare	Ratio of childcare providers	Number of childcare providers needed	
2 0 1 2	3,294,200	263,536	(>3)	158,122	1:5	31,624	**42,165**
			(3 - 4)	105,414	1:10	10,541	
	Number of children aged (0-4) years	20% targeted to receive childcare	Age groups (years)	Targeted number of children to receive childcare	Ratio of childcare providers	Number of childcare providers needed	
2 0 2 0	3,273,300	654,660	(>3)	392,796	1:5	78,559	**104,745**
			(3 - 4)	261,864	1:10	26,186	

Figure 1.3 Estimated number of childcare providers to be trained by year 2012 and 2020 (Adapted from Foong, 2011 and Department of Statistics Malaysia, 2010)

According to the forecast made on the estimated number of pre-school teachers to be trained by 2020 to meet the needs of the targeted number of children to receive pre-school education, an estimated 76,583 preschool teachers will be required by 2020 (Foong, 2011).

Since a majority of the existing workforce in the private sector does not hold a minimum qualification in early child care and education, this means most of the practitioners in the field lack the awareness of the specific body of knowledge

associated with the discipline. It is imperative to form a critical mass of reflective practitioners who could critically reflect to improve and enhance early childhood practice. Teacher training institutions play a fundamental role in preparing trainee teachers to go into the teaching field. Practicum is the beginning of the bridge between the college and the early childhood center, and the mentor is the first point of contact in the real classroom. A research such as this will shed light on the area of early childhood care and education practices, as well as early childhood teacher training.

Secondly, learning to teach requires critical reflection on teaching practices and the context of these practices in today's classrooms (Stegman, 2007). As "reflection is a versatile, dynamic and critical process of learning, it helps contextualize learning, and is applicable in the real world of complex and ever changing situations" (Sim, 2006, p. 36). Otherwise, ten years of teaching experience without learning from experiences with continuous improvement could be just one year of experience that is repeated ten times. Reflection is therefore the key to individual and organizational improvement (York-Barr, Sommers, & Ghere, 2006).

Thirdly, the changing demographics in Malaysian society due to rural-urban migration, changes to family structures, and mobility as a result of globalization and technology advancement, are resulting in the diversity of the children attending early childhood programs. Teacher training can no longer use a one-size-fits-all approach to teaching and learning. Narrow instructional methods such as the use of a particular teaching technique applied to all children without consideration of each child as an individual and his or her family circumstances need to be questioned. Student teachers must be able to reflect on what works best for each child and on why certain things are done in certain ways (Etscheidt et al., 2012; Fukkink & Lont, 2007).

The level of reflection has been recognized to have close association with professionalism in teaching. Professionalism refers to employees who have a

specialized body of knowledge who govern themselves by setting their own professional standards (Darling-Hammond, 2006; Valli, 1997). Non- professionals have no set standards that guide their practice, are not paid well for their jobs, and do not enjoy high social status and highly valued craftsmanship. Instructional skills in the teaching of young children alone are not enough. Ways of thinking about their classrooms, their actions, and on their own knowledge and preparation will need to be developed. For instance, identify strengths and weaknesses in teaching for improvement, help children overcome obstacles to learning instead of putting the blame on them (Schon, 1987). "Teachers are the custodians of our children and our cultural heritage" (Valli, 1997, p. 72). It is therefore important that the trainee teachers develop the skills of reflective capacities early than later.

Reflection can be an effective learning strategy to bring out the tacit knowledge and understanding that informs workplace practice, enhances professional judgment skills, and assists practitioners in their personal development and professional accountability (Boud et al., 1985; Mezirow, 1990; Schön, 1983, 1987; Sim, 2006). Otherwise, the absence of reflection may produce "unthinking conformists" (Valli, 1997, p. 73).

Research has now indicated that new teachers do have the ability to become reflective thinkers and that reflective skills can be taught. The ability to reflect is the result of both the developmental stages and educational experience provided. Reflection can be developed by carefully designed teaching strategies. In this way, student teachers could be engaged in more culturally and contextually appropriate teaching, take responsibility for teaching problems; and reflect on their ethical responsibilities toward children (Husu et al., 2006; King & Kitchener, 1994; Ross, 1990; Toom et al., 2014; Valli, 1997). Learning and assessment during practicum need to carefully integrate theory and practice. Placement mentors, on the other hand, also

need to support student teachers for meaningful teacher practices. All these require strong placement and university collaborations (Allen & Wright, 2014; Cohen et al., 2013).

Significance of the Study

Research in the area of reflection as a strategy in teacher education is critical in teacher education, particularly when the findings could bring meaning and relevance into the training of ECCE practitioners for improving teaching and learning practices in the Malaysian early childhood classrooms. The gaps in knowledge about pedagogical approaches that support student teachers' reflective thinking, and the role of the placement mentors and college supervisors in collective reflection would inform future practices in the use of reflection as a pedagogical strategy in teacher education (Cohen et al., 2013; Etscheidt et al., 2012). For instance, supporting pre-service teachers in turning experiences into meaningful personal and professional development could help teachers improve their practice as they perform. It is what Schön (1983) refers to as an understanding on applying "wisdom, artistry and personal practical knowledge gained through experience, as well as professional, academic knowledge" (Schön, 1983, p. 31). Boud et al. (1985) also describe performance outcomes as a result of higher order reflective thinking as new perspectives on experience; changes in behavior; readiness for application; and commitment to action. Potential emotional outcomes such as changes in feelings, attitudes and values due to the emphasis of the affective domain in reflective practice are also made possible.

A critical understanding and appreciation of the matters related to young children and their families, as well as the complex ecosystem of early childhood care and education can only be made possible when constant reflection takes place within the real context where these phenomena happen. As Valli points out, reflection is "not

an end in itself, but for the purpose of action, communal dialogue is essential. Many different voices are necessary" (Valli, 1997, p. 86).

Given the historical, political and cultural context of this emerging early childhood profession, this research will pave the way for reflective learning for Malaysian pre-service early childhood teachers. The learning process will be as important as the reflection outcomes in action, affective and perspective transformation, leading to a cultural shift in embracing reflective practice. Locally generated knowledge gained through reflective dialog with colleagues (Ghaye & Lillyman, 2000) advances workplace practices and empowers practitioners (Schön, 1983, 1987). It brings out the desired change in the workplace, starting from the "activity systems" such as classrooms, schools and universities. The members of the communities will become agents of change through efforts to improve the "activity system" (Wells, 1991, p. 7). Hence, this study will answer some questions on the use of Group Dialogic Reflection as a pedagogical approach in training early childhood teachers, as more empirical evidence on the impact of group dialogic reflection on pre-service teacher reflection is needed. This is a qualitative research using the case study method with a multiple-case design. Purposeful sampling technique is used to seek information-rich cases that will be studied in greater depth.

Delimitations of scope and key assumptions

This research problem is originated from the researcher's local context, in the ECCE environment and in the situation that is described in Section 1.2. Although the ECCE industry has been chosen, the case sample, the participants in the units of analysis, its environmental factors, and variables could not be controlled, the researcher has made attempts to avoid purposive samples that are homogenous, so that

the findings will be more meaningful, and a deeper understanding of the cases could be illuminated.

Definition of Key Terms

Key terms are defined to establish conceptual and operational positions taken in this study are as follows:

Group dialogic reflection. Group Dialogic Reflection refers to collective conversations or discussions in reflective situations, as conceptualised by Argyris and Schön (1974). It is a situated and purposeful discourse mediated by the use of phonological or graphical meaning potential of a language to understand how knowledge can be generated through participation in this collaborated activity. The discourse is also characterized by responsiveness and progressiveness (Wells, 1991). The principle of "responsivity" refers to the dialog of "knowledge building, the mode of discourse in which a structure of meaning is built up collaboratively over successive turns" (Wells, 1991, p. 16). Bakhtin (1986) refers to all discourses as dialogic. The meanings of words and expressions as well as utterances are the "link in a very complexly organized chain of other utterances" (p. 69). Not all discourses are necessarily knowledge building in nature, but for the purpose of knowledge building, they have to be progressive. Bereiter (1994) defines progressive discourse as the process where discussion, sharing, framing and reframing questions bring to "a new understanding that everyone involved agrees is superior to their own previous understanding" (p. 6). These discourses require commitment from each group member to have a common understanding or goals; frame and reframe questions and propositions based on evidence from practice; expand on propositions agreed; and allow criticism of the propositions brought forward by members of the group if it serves to advance the discourse (Bereiter, 1994, p. 7).

Group Dialogic Reflection in this study refers to reflection conducted collectively during practicum among student teacher, mentor and supervisor as part requirement of the practicum. The objective is to help student teachers to reflect more critically, form deeper understandings of practice with young children in order to improve their practices.

Early childhood care and education (ECCE). UNESCO (2010) defines early childhood as the period in a child's life from birth to eight years old. Early Childhood Care and Education (ECCE) programs cater to the child's health, nutrition, security and learning needs, providing holistic development for every child. In Malaysia, early childhood care and education refers to programs for young children aged birth – four years in the childcare setting, and children aged four to six years old in preschool settings (The Commissioner of Law Revision, 2006). In this study, pre-service early childhood student teachers could potentially work as childcare providers or a preschool teachers in the ECCE settings.

Childcare Provider is the person that cares for the young children aged from birth to four years in an institutional childcare center (Jabatan Kebajikan Masyarakat Malaysia, 1999). Pre-school education is the informal education that caters for children from 5 to 6 years before they enter primary school age at 7 years in Malaysia. A pre-school teacher is responsible for educating children at pre-primary level, particularly the year four to six cohort.

Teacher training institution. A teacher training institution in this study refers to an institution responsible for training early childhood care and education (ECCE) students. Teacher training institutions play a fundamental role that will directly impact the quality of ECCE services. Students are being exposed to theories and practice of child development and early childhood education during their training.

The training process involves learning the skills needed to do a particular job or activity (Cambridge University, 2012). In this study, the teacher training institution is a college that provides the opportunity to learn the skills required to become a childcare provider or preschool teacher.

Practicum. Practicum is an integral component of most pre-service teacher education programs (Cohen et al., 2013; Perry, 1997). It is regarded as one of the most important means of assisting students to become early childhood teachers. According to the Programme Standards for Early Childhood Education published by the Malaysian Qualifications Agency, practicum as referred to in professional practice, is "a period of time within the programme when students are required to be placed in registered child care centres and registered preschools to experience the real working environment" (Malaysian Qualifications Agency, 2014, p. 3).

Six areas were identified by MQA for practicums in any early childhood programs as follows: i) effective and competent early childhood educators; ii) knowledge and competencies; iii) translation of knowledge into behavior and practice; iv) "reflective practice and supervision which encompass active listening, referring questions and concerns to supervisors/appropriate staff, and using supervisors' feedback to improve practice"; v) preparation including lesson plans, organization of activities and learning environments; vi) professional practices; working with peers, supervisors and staff in the industrial training centers (p. 11).

Childcare centre (TASKA). TASKA is a defined as an institution where children below four years of age receive alternative care provided by childcare providers.

Preschool (TADIKA) / kindergarten. TADIKA is an educational institution that provides children of ages four to six years with early experiences for their growth, development and learning.

Pre-service teachers. Pre-service teachers are student teachers undertaking practicum in settings where young children are powerless and dependent on adults for their physical and psychological well-being, in which standards of professional practice become particularly important (Katz, 2008). Pre-service teachers in this study are student teachers undergoing training prior to their employment as early childhood practitioners. The practicum participant will be referred to as 'student teacher' in this study.

Mentor. During practicum, the student teacher will be supervised by a teacher who is responsible for the particular group or class assigned to the student teacher who is more commonly known as the mentor or supervising teacher (Cohen et al., 2013; Perry, 1997; Pungur, 2007). The mentor in this study is the person assigned by the placement center to support the student teacher in teaching and learning activities in the early childhood setting.

Supervisor. A student teacher undertaking practicum in any teacher training program may have access to a representative from his or her university or college (Cohen et al., 2013). In this study, the supervisor is the lecturer assigned to undertake the role of advising the student teacher. He or she will be supervising and visiting the student teacher undergoing studies in an early childhood program.

Reflection. Reflection is defined as "an important human activity in which people recapture their experience, think about it, mull over & evaluate it. It is this working with experience that is important in learning" (Boud, Keogh, & Walker,

1985). In the context of the study, student teachers are expected to carry out reflection during practicum to demonstrate the ability to reflect on their practice in order to improve the quality of their practice, and identify their own professional development needs. Reflection could be carried out individually or collectively as a group.

Learning. Learning refers to student teachers making sense of the practicum experience and turning it into meaningful outcomes. It is defined as the "process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action" (Mezirow, 1990). Learning in this study refers to outcomes of early childhood practicum at an undergraduate level that allows student teachers to perform reflective practice and quality care and education practices. Effective learning arising from deepened experiences from reflection enhances the readiness of the student teacher in the world of teaching (Shulman & Shulman, 2004). The outcomes are specifically referring to any reflective outcomes demonstrated through action, affective and perspective transformation by student teachers during early childhood practicum (Boud et al., 1985).

Conclusion

This chapter lays the foundations for the study. It introduces readers to early childhood care and education from the global and local perspective; the importance of developing reflection skills for the early childhood pre-service teacher training program; and Group Dialogic Reflection as a pedagogical approach during early childhood practicum. While this chapter sets the scene with the background, rationale and the research objectives of the study, the next chapter will present the body of literature on the theoretical concepts around the study, as well as the unique roles and

relationships of the Student Teacher, Placement Mentor and College Supervisor during the early childhood practicum.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

This chapter provides an introduction to the training of early childhood teachers and practicum in early childhood programs. Literature review around the area of reflection such as the types and levels of reflection and reflective teacher development in teacher education will be presented. The theoretical framework for the concept of Group Dialogic Reflection is wrapped around theories of reflective learning as a collective process, social constructivism theories, as well as dialog and discourse in reflection. The conceptual framework for Group dialogic reflection as a pedagogical approach in early childhood practicum is elaborated, followed by dialogs on early childhood education; issues in the traditional approach to practicum are discussed, as well as the shift from individual to group perspective in reflection. Past research studies on collective reflection as a reflective strategy will also be deliberated.

Early childhood Teacher Training Program

The key components in the early child teacher training programs cover four important areas:

a) Foundation of early childhood education consisting of theories in child development and learning, and curriculum approaches.

b) Pedagogy in teaching literacy, math, social studies, science, and the arts for young children, where the skill of facilitating learning across the content areas for diverse groupings of children is needed.

c) Program planning and assessment, and adapting instruction to meet the diverse needs of children and their families and communities.

d) Direct experience with young children in a variety of settings where the student teacher is involved in observations, reflection, practical, and teaching practice.

Direct experiences through practicum or teaching practice is an important, if not the most important component of the early childhood education teaching programs (Bredekamp, 1987; Hyson, 2003; Katz, 1984, 2008; Katz & Raths, 1985; Miller & Cable, 2011). It gives opportunities for student teachers to learn from their first hand experiences in classrooms (Rahman & Scaife, 2012; Tyminski, 2006). The practicum duration could range from one week to one semester or more where student teachers spend time in teaching experiences. It plays a critical role in forming professional identity and has a greater influence than taught courses on developing teacher professional knowledge (Cohen et al., 2013). The practicum allows student teachers to apply theories to practice, provides opportunities for developing skills in effective and collaborative working relationships with colleagues, families, volunteers and other professionals in the community (Allen & Wright, 2014; Perry, 1997; Russell & Loughran 2007; Stenberg, Rajala, & Hilppo, 2016).

In Malaysia, the Programme Standards for Early Childhood Education aims at developing competent, ethical, professionally qualified and global early childhood educators. To be competent, certain fundamental knowledge and competencies are required. The five core knowledge and competencies are child development; curriculum and learning environment; administration and management; families and the community; as well as professional development (Malaysian Qualifications Agency, 2014).

A sound knowledge of child development enables student teachers to plan and create safe, healthy and stimulating developmentally appropriate environments and experiences that promote growth, development and learning. Student teachers are required to observe and assess the children's stages of development, behavior and interest areas to ensure program effectiveness. They also need the knowledge of

positive strategies and techniques to guide children with social and emotional difficulties.

Curriculum and learning environment covers theories and principles of early learning, as well as characteristics of physical and learning environments that are safe and conducive to learning. The aspects of learning include language, communication and literacy; early mathematics, science and technology; social studies; creative arts; health, safety and nutrition; as well as spiritual and moral values.

Administration and management of the early childhood learning environment and organizational climate are included in the core knowledge and competencies required to ensure sustainability of the early childhood center operation. So are the knowledge and skills to engage families and the community, as children develop within the context of their families and the community with different ethnicity, religious beliefs and culture.

More importantly, this program standard emphasizes application of the core knowledge and competencies acquired through professional practice. Student teachers are expected to strive for continual professional growth and development, display professional work habits, and comply with the professional code of ethics. Professional practice has been included to develop effective and competent early childhood educators through application of knowledge and competencies to practice. Student teachers are expected to prepare lesson plans, organize activities and learning environments and work with peers, supervisors and staff at the placement center.

The recommended credit hours for professional practice is six to eight credits (approximately 12 to 16 weeks) for a diploma level program, and eight to twelve credits (approximately 16 to 24) for a bachelor level program. There is a minimum

requirement of three credits for a diploma level program, and four credits for a bachelor level program for practicum placements in childcare center (TASKA) as well as preschool/kindergarten (TADIKA) respectively. It is specified that placements in the two settings are not to be run consecutively to ensure adequate time for self-reflection. Reflection has been stipulated as one of the learning outcomes for undergraduate student teachers where they are expected to reflect on their placement experiences; raise questions and concerns to their mentors and supervisors; and receive feedback to improve practice during practicum. They are also expected to apply active listening, problem solving, and creative thinking skills during the practicum (Malaysian Qualifications Agency, 2014).

Reflection

Reflection has its roots in the Latin language *reflectere* meaning *to bend back*. The studies around reflection and its practices are rooted in the scholarly lineages of Dewey and Schön, who have made tremendous contribution to the concept of reflection and reflective practice which have received much scholarly attention to date.

According to Dewey (1910), reflection is an active and continual process of system thinking based on evidence, and not assumptions or mindless conformation to existing ideas. It is a logical process that impacts decisions based on logic and evidence or both, rather than accepting anything at face value. Dewey (1910) refers to reflective thought as the "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 6). He argues that reflection is pursued when a person is in doubt, and the action involves an inquiry that leads to information that "corroborate or to nullify the suggested belief" (Dewey, 1910). The motivation to reflect comes from the curiosity and desire to find equilibrium to what is unknown in the encounter. He

constantly advocates for reflection in teaching that frees teachers from habitual, thoughtless and routine activities. Teachers are urged to plan with an end in mind, and be purposeful and deliberate in their actions of teaching (Dewey, 1933, in Valli, 1997). The habit to reflect helps teachers to avoid impulsive and unthoughtful routine behaviors. This process, as Rodger (2002) suggests, moves the teachers from one experience into the next resulting in deeper and more meaningful understanding. It is a scientific inquiry that is systematic, rigorous and disciplined. Interaction with others promotes a habit of mind that enhances personal and intellectual growth. However, Dewey's (1910) process of reflection is cognitive- driven. One needs to go through the logical steps in problem defining, means-end analysis and generalization.

Schön argues that teachers have to be reflective practitioners and he persistently disagrees on the separation of theory and practice as dominated by the Western traditions. Schön (1983, 1987) began his research on the premise that teaching is full of uncertainties and complexity. Simply applying what teachers have learned in an unvarying manner will be problematic. The relationship between theory and practice, which he terms "technical rationality", fails to acknowledge that teachers' thinking does not merely guide action. It is also coming out of action. Hence, he has developed this popular theory on reflection "in" and "on" action that allows teachers to respond to the unique situations that happen in class. Thus, developing reflective skills in analyzing classroom teaching situations has become an important topic in scholarly work on teacher education.

The following section presents the literature review around reflection, specifically the definitions of reflection in the context of teaching; various typologies, categorizations, or levels of reflective thinking in pre-service teacher educators; research on various strategies and structures in teacher education programs that promote reflection individually or in groups.

Reflection is widely used by many professions such as nursing, medicine, healthcare, occupational therapy, education and social work as a strategy for enhancing professional learning and development (Cornish & Jenkins, 2012; Ghaye & Lillyman, 2000; Sim, 2006). It is also the hallmark of professional competence for the teaching profession, including higher education and teacher education (Calderhead & Gates, 2004; LaBoskey, 1994; Larrivee, 2008; Pultorak & Educators, 2010; Zeichner, 1996). Moss and Petrie (2002) identify reflection skills as the core activity critical for early childhood practitioners in improving practice and knowledge about working with young children. It has implications on the job performance of the teacher's day to day decision-making and problem-solving; as well as considerations and judgment about things that matter to education such as motivation and learning, curriculum choices, educational goals, evaluation, school organizations, institutional culture, and so forth (Larrivee, 2008; Valli, 1997).

In 2004, the Association of Teacher Educators (ATE) in America appointed a national commission on teacher reflectivity. A very thorough and detailed investigation of the impact of teacher reflectivity, if any, on teacher performance, teacher retention, student learning, and other important aspects of teaching, learning, and teacher education was conducted. Reflection was found to be a rigorous, systematic and complex way of thinking that requires discipline, time and effort to do well. Teachers who are to teach in this manner must themselves be reflective inquirers, or have an inquiry stance (Pultorak & Educators, 2010).

Mezirow (1990) asserts that reflection is a higher-order mental process enabling teachers to make inferences, generalize, discriminate, solve problems, make judgements and examine feelings and emotions. It can be also be developed in stages

from considering a single aspect of a lesson to the *ethical, social and political* implications of teaching practice (Larrivee, 2008, p. 341).

Although reflection has been a subject for research on teaching in the last few decades, the researcher's search for the meanings of reflection or reflective practice has opened up the Pandora's box of a very diverse range of definitions making it difficult to find a commonly accepted notion, particularly with references to types, categories and dimensions of reflection. The definitions are always inconsistently used and varied in nature. Various scholars have given different interpretations to the levels or stages of reflective abilities. Hence, finding a common framework and meaning on reflection has been a challenge.

Key themes emerging from literature review from 1933-2008, various themes on reflection and levels of reflective thinking are presented in Figure 2.1 From the various scholarly studies as shown in the top horizontal columns, reflection and various reflective thinking process are labelled as levels of reflection, types, scale, typology or taxonomy of reflection, and so forth. There is no common framework that describes the levels of reflective thinking.

The researcher refers to Laboskey (1994)'s model for pre-service teachers as a starting point, showing the development of reflective thinking from common-sense thinker to alert novice, and eventually a pedagogical thinker, as shown at the left column in Figure 2.1. Across the columns to the right, there is a range of reflective levels from indetermined, unreflective to reflective, to critical reflection (Boud et al., 1985; Dewey, 1997; Hatton & Smith, 1995; Kember et al., 2000; Korthagen & Kessels, 1999; LaBoskey, 1994; Larrivee, 2000, 2008; Mezirow, 1991; Schön, 1987; Valli, 1997; Van Manen, 1977).

LaBoskey 1994	Dewey 1933	Schön 1987	Korthagen 1999	Boud 1985	Kember et al 2000	Mezirow 1991	Larrivee 2008	Van Manen 1977	Valli 1992	Hatton & Smith 1995
Reflective practice for in-service teachers	*Reflective Thinking Process*	*Reflective Practice: Reflection-in-action*	*Reflection by ALACT*	*Reflective Thinking Process*	*Levels of Reflection*	*Types of Reflection/ Taxonomy*	*Scale of Reflection*	*Levels of Reflection*	*Typology of Reflection*	*Types of Reflection*
In-determine	Habermas (1976) Non-Reflective Learners ; *Mezirow (1991) Absence of an Inquiry Stance, Schön (1987) Indetermine zone of practice*									
Un – reflective/ Non-reflective	**Common Sense Thinkers**	Sponta-neous interpreta-tion of the experience		Looking back at action	Returning to experience- describing events. A precursor to Reflection	Habitual action-through frequent use becomes an activity performed automatically or with little conscious thought	Narrative	Pre-reflection non-reflective -react to students and classroom situations automatically without conscious consideration of alternative responses.	Technical rationality	Technical reflection	Descrip-tive informa-tion- non reflective

Figure 2.1, continued

Reflective: Initial	A L E R T N o v i c e s	Naming the problem(s) or the question(s) that arises out of the experience	Problema-tic situation	Aware-ness of essential aspects	Attending to feelings- awareness of emotions that hinder or facilitate learning	Understanding - thoughtful action – making use of existing knowledge without attempt to evaluate it.	Content	Surface reflection- Technical, descriptive Focus on achieving goals	Practical -/contex-tual	Reflection-in action and reflection on-action	Descrip-tive reflection- reasons and justifica-tions
Advanced	P e d a g o g i c a l T	Generati ng possible explana-tions for the problem(s) or question (s) posed	Frame/re-frame the problem	Create alternative method of action	Association Relating new knowledge to existing under-standing, feeling, attitudes, perspectives	Reflection – validity testing	Process	Pedagogi-cal- Application as theory in practice /theoretical, deliberative		Delibera-tive reflection,	Dialogic – reflect and analysis
	h i n k e r	Ramifyin g the explanati ons into full- blown hypothes es	Experimen tation	Action	Integration- Formation of new insight					Personalistic reflection	

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Figure 2.1, continued

Critical	Experiment or test the selected hypotheses	Review consequences/implementation	Validation – testing and verifying proposed synthesis	Critical Reflection	Premise	Critical - dialectical	Critical reflection	Critical – influenced by social political ethical issues
	Content	Content-reflective writing scale	Structured Reflective Practice model but not the content – / To use with evaluation Onion model	Appropriation – critical awareness-changes in Action, affective and perspective outcomes	Types of Assump-tions			
				Assess levels of Reflection and quality of reflective practice	Taxonomy	Content	Useful as a guide process	Content
					Can be used as a scale to assess RP, also has definition of levels			

Figure 2.1 Key Reflection Themes and Levels by Scholars (1933-2008)

Types and levels of reflection. For this study, a framework for reflection that evaluates student teachers' reflective thinking is necessary. The pedagogical process could be studied depicting the different elements of reflections that are appropriate. During practicum, reflection could involve student teachers, mentors and the supervisor individually and collectively, providing opportunities for deeper reflection. Hence, a pedagogical approach consists of a framework for reflective thinking, with clearly defined reflective thinking levels; and pedagogical elements that facilitate reflective thinking and practice.

As shown in Figure 2.1, many studies categorize reflection as typology of reflective practice, developmental or hierarchical. Just as there are many types of reflection, there are many classifications of categories of reflections too. The researcher broadly categorizes the types of reflective levels as follows:

Non-reflective level contrasts reflective thinking, as defined by Dewey, are put forward by LaBoskey (1999) as In-determined and non- reflective learning (Habermas, 1976; Mezirow, 1991), Common Sense Thinkers (LaBoskey, 1994); Descriptive information (Hatton & Smith, 1995); Narrative (Mezirow, 1991); Technical (Valli, 1990); as well as Habitual Action (Kember et al., 1999) and Pre-reflection (Larrivee, 2008), and Returning to Experience as pre-cursor to reflection (Boud, 1985).

Initial level of reflective thinking focuses on teaching functions, actions or skills, generally considering teaching episodes as isolated events. The initial levels of reflection are identified by the absence of evidence of one or more qualities ascribed to higher levels. Low levels of reflection have been described as Technical (Van Manen, 1977), Routine (Yost et al., 2000), Surface (Larrivee, 2008), Content (Mezirow, 1991), Understanding (Kember 2000) Reflective- Common Sense Thinker

(LaBoskey, 1994), descriptive reflection (Hatton & Smith, 1995) as well as Returning to Experience and Attending to Feelings (Boud et al, 1985).

More advanced level of reflective thinking considers the theory and rationale for current practice or involves in validating presuppositions such as contextual or practical (Van Manen, 1977), Process (Mezirow, 1991), Reflection- Validity Testing (Kember 2000), Alert Novice (LaBoskey, 1999) and Re-evaluating Experience: Association, Integration and Validation (Boud et al., 1985).

Critical reflection is the highest level and it involves teachers examining the moral, ethical, social and political consequences of their teaching, grappling with the ultimate purposes of schooling (Hatton & Smith, 1995; Kember et al., 2000; Larrivee, 2008; Van Manen, 1977), Reflective-Pedagogical Thinker (LaBoskey, 1994), and Premise (Mezirow, 1991) as well as Re-evaluating Experience: Appropriation (Boud et al., 1985)

The broad categories of reflection and the key characteristics of each category from non-reflective to critical reflection levels will be discussed in the following section:

Non-reflective level. Non-reflective learning is defined by Habermas (1976) as learning where "theoretical and practical validity claims are naïvely taken for granted and accepted or rejected without discursive consideration" (p. 16). For instance, reacting to students and classroom situations without conscious consideration of alternative responses. Such teachers accept explanation of a behavior or situation quickly resulting in a narrow range of potential solutions, and do not attempt to make connection with other events. Their orientation is reactive, attributing ownership of problems to students or others. They view student and classroom circumstances as beyond their control, seeing themselves as victims of circumstances. They take things

for granted without questioning and do not adapt their teaching based on students' responses and needs. Even though all teachers make mistakes, non-reflective teachers are unable to recognize and learn from their mistakes.

The key distinction between reflective and non-reflective teachers is taking an inquiry stance (Larrivee, 2006). A teacher with an inquiry stance is always curiously seeking for understanding, perpetually in construction and re-construction of knowledge. A close- minded attitude does not invite new ideas or solutions. Construction of their own meaning could also help others do the same. Hence, it is important to find ways to facilitate their development of reflective practice (LaBoskey, 1999; Larrivee, 2008; Mezirow, 1990).

Initial reflection level. At the initial level of reflection, the focus is usually on aspects of teaching that are usually narrow and rule-governed. Teacher educators in a teacher training program would normally educate and assess their trainee teachers using externally imposed criteria derived from research on teaching. The student teacher's performance will be judged retrospectively with academic research findings such as standards, guidelines, prescribed strategies and evaluation criteria developed by "experts" in teaching. For instance, they may calculate the time used for play in the classroom to determine whether time spent on play learning activities was increasing; manage a class, give appropriate feedback; implement the activities as how they have been trained, and so forth. This type of reflection does not consider the purposes of schooling; social, moral and ethical issues about teaching.

This level operates on surface reflection where teachers' reflection focuses on strategies and methods used to reach predetermined goals. They are merely concerned with what works rather than the value of goals as ends in themselves. For this level,

the term technical is used widely (Hatton & Smith, 1995; Larrivee, 2008; Schön, 1983; Valli, 1997; Van Manen, 1977). However, in Boud et al. (1985)'s level of Attending to Feelings, the affective domain rather than just technical concerns to look at feelings, values, beliefs, and assumptions at this level of reflection has been addressed.

More advanced reflection level. Valli (1992) refers to deliberative reflection that emphasizes on a variety of sources while assessing practice. This includes research, experience, the advice of other teachers, personal beliefs and values, and so forth. Multiple perspectives are taken into considerations as teachers make the best decision possible. Students will be assessed by their abilities to weigh these competing perspectives and to justify their decisions. The focus on the content of deliberative reflection would be more inclusive such as teaching behaviors; their relationships with students; the subject matter; organizational culture and climate rather than the narrow range of instructional and management behaviors considered in technical reflection. For example, the school and parents may expect teachers to deliver more academic related activities such as reading and writing before they move on to primary school. However, teachers who promote holistic development through play and meaningful learning would caution teachers against this expectation. During teacher training, teacher educators would help trainee teachers to deliberate on such conflicting viewpoints, determine the credibility of the sources, and consider the best alternative for their particular students. In this context, the role of the teacher educators would focus on developing students' capacities to become good decision makers for classroom practice.

Critical reflection. Critical reflection has attracted the most consensus in the literature as a level of reflection examining the ethical, social, and political consequences of one's practice. It is regarded as the highest form of reflection because

of its potential to eliminate misery and create social conditions necessary for human freedom and happiness (Habermas, 1976). Critical reflection does not just aim at increasing understanding, but improving the quality of life of disadvantaged groups; and social action (Van Manen, 1977). It holds an assumption that schools often reproduce unjust social class, race, and sex relations. It desires to change teaching practices and school structures that foster injustice and inequality, and pay attention to the voices of those who are among a society's least powerful and privileged. The level of reflection would be determined by the teachers' ability to apply ethical criteria to the goals and processes of schooling, and the level of consciousness on the consequences of their actions. Critical reflection considers teaching as a moral pursuit concerning both means and ends in a democratic society, where teachers could become change agents pf professional practice (Larrivee, 2000; Mezirow 1991; Osterman & Kottkamp, 2004; Schön, 1987).

Many researchers believe that a change in professional practice happens when a deeper level of reflection take place (Gibson & Purdy, 2012; Husu et al., 2006; Larrivee, 2008; Rogers, 2001). Larrivee (2008) refers to the progression in the ability to reflect "from trivial, to significant, to potentially profound. Increasing levels involve higher forms of thought, moving from issues of practicality to values and belief" (p. 344). It is worth noting, however, that a teacher's progression is not necessarily linear; one may reflect at different levels simultaneously, interweaving various levels. The levels may be thought of as parallel to the growth of a teacher from novice to expert to master. While each dimension of reflection can be useful in its own right, increasing levels of reflective contents tend to developmentally involve higher forms of thinking from content to transformation in values and beliefs (Valli, 1997).

Although it is important for teachers to progress through the levels of reflective practice to ultimately become critically reflective, not all teachers will become critically reflective teachers. Critical reflection may make novice teachers feel most uncomfortable, at times powerless when they feel threatened, especially when not in a position to change anything happening around them. The potential consequences of using questions could sometimes lead to dissatisfaction, particularly when they begin to reflect on matters concerning social justice such as disadvantaged children, negative feedback communicated, pressure for academic performance in primary school at the expense of play time, and so forth.

Challenging or questioning of one's own practice also puts the practitioner in a vulnerable position. Particularly when the issues discussed are political, social or ethical, subjecting participating practitioners to a higher level of personal or professional risk. Critical self-evaluation may also lead to a range of negative emotions such as frustration, despair, fear or disgust or workplace confrontation. Expressing an honest reflection may be seen as noble cause for one, but may result in disagreement at the workplace and create awkward situations for some (Ghaye & Lillyman, 2000; Sim, 2006). Hence, it is important that reflection, be it at individual or collective level, is effectively facilitated and conducted in a safe and supportive learning environment (Boud et al., 1985; LaBoskey, 1994; Mezirow, 1990).

Many types or levels of reflection may manifest in student teachers' reflection. Technical or content reflection may be the way student teachers think and it could be the result of how reflection is used in many teacher training programs. While technical reflection focuses on instructional and management activities, these do not cover the full range of teachers' responsibilities, and limits the scope of teacher reflection. Critical reflection, on the other hand, may offer inquiry into essential social and

political issues, but offers little attention to instructional effectiveness. Although it has very noble aims of bringing student teachers' attention to the social and ethical implications of teaching, it is argued that this type of reflection is less likely to be achieved by novice teachers (Kember, 2010; Poom-Valickis, Katrin, & Mathews, 2013; Nolan & Sim, 2011).

Novice teachers may bring with them the beliefs and assumptions that shape their educational values such as bias, personal prejudices, judgment, and so forth. Some researchers suggest that reflective inquiries can be more effective when undertaken as a collegial activity. In the absence of other voices and points of view, reflections can become narrow and individualistic (Collin & Karsenti, 2011; Collin, Karsenti, & Komis, 2012; Ohlsson, 2013; Rantatalo & Karp, 2016). Valli (1997) cautions that teachers must be encouraged not only "to listen to their own voice, but to other voices as well… Otherwise, the possibility of personal transformation is limited" (p. 81).

In summary, due to the limitations in each of the reflection type, those broad categories discussed in the preceding paragraphs are inadequate to develop a pedagogical framework that enhances early childhood teachers' reflective thinking. Reflection in the context of practicum need to consider the personal characteristics; the dynamics of the particular context or workplace, as well as the repertoire of the people in the context (Boud, 2010; Moran & Dallat, 1995). A more holistic approach to reflection during practicum is required. This should include considerations of the student teacher's past experiences; context of the workplace and its dynamics, and a pedagogical approach that provides opportunities for reflection, and a way to evaluate the level of reflection in both cognitive and affective domains.

Transformative learning. A critical outcome for reflection is the reflective process that should result in action plans and decisions for practice. The action part of this process is fundamentally important as it presupposes that a shift has taken place. Ultimately, the transformative power of reflection is the desired outcome for developing reflective thinking and practice of pre-service teachers (Brookfield, 1998; Mezirow, 1990; Toom et al., 2014). Boud et al. (1985)'s framework for reflective thinking involves first attending to feelings, and then re-evaluating the experience through the elements of association, integration, validation, and appropriation that may result in action, perspectives or behavioral changes.

Transformative learning calls for a major shift in one's basic assumptions and a consequent change in perspective and personal paradigm. Acquiring a deeper understanding in itself does not constitute transformative learning (Brookfield, 2000; Mezirow, 1991). It requires questioning and reframing of thinking (Mezirow, 1990). According to Mezirow's theory of transformative learning, critical reflection is a precursor to transformative learning but critical reflection alone may not lead to transformative learning (Mezirow, 1990). It requires changing perspectives and acting upon these new perspectives. As Sim (2006) suggested, "perspective transformation is only possible if members are given the opportunity to construct and de-construct the social context in which they work" (p. 38).

To summarize, Mezirow (1990, 1991) cautions that it is the primary duty of educators to encourage critical reflection and facilitate transformative learning among student teachers who will become professionals one day. Critical reflection is not about what and how; it is about why, and the consequences of acting upon the new perspectives (Mezirow, 1990). This higher order reflection skill is an important form

of reflection as it assists practitioners in developing new ways of working given that early childhood education is an emerging profession.

Developing Reflective Teachers in Teacher Education

The following section discusses the key elements for developing a reflective teacher in teacher education.

The three-stage model (Dewey, 1910) for developing reflective thinking in student teachers begins with technical training; helping them to think like professionals; and enabling them to develop new forms of understanding and action. However, the question of what characterizes the content of reflective inquiry; and how one could be nurtured to develop new forms of understanding in a complex situation remains unanswered. Many researchers recognize that novice teachers are at the initial stage rather than higher stages of reflections involving transformation in practice (Hayden & Moore, 2013; Osterman & Kottkamp, 2004; Risko, Roskos, & Vukelich, 2005).

In 1994, LaBoskey conducted a case study to identify patterns of reflective processes and attitudes of reflective teachers. The findings suggest that student teachers progress in a continuum of the development of reflective thinking of pre-service teachers from common-sense thinker to novice thinker, and eventually pedagogical thinker. A reflective teacher who is a pedagogical thinker is a facilitator open to learning; growth oriented, seeking feedback and triangulation, with awareness of teaching as moral activity, and grounded in knowledge about self, children and subject matter.

The ability and attitude of the student teachers are found to be the critical success factors; for instance, a strong belief, a passion to know more, and higher order

of thinking skills as in Bloom's Taxonomy such as the ability to analyze, synthesize, and evaluate. Cognitive abilities were also identified by LaBoskey (in Calderhead, 2004) as one of the critical success factors for developing a reflective practitioner, for instance, the ability to describe and analyze the structural features of a situation, issue or problem; gather and evaluate information to identify the possible sources of the problem and generate multiple alternatives, solutions or implications to the problem identified (means/end analysis); and integrate all the information to come to a conclusion about the solution (generalization).

The pedagogy for developing reflection thinking in teacher education comprises conditions (artifacts, partner/observations); process (problem definition, means/end analysis; generalization) and content of reflection (pedagogical, social-political and moral-ethical) as proposed by Goodman (1984) and LaBoskey (1994). Without carefully constructed guidance, novices seemed unable to engage in critical reflection to enhance their practice. Larrivee (2008) argues that novice teachers can deepen their level of reflection with powerful facilitation and mediation within an emotionally supportive learning climate. Pre-service and novice teachers can be helped to reflect at higher levels with multifaceted and strategically constructed interventions (Boud, Keogh, & Walker, 1985; Calderhead & Gates, 2004; Dewey, 1910; Loughran, 1999, 2002; Mezirow, 1991; Zeichner, 1987).

For the purpose of this study, the researcher has conceptualized the elements for Group Dialogic Reflection as contents of reflection, conditions, and climate for developing a reflective teacher, as shown in the following Figure 2.3:
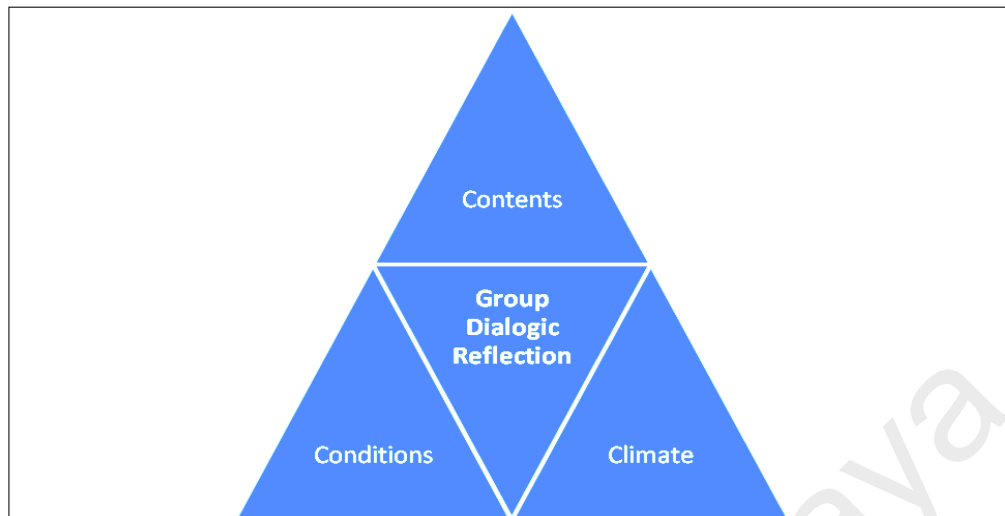
Figure 2.2 Elements in Group Dialogic Reflection.

These elements will form a part of the conceptual framework of the study that will be discussed in detail in the next section.

Group Dialogic Reflection- Theoretical Framework

The theoretical framework underpinning Group Dialogic Reflection as a pedagogical approach for early childhood practicum will be discussed in the following section. Group Dialogic Reflection is premised on theories of reflection and reflective thinking; social constructivism theory; Learning theories, and dialog and discourse theories interwoven into the pedagogical approach, as summarized in Figure 2.3:
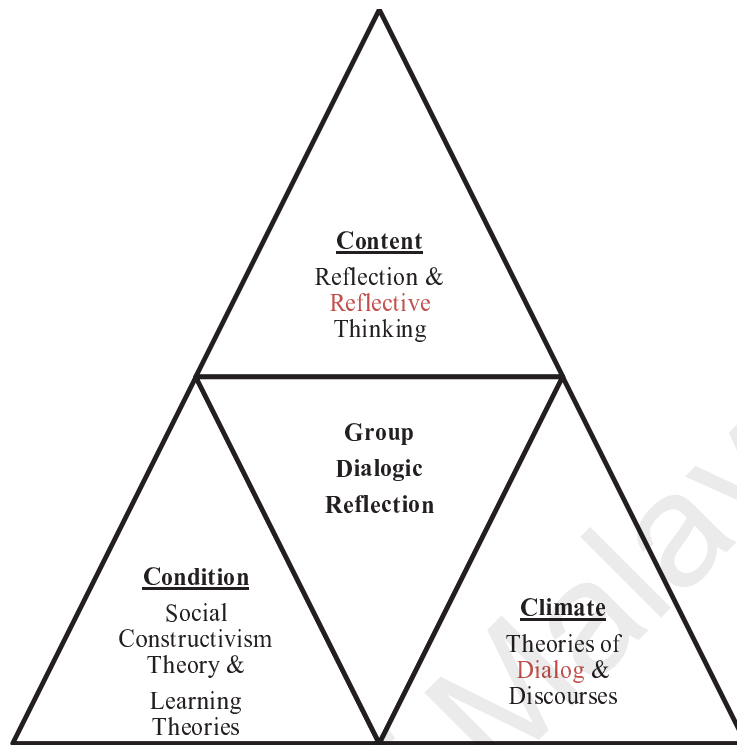
Figure 2.3 Theoretical Framework for Group Dialogic Reflection.

Framework of reflective thinking. For content of reflection, the researcher uses Boud, Keogh, and Walker (1985)'s framework of reflective thinking that describes six levels of reflective thinking processes learners might experience. From mere descriptive nature of reflection, to transformative outcomes of reflection, the levels are hierarchical in nature but do not necessarily occur in sequence (Husu et al., 2006; Toom et al., 2014). A brief description of each level is as follows:

Level 1: returning to experience. Level 1 involves going back to the event that has happened using description of the actual event, with self or with others. This description provides data and clarification without the emotional feelings about the event. This can be done through a written journal, log of the event, or describing the events to another person not involved directly in the experience such as a mentor or academic supervisor. As this level involves mere description of events and activities,

it is not considered reflection, but the precursor to reflection (LaBoskey, 1999; Larrivee, 2008; Mezirow, 1990).

Level 2: attending to feelings. Level 2 recognizes the importance of feelings in facilitating or obstructing the learning experience since feelings and emotions could become either a source of learning or a barrier to learning (Boud et al., 1985). Positive feelings, for instance, could drive people through challenging situations, allow learners to consciously recall good experiences, and focus on the pleasant side of the event thereby looking forward to its potential benefits. Negative feelings, however, need to be acknowledged, looked into, and be removed as a barrier in the future event. Student teachers could understand their emotions in the learning context better if they are able to articulate their feelings. Writing about those feelings in a journal and having dialog with others, for instance, will provide a platform for expressing those feelings. Reflecting on the event rationally through articulating the feelings around the event allows success to breed success, and helps to remove potential obstacles to learning. Self-awareness is said to be an important characteristic of self-directed learning (Nolan & Sim, 2011).

Level 3: association. Association is the act of connecting new information to what is already known by connecting ideas and feelings from the experience to existing knowledge. This is an important cognitive structure for learning, both intellectually and affectively. It can be done through journal writing, drawings or dialogs. For example, persons may come to awareness that the experience that they are undergoing now is what they are familiar with from previous encountered experience. Dialogs and discussions on reflection are a good platform to include multiple perspectives by connecting ideas and feelings with workplace knowledge without fear of criticism or

evaluations. It is suggested that the more association is made, the greater the chances for achieving the next level, which is integration (Boud et al., 1985; Toom et al., 2014)

Level 4: integration. Integration is a more meaningful process involving the act of identifying any patterns and relationships that have been observed during the association stage, and drawing a conclusion on the new and previous experiences, hence forming new insights. This process of synthesis in integration creates room for further reflective activity. For instance, learners may have noticed that they had some success with the strategies they used in the micro teaching and believed that those strategies could also be used in the placement center. By synthesizing old and new knowledge, new insight is formed as a result of the previous knowledge acquired that becomes the "new" knowledge. Further examinations of the relationship between their teaching experiences and theoretical knowledge leads to tentative conclusions about the two (Toom et al., 2014).

Level 5: validation. Validation involves testing and verifying the proposed synthesis for consistency. It allows the student teachers to determine the authenticity of the ideas and feelings, or experiences of their colleagues. Reflection helps in conceptualizing ways to incorporate a new concept. This process could involve learners mentally rehearsing their ideas, or simply discussing them with someone whose opinion they trust. Validation requires applying new learning for testing in practice (Husu et al., 2006; Toom et al., 2014).

Level 6: appropriation. Appropriation requires the student teacher to apply self-awareness and daily approach toward work, leading to changes in behavioral outcomes (action outcomes) or affective state (affective outcomes) as well as in perspectives (perspective outcomes). It results in student teachers adopting new

learning in the actual workplace context. This involves trying out new concepts or strategies after reflection; if successful, these will become part of their natural behavior (reflective learning). For example, following a chaotic presentation, a student teacher, upon reflection, concludes that he did not make adequate preparations for the class. After deciding that it would be best to spend more time in preparations based on the children's needs, this behavior will soon become natural to him over a period (Boud et al., 1985). Perspective transformation or transformative learning means becoming critically aware of how and why one's assumptions could constrain the way one perceives, comprehends and feels about the environment (Mezirow, 1990). It requires a major shift in one's basic presuppositions for a change in perspective and personal paradigm.

Action outcomes involve a new way of doing things, developing new skills, commitment to action and/or readiness for application. This would be seen in the student's readiness to apply her newly acquired reflective skills to action. An affective outcome involves a change in attitude or emotional state. It involves a "positive attitude towards learning in a particular area, greater confidence or assertiveness, or a changed set of priorities" (Boud et al., 1985, p. 34). The student's changed attitude to wanting to find out more about a certain aspect of practice, along with her increased motivation for learning, would be evidence of this. Perspective outcomes involve changes in perspectives and beliefs and values. This is characterized by the student changing her perspective on reflection. Acquisition of deeper understanding in itself without critically reflecting on one's own assumption does not equate with transformative learning. According to Mezirow's theory of transformative learning, critical reflection is a precursor to transformative learning (Mezirow, 1990).

Social constructivism theories.

Social constructivism theory (Vygotsky, 1978, 1981) explains the condition required for deeper reflective thinking of student teachers. Learning, in the context of early childhood student teachers from the College that are placed in practicum settings, is occurring within a social context. It does not happen in a vacuum; just as plants need water, air and sunlight to grow. Research is beginning to point to the social dimension as a critical aspect for reflective practice to flourish (Brockbank & McGill, 2007; Collin & Karsenti, 2011; Lave & Wenger, 1991; Ohlsson, 2013; Rantatalo & Karp, 2016; Reiman, 1999; Reynolds & Vince, 2004). The social constructivist views reality as deeply influenced by life experiences around the learners. The learning contexts help create meaning through interaction and engagement with others through language, visual image and body language in discourse. These experiences and interactions give rise to opportunities to test the theories and assumptions learnt in the lectures, and making the knowledge relevant and meaningful to them as they work with the children (Brockbank & McGill, 2007).

The community of early childhood education and teacher education institutions do not exist in isolation, or rather, should not happen in isolation being "taken out of the context" as they are part and parcel of the macro system in early childhood education. As members of a community of practice, teachers learn by involving the whole person in relation to social communities. The student teachers can be empowered to shape those experiences in their daily practice, which in turn will shape their practice as well. In the process, learning transforms who they are and what they do; it is therefore a process of "becoming" as part of the community learning (Lave & Wenger, 1991). The opportunity afforded where people could learn from and with each other creates a supportive environment that gives student teachers the courage and

resources to act on new knowledge acquired, and advancing professional knowledge in the field (Sim, 2006).

The Shift from Individual to Collective Perspective in Reflective Practice

Scholars in reflective practice are beginning to shift attention from individual reflection to collective reflection. The social and cultural context impacts on the person's reflection, and his or her professional identify that includes past experiences, assumptions and perspectives held. The shift to collective reflection has also brought theoretical and practical implications to the notion of reflective practice and learning. It is argued that reflective learning is shaped by the social, historical and cultural context where the community and workplace are situated (Collin & Karsenti, 2011; Rantatalo & Karp, 2016; Reynolds & Vince, 2004). Collective reflection in the context of organizational reflection involves relationships with others. Power relations inevitably become an integral part of the reflective activity. There is also a need to consider the supervisory role in relation to the student teacher being placed in the practicum placement setting, and the College supervisor assigned to the student teacher.

Although reflective thinking is an individual cognitive learning process, the social context and relations in reflection are influential, as suggested by social constructivism theory (Vygotsky, 1978, 1981). The social-cognitive theory argues that input by others could trigger individual cognitive processes. Even though the individuals are embodied in the group under the social setting, the group also operates through individuals. Hence, collective reflection can be conceptualized as a situated practice, a form of symbolic mediation through which shared meanings, validations of ideas and sense making leading to reflective learning could occur (Rantatalo & Karp, 2016; Vygotsky, 1978).

According to Cressey and Boud (2006), this shift is inevitable due to changes in the trends in professional practice characterized by collective rather than individual in nature. It can be multidisciplinary or transdisciplinary, with an increasing emphasis on co-production in practice. Hence, professionals can no longer be trained to work alone in isolation. Most jobs will begin to expect that they perform their tasks cooperatively. They also work very closely with the 'client' as they are actively involved in the interaction as they are personally implicated in the outcomes of the practice.

Hence, Boud (in Bradbury et al., 2010) has suggested that the pre-service teacher education program be revamped in light of these developments as thinking about practice in isolation is meaningless (Boud, in Bradbury, 2010, p. 29). Cressey and Boud (2006) and Boud (in Bradbury, 2010) suggested a model of productive reflection with the following elements.

Reflective learning from the collective perspective. Learning is defined as the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action (Mezirow, 1990, p. 2). Reflective learning in this study is referred to any reflective outcomes demonstrated through action, affective and perspective transformation by student teachers during early childhood practicum.

Reflection that takes place in the social context brings reflection beyond the individual. It involves collective learning; Cook and Yanow (1993) point out that since organizations are made up of human groups, people behave as groups of humans rather than individuals. Any organizational activity should be looked at as activity at the group level, not just at the individual level. Essentially, organizational learning needs

to have shared meanings through cultural artifacts or symbolic mediation (Vygotsky, 1978). The shared meanings in learning organizations require a supportive learning environment where people can have dialogs in a collegial environment and a conducive climate (Mann, Gordon, & MacLeod, 2009; Senge, 1990). As a result, learning is not only kept inside the individuals, but outside. Collective reflection in groups allows individuals to explore complex issues from many points of view. Individuals could communicate their assumptions freely resulting in free explorations of experience and thoughts beyond their individual views (Senge, 1990). The question is, what stops individuals from learning as a collective effort.

Argyris and Schön (1974) argue that in organizations, people usually maintain their personal agenda and pursue it by retaining control, shunning distractions, questions, challenges or complaints. They focus on rationality of decisions as they "craft their positions, evaluations, and attribution in ways that inhibit inquiries into them and tests of them with others' logic" (Argyris, 1993, p. 52). To promote organizational learning, anything that inhibits learning needs to be removed. Insistence to carry on its present policies or achieve its objectives is referred to as "single loop learning" (Argyris, 1977, p. 116), which could be a barrier to learning. For instance, one of the barriers to learning is the organizational defense mechanism that could be in the form of policy, practice, or action that prevents people from experiencing embarrassment or threat. This defense mechanism may also prevent them from discovering the causes of the embarrassment or threat. Hence, Argyris and Schön (1974) argue that people have their own mental maps for guiding their actions when they need to act in situations. For instance, when teachers are required to plan, implement and review their actions, the theory in action guide their actions rather than

the espoused theories. In reality, very few people are aware of theories they use resulting in a gap between theory and action.

The gap exists between the two contrasting theories of action: of what the practitioners do; and what the practitioners say they will do. For instance, when people are asked how they would behave under certain circumstances, the answer they usually give is the espoused theory of action for that situation. This is the theory of action that one is committed to, and upon request, will be communicated to others. However, the theory that actually governs the action is this theory-in-use (Argyris & Schön 1974, pp. 6-7).

Research indicates that most teachers are trapped in single loop learning (Argyris & Schon, 1974; Osterman & Kottkamp, 2004). Many are confined by school routines, rules and regulations, as well as cultures that discourage the sharing and critiquing of practice. As argued by Loughran (1999), they have lost their extended view of their responsibility – of "teaching as a moral enterprise" (p. 216) Teachers should see themselves as more than technicians who can teach well, but need to see that in the long run what they do will impact on the lives of the children (Loughran, 1999). Although unilateral control and withholding of information may yield short terms results such as organizational stability, harmony and speed, in the longer run, however, the organization will encounter absence of trust, creativity and commitment, as well as negative energies such as defensiveness, passivity, and resistance. For instance, in schools where educators are less willing to share information and avoid delving deeply into those aspects of personal belief and practice that are critical elements of reflective practice, they will still remain ineffective even though the technology becomes more sophisticated and people are more educated. When people

could make enquires, question the underlying policies, goals and even the program itself, they are involved in double loop learning (Argyris, 1977).

To be more effective as a learning organization, bridging that gap between theory-in-use and espoused theory is essential, as pursued by the researcher in this study to bring about coherence in practice. For example, when a principal asks a teacher how best a child learns in a situation, she may conveniently relate a piece of theory, or she might explain that the child has a learning difficulty. However, the theory-in-use might be quite different. The teacher may have run out of ideas to tackle the child's inability to acquire the concepts. Teachers may face an unresolved issue if the gap between espoused theory and theory-in-use becomes too wide, until and unless coherence exists between what they say they will do, and what they do in practice which will bring about transformation and improvement in practice. However, it is possible to develop collaborative and problem solving strategies where double loop learning can take place in organizations. Commitment, problem solving, creativity and learning come from strategies such as open communication, having common goals, publicly testing assumptions, as well as advocacy and enquiry (Osterman & Kottkamp, 2004), as outlined in the behavior, strategies and the effects of Model I and II behaviors in Table 2.1:

Table 2.1

Model I and II Behaviors, Strategies and Results (Adapted from Osterman & Kottkamp, 2004)

	Behaviors	Strategies	Effects
Model I	Unilateral Control Conflict Avoidance	Manage Unilaterality Protect Self and Others Be Rational	Defensiveness Passivity Resistance
Model II	Collaboration Problem Solving	Communicate Openly Emphasize Common Goals Publicly test assumptions Advocacy and Inquiry	Commitment Problem Solving Creativity and Learning

Dialog and discourse. The following theories discuss the climate required for Group Dialogic Reflection that promotes deep reflection during the early childhood practicum. Reflective discourse (Habermas, 1976) is the philosophical foundation for the concept of dialog in this research. Argyris and Schön (1974) and Habermas (1976) have initially advocated that discourse unveil hidden assumptions in the teaching practice through recognizing emotions and analysis. Brockbank and McGill (2007) later had called it the Reflective Dialogue. The assumption for the notion of reflective dialog is when teachers justify their practice, theoretical models based on their espoused theories will be referred to, which may or may not coincide with their theory in use. Hence, when teachers get engaged in reflective dialog, they would have the opportunity to bring to light the entrenched theory-in-use influenced by experiences.

The word 'dialogue' comes from the Greek word dialogos. Logos means 'the word' and 'dia' means 'through'. Dialog can be done among any number of participants, not necessary just two. Bohm (1996, 2000), an authority on dialog, illustrated the

meaning of dialog as "a stream of meaning flowing among and through us and between us…out of which may emerge some new understanding" (p. 6).

According to Bohm (2000), in the notion of dialog, there is shared meaning to the communication that holds people in conversations, and out of which will emerge some new understanding. A dialog is not didactic in nature, characterized by one party claiming to be expert in interaction with others; nor a one- way transmission of knowledge and ideas. A dialog is not adversarial, with the intention to win or defeat another person in an argument at the expense of other silenced voices. Rather, it should be allies and advocates of the issues examined. The philosophical foundation of a reflective dialog is power relations with the parties involved that enables and does not disable learning (Brockbank & McGill, 2007; Habermas, 1970). Reflective dialog supports reflective thinking of students by "taking into account that voices represented, the place of the challenge, the role of language, connections to specific literature, aligned feedback, technological support, the social atmosphere and the role of facilitators and peers (Brockbank & McGill, 2007, p. 72).

Brockbank and McGill (2007) advocate reflective dialog as an alternative to the conventional reflective strategies to facilitate reflection and action. It allows each individual to share thoughts, feelings, reactions and analysis of the experience. The facilitator or other group members pose questions that will encourage the individual to think more broadly and deeply about the experience. Reflective dialogs encourage the group participants to think more critically, uncover taken-for-granted assumptions, and consider multiple perspectives and strategies for conclusions.

Group dialogic reflection as a new form of dialog for learning. More open modes of communication refute deeply rooted organization norms that are obstacles

to critically reflective learning such as avoid discussing sensitive issues to prevent confrontation and public discussion, or shun from looking at the whole picture so that no one sees how problems are connected (Mezirow, 1998). Open communication and dialog are believed to enable functioning through double loop learning (Osterman, 2004). Organizations as a whole resist identifying and analyzing problems, or actively suppress problems. For instance, not everyone is willing to share openly and trustingly (Argyris, 1993b). In Asia, people generally are unwilling to expose their feelings, thoughts and emotions to save face and avoid conflicts among colleagues. Younger generations have been told to respect the elders. Hence, subordinates tend to give face and obligingly follow the instructions of their seniors or superiors out of respect, even if their suggestions may not be the most appropriate way to work. Challenging the ideas of more senior colleagues may be construed as "rude" in the social cultural context. Understanding the meanings of what are being communicated, for instance, beliefs, values, feelings, decisions, concepts, ideals, and so forth, is of paramount importance for organizational learning.

Mezirow (1990) argues that communicative learning searches for themes and metaphors for unfamiliar situations or events and turn them into meanings. If the event does not fit an existing schema, new meaning schemes are created in the integration process. Each set of new information could form new understandings to the existing schema that can be moving back and forth between the parts and the whole of that event which Bernstein (1985, in Mezirow, 1990) describes as the *hermeneutic circle.* Over time, the understanding can be further interpreted once we discover its significance in the context of the teaching experiences.

Apart from that, validation through judgment on the event allows further understanding of the conditions to ascertain if they are true and justified, such as

appropriateness (in relation to social norms), or authenticity (in relation to feelings). Until and unless everyone is satisfied with the justifications, the dialog cannot be carried out meaningfully. The objective of dialog is to arrive at an agreement about the justification of the ideas expressed during the reflective session. The teacher educator's role is to provide skillful emotional support and collaborate as co-learners to maximize the learning potential in that reflection event (Habermas, 1984).

Brockbank and McGill (2007) consider reflective dialog where students, lecturers and other significant adults such as mentors collectively reflect upon the knowledge, feelings and actions to improve practice, a paradigm shift in teaching and learning in higher education. The lecturer is clearly modelling the important aspect of learning from a social constructivist perspective. When reflective dialogs are held, meaning schemes and perspectives are transformed through validation. It is a shared process of professional growth and learning where insights and solutions to problems are results of communal efforts, offering each other emotional support and motivation for sustainable growth and development (Osterman, 2004).

In summary, reflective practice as a strategy for change effected by the individual to transform practices in the workplace, arguably, it does not happen automatically with reflection done in isolation by individuals, unless dialog occurs (Bradbury et al., 2010; Brockbank & McGill, 2007; Osterman & Kottkamp, 2004; Mezirow, 2003). As Osterman and Kottkamp (2004) have rightly suggested, "while organizational change or cultural change will not come about without individual change, organizational change will not come about until dialogue about change absorbs the whole community" (p. xi).

Group Dialogic Reflection as a Pedagogical Approach

The previous section has discussed the key theoretical framework underpinning the concept of Group Dialogic Reflection as a pedagogical approach for early childhood practicum. The next section will examine the conceptual framework of the study, on how Group Dialogic Reflection is mediated by the contents of reflection; conditions and climate, and turns practicum experiences into reflective learning in a continuous cycle of experience and reflection. The enabling factors and barriers to reflection will also be explored. Each of the concepts illustrated in Figure 2.4 will be discussed in detail.
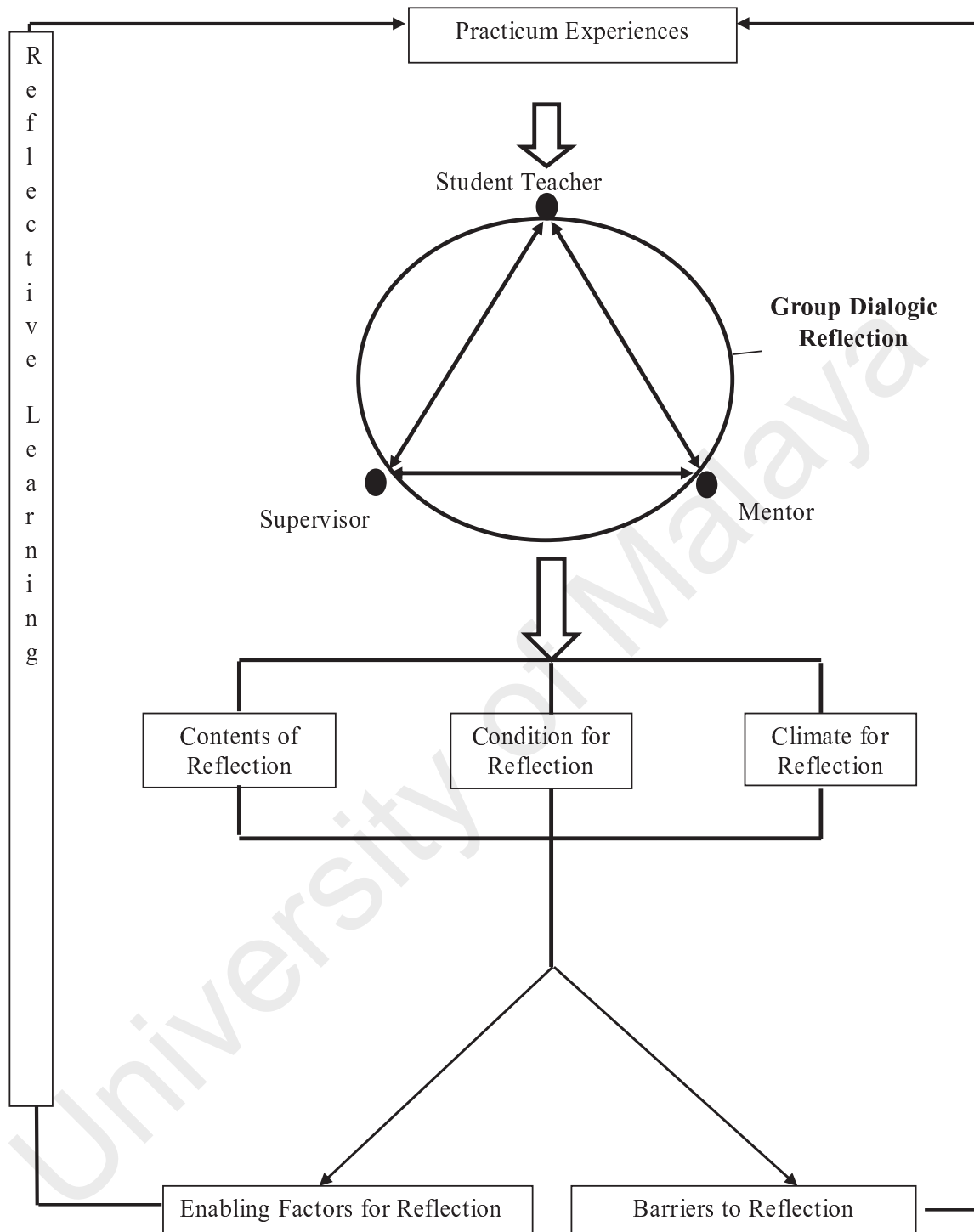
Figure 2.4 Conceptual framework of the Study.

Contents of reflection. In this study, the contents are referred to as the types and levels of reflective thinking of student teachers. The framework for reflective thinking developed by Boud, Keogh, and Walker (1985) are used to analyze the levels of reflective thinking of student teachers. They are subsequently mapped against typologies by various scholars in reflection (Habermas, 1976; Hatton & Smith, 1995; Mezirow, 1991; Kember 2000; LaBoskey, 1994, 1999; Van Manen, 1977) that are categorized as Non-reflective teachers, beginner, advanced, and proficient as shown in Table 2.2:

Table 2.2

Framework for Analyzing Contents of Reflection

Types of Reflective Teachers	Level of Reflective Thinking
Non-reflective teachers	Level 1: Returning to experience
Beginner - focused on teaching functions, actions or skills, generally considering teaching episodes as isolated.	Returning to experience: Level 2: Responding to emotions
Advanced- considers the theory and rationale for current practice or involves in validating presuppositions such as contextual or practical.	Re-evaluating Experience: Level 3: Association Level 4: Integration Level 5: Validation
Proficient - examines the moral, ethical, social and political consequences of their teaching, grappling with the ultimate purposes of schooling. It is often described as critical reflection.	Re-evaluating Experience: Level 6: Appropriation: * Action- affective/perspective outcomes (Generative)

Conditions. The conditions in this pedagogical approach involve key elements such as contextual requirements, appropriate reflective strategies, artifacts, facilitative methods and other means with which group dialogic reflection could take place (Boud, 2012; Boud et al., 1985; Brockbank & McGill, 2007; LaBoskey, 1999; Mezirow, 1987) as follows:

Situated in context. Reflection that is contextualized within the practice at work connects learning and work, and operates in the space between the two. It cannot be done in isolation from the organization and the objectives for its existence. The experiences from the immediate context are the primary consideration for dialog to take place. Reflective learning does not happen in a social vacuum, but a social space imbued with personal, social historical, cultural and economic forces.

The practicum placement center provides the context for the dialog where student teachers, placement mentors and colleagues and supervisors are engaged in jointly constructing meaning and knowledge with regard to the practicum experience which eventually becomes the "product of that relation between those in dialogue. The material is not out there, detached and unconnected" (Brockbank & McGill, 2007, p. 5). It is not an isolated exercise in hypothetical settings.

Situated reflection allows multiple perspectives and understandings to be examined and employed by practitioners in the actual field (Boud, 2010). Various reflection strategies could be used along with reflection dialog sessions. For instance, the student teachers writing up the reflective journal, a platform for sharing of reflection in action, on action and for action; critical incidents as well as sharing of other literature (Noble, 2007; Raban et al., 2004). With this, journal writing can even become an active component because students are obligated to justify their actions and

responses rather than merely describing them in the journal. It also becomes the means for triangulation to support decisions made about changes in practice and implementation (Noble, 2007). The link between knowledge and production may lead to a change process at the workplace (Boud, in Bradbury, 2010; Lave & Wenger, 1991; Malthouse, Roffey-Barentsen, & Watts, 2014).

Essentially, reflective dialogs that happen within the context of the workplace are more meaningful to student teachers as it brings to the table a myriad of real problems to be solved (Boud, 2010). Early childhood professionals need a conducive environment and relationships that support dialog, rigorous subjectivity and critical thinking, as well as opportunities to share the life and work of the early childhood center among practitioners, children and parents (Moss & Petrie, 2002).

Collective reflection.   Habermas (1974) suggests that individual reflection without dialog is limited to a person's own perceptions that is yet to be validated by others, hence, it is a "detachment on the part of self, to look at another part of self, and in this there is a danger of self-deception" (in Brockbank & McGill, 2007, p. 66).

Collective reflection is a 'space' for student teachers to engage in dialogs with various levels of professionals, in particular, the experienced practitioners and academics allows the experience of a person within the context of a group of autonomous learners with common learning goals to result in purposeful learning. Grundy (1982, in Boud, 1985) argued that as each person interacts with other group members, they inform practical ideas which then could result in new knowledge for the group. These new insights can be applied in the intended activity or more reflective activities in the related context. This may imply that these reflective activities may happen in sequential stages or simultaneously. However, for this to happen, Grundy

strongly believes that the teacher-student relationship must occur first for successful critical reflection.

In addition, to provide the right conditions for critical reflection, a structure allowing equal power relationships between group members is essential. Collaborative dialogs go beyond reflection conducted in isolation to an intentional discourse where questions and problems generated by reflection are discussed in a collegial manner that leads to learning (Pultorak & Educators, 2010).

Teaching is an explicit and personal expression of multiple forms of knowledge and skills that is implicit and hidden from the practitioner, but is observable by other people. Therefore, reflection is enhanced when facilitation provides a "strategically constructed mediation" that allows deeper reflection on this complex process about teaching and learning (Larrivee, 2006, p. 24). Through this mediation, the teacher's thinking can be "confirmed, modified, or stimulated to deeper levels of understanding" (Larrivee, 2006, p. 24). At the same time, student teachers are also exposed to multiple perspectives, and wider range of discourses on issues that may otherwise not be discussed in traditional practicum practices (Sumsion, 2003, p. 83). Even if the process involves 'intellectual conflict' (Fullan, 1999, in Osterman & Kottkamp, 2004, p. 20), these are checks and balances of other colleagues' perspectives that can help novice teachers to validate their thinking. Group support can also surface the stress from teaching and provide a cushion against the inevitable low point en route to becoming a reflective practitioner (Brookfield, 1995).

In summary, collective reflection is more an organizational rather than an individual intent. This new emphasis is on reflection that leads to action with and for others and for the benefit of the work involved (Boud, in Bradbury, 2010; Toom et al.,

2014)). Evidence also suggests that professional development and changes in practice are more likely to occur when the learning processes are active rather than passive. Through positive engagement and collaborative reflection, debriefing and journal writing become more meaningful (Noble, 2007). For instance, dialog during small group discussion can work through critical incidents experienced by participating team members at various levels of professional practice. Although discussion where each member at a similar level of professional development is possible, it may indeed prove fruitless, as only a narrow knowledge base is drawn.

Transformation through developmental and generative processes. Student teachers are motivated to learn when they play an active role in the whole cycle of reflection, turning their practicum experiences into learning. Collective reflection involves a perpetual construction, rather than reproduction of knowledge, resulting in a cyclical process which is essentially generative. When the student teachers involve in shared inquiry and dialogs, deep learning is generated as opposed to surface learning. Deep learning leads to transformative learning. The ultimate aim of reflection is to generate possibilities that can be appropriated, and not just to resolve a particular problem. It is generative rather than instrumental (Kuh, 2012; Parr & Chan, 2015; Toom et al., 2014).

In Group Dialogic Reflection, learning facilitated through a continuous process of connecting and reconnecting the domains of knowledge, self and the world through actions leads to transformative practices at the workplace (Boud, 2010; Brockbank & McGill, 2007). As Brockbank and McGill (2007) summed up the process:

Reflective learning is an intentional social process, where context and experience are acknowledged, in which learners are active individuals, wholly present,

are engaging with others, open to challenge, and the outcome involves transformation as well as improvement for both individuals and their environment (p. 36).

The power of transformation is not just generative, but developmental as well. Group Dialogic Reflection provides sustainable strategies to solve organizational problems and challenges, and develop the capacity of the people involved in the dialog. Group Dialogic Reflection takes place within small groups within a community of learning. It can start from a simple technique of debriefing by description of the event and experience, and return to the experience before proceeding to any analysis (Boud et al., 1985). Practices could be discussed and critiqued, generating validated and new ideas resulting in improved practice (Cressey & Boud, 2006; Mezirow, 1990; Sim, 2006; Walsh, 2009) which otherwise may be accepted uncritically (Mezirow, 1990).

Turning experience into reflective learning during practicum. The following section discusses the cycle of Group Dialogic Reflection. It begins with the student teachers who are engaged in the experience of teaching; write in reflective journals and share their thoughts, observations and reactions with others; discuss any themes or patterns; and subsequently form broad principles about how the world looks, and integrate learning into behavior. Boud, Keogh, and Walker (1985) highlight the importance of the relationship between experience and reflection as reflection is "a form of response of the learner to experience" (p. 18).

During practicum, unexpected events or surprises in the experience may lead to a brief period of uncertainty and conflict described as "the indeterminate zone of practice" (Schön, 1983, p. 146). During this brief moment, one may enter into "reflective conversation with the situation" (p. 146) that involves questioning, reorganization, and experimenting. The disequilibrium for adaptation and growth, or

"the indeterminate zone of practice" (Schon, 1983) is turned into responsive instructional adaptation (Shulman & Shulman, 2004). Equilibrium is achieved when learning takes place. In the process of development from novice to expert teachers, these processes occur as the student teachers strive to achieve equilibrium through bumpy journeys, as Hayden and Mark (2013) rightly stated, "there is no magical, linear line from novice to expert, but rather many false starts, recursive thinking, reflective moments, and problem solving episodes (p. 234).

Dialogic reflection conducted collectively provides a continuous experiential learning cycle woven into the practicum experience. Kolb's experiential learning model identifies learning as a continuous process grounded in experience with four stages of experience. Learning involves concrete experience, reflection, abstract conceptualization and active experimentation (Kolb, 1984). Pfeiffer and Jones (1975, in 1998) expanded Kolb's model of the experiential learning process and developed a five stage model of experiential learning for group facilitation. Using this group facilitation model, continuous cycle of experiencing, publishing, processing, generalizing and applying can be described as follows:

Experiencing: Learners are involved in the act of teaching, performing, observing, seeing, or talking say through teaching and learning activities in the classroom. This initial experience is the basis for the entire process.

Publishing: The learners write up reflective journals, and share reactions, reflective thoughts and observations with others who have either experienced or observed the same activity in the classroom during Group Dialogic Reflection. The data generated from the experience are shared with others.

Processing: Learners make sense of the data generated for both individuals and the group by way of interpreting the shared data. The dynamics that emerged in the classroom activities are explored, discussed, and evaluated (processed) with other participants. Any themes or patterns that emerge are discussed.

Generalizing: Learners develop principles or extract generalizations from the experience, forming testable hypotheses and broad principles about pedagogical issues.

Applying: Learners are involved in planning applications of the principles derived from the experience. The whole experiential learning process is not complete until a new knowledge or discovery is used and tested. This becomes the "experimental" part of the experiential model, which is an experience in itself.

Finally, with this new experience, the next cycle begins (refer to Figure 2.6). Sharing of reflective thoughts is the catalyst for learning, where shared meanings in the form of newly constructed information can be extracted from raw experiences and be transformed into perspective or action changes. New knowledge can also be tested in a new place and eventually be integrated into behavior (Boud et al., 1985).
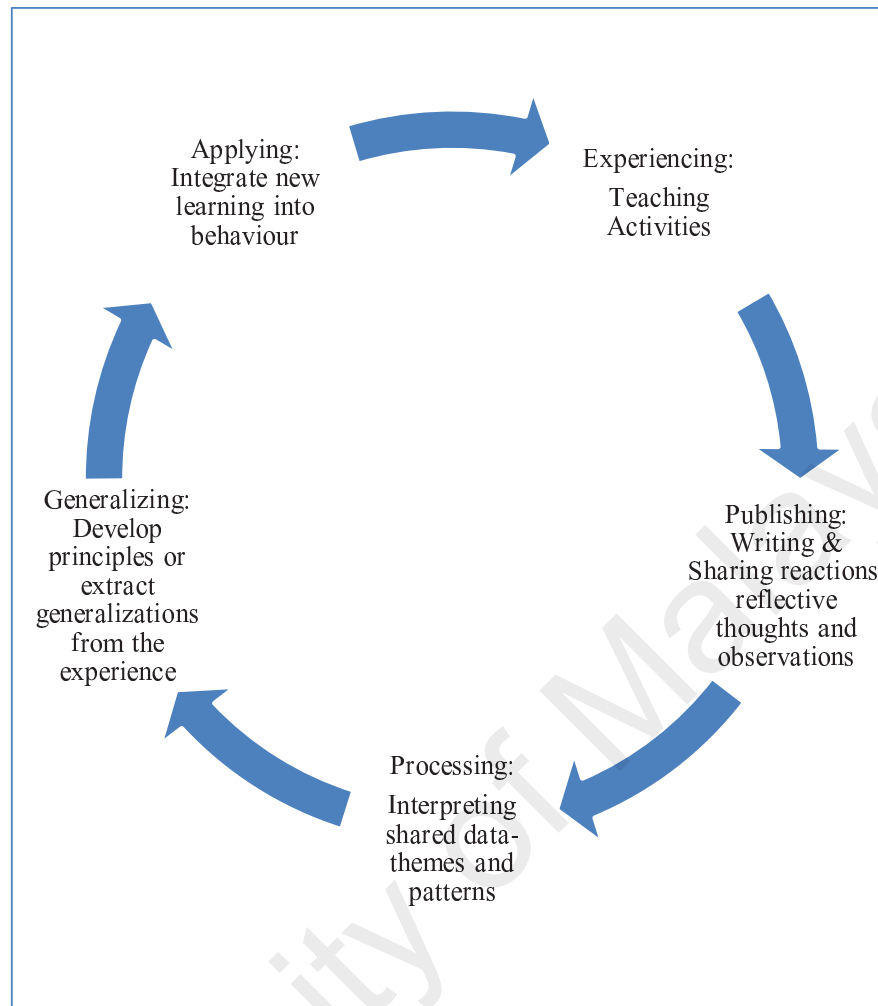
Figure 2.5 The Cycle of Group Dialogic Reflection (Adapted from Pfeiffer & Jones (1998)'s Model of Experiential Learning)

Reflective thinking strategies for pre-service teachers. The following section discusses other reflection strategies such as journaling; reflection-on-action; reflection-in-action and reflection-for-action; supervision during practicum; and peer reflection. Some of the evidence based reflective strategies in teacher education will be presented as follows (Larrivee, 2008; Moran & Dallat, 1995; Rogers, 2001).

Journaling. Journaling has been used by many teacher educators to encourage reflective thinking, and is not as formal as other academic assignments. Students

usually reflect on what has happened, how they feel, what they have done in the classroom specifically, why they did it, and how they would do it otherwise. It helps to generate greater awareness of personal beliefs and implicit theories of teaching. Feedback from supervisors helps student teachers to explore their own perspectives in relation to theory, research, and classroom observations. Some research explore online journaling as a strategy although the focus in this study is on written journals as part of the practicum requirements, and how these relate to the group dialogic reflection that take place (Bain, Mills, Ballantyne, & Packer, 2002; Hume, 2009; Lai & Calandra, 2007; Ortlipp, 2008; Ward & McCotter, 2004).

Reflection- in-action, reflection- on- action and reflection-for action. Premised on Dewey's foundational work on reflection, Schön's concepts (1983, 1987, 1991) on reflective practitioners have redefined reflection based on practice linking thinking and action. To Schön (1983), reflection focuses interactively on the outcomes of action, the action itself, and the intuitive knowing implicit in the action (p. 28). A clear distinction is made between practitioners' reflection-in-action and reflection-on-action (Schön, 1983, 1987).

Reflection-in-action involves reflecting on the event while in the midst of action. As Schön (1987) argues, "our thinking serves to reshape what we are doing while we are doing it" (p. 26). It creates the knowledge that enables practitioners to work while thinking on their feet, which is an important attribute for early childhood practitioners as it questions the basic assumption on their work practices which is called knowing-in-action (Schön, 1987). Reflection-in-action often results in the practitioners' immediate implementation of actions that lead to further changes (Schön, 1987). However, reflecting in action can be challenging when the teacher is faced with demands on the job and is consciously interacting with a problematic

situation. He or she may draw on various sources of knowledge in order to develop strategies and test out possible solutions. Reflection helps the teacher in defining the teaching problems and questions. For instance, teachers need to first reflect on their teaching in ways that will lead them to define a practical problem or question which they saw as needing some solutions or answers.

Reflection-on-action refers to "thinking back on what we have done" (Schön, 1987, p. 26). It is retrospective, in that it enables practitioners to reflect back on an experience or event, usually with the aim of explaining an unexpected outcome (Schön, 1987). It is about "making sense of practice" and it can occur at a personal or public level as a reflective dialog (Ghaye & Lillyman, 2000, p. 7).

Killion and Todnem (1991) developed the concept of "reflection-for-action" where thoughts occur before action, with an intention to guide future practice. Reflection enhances learning by framing and reframing the workplace specific problem resulting in knowledge about current and future workplace practice (Schön, 1987). It allows teachers to confront and question their understanding and values. This will result in advancing their work practices, and empowering them to drive change at the workplace (Schön, 1987).

Reflective journals are commonly used in teacher training programs for student teachers to record their reflection-in-action, reflection-on-action and reflection-for-action. They could look at important events happening in their classrooms and help them think carefully about these events. However, these reflective activities could also be done collectively when student teachers, mentors and supervisors meet. The study will explore how these reflective activities take place, and if there is any difference in

the nature of reflection between individual reflections using journals and collective reflections.

Supervision during practicum. Student teachers are usually supervised by college or university lecturers during practicum. A placement mentor is usually the class teacher. The supervisors are usually experienced academics; they play a role in enhancing reflective thinking of the student teachers under their care.

Stegman (2007)'s study on student teachers' reflective thinking found that none of the interventions he used in coaching or guided journal writing succeeded in promoting deeper levels of reflective thinking. In fact, it was the mentor teacher that had the most influence on student teachers. The "support communities", as Valli (1997) has called them, provide a safe and conducive environment for discussing teaching problems, to mutually improve teaching skill and assessment capacities, and to connect prior learning with current experiences (Moran & Dallat, 1995; Nolan Jr, Nolan, & Hoover, 2010).

Peer reflection. Peer reflection refers to peer-discussions in the form of small-group discussions, reading and commenting on each other's journals, critiquing each other's ideas, and examining controversial ideas that could be used to promote reflection. In this study, peer reflections take place in the context of shared reflection where questioning, sharing, and evaluation take place at the academic college, and not placement center based. Various strategies of reflections are used, such as informal discussions, technical questions, evaluation or guided questions to explore a wider scope of reflective contents (Lloyd & LaFramboise, 2005; Moran & Dallat, 1995).

Climate. Climate in this study covers both the attitudes for individuals and the social relationship that would promote reflective thinking during Group Dialogic

Reflection. LaBoskey (1994) advocated pre-service programs providing wide-ranging opportunities for interactions with records of their teaching; other means to broaden their scope of reflective context; and the skills and attitude of reflection itself (Calderhead & Gates, 2004).

Dewey (1997) suggests that, to be reflective, teachers need three essential attitudes of wholeheartedness, open mindedness, and responsibility. Wholeheartedness binds the two other attitudes toward reflective practice as it is referred to as people who have single-mindedly taken control over their development as teachers, and are totally engaged in the exercise; for instance, giving up their time, resources and energy to reflect on matters concerning the subject, the children and themselves as educators (Dewey, 1997).

Open mindedness requires people to consider different alternative possibilities and perspectives of others, and acknowledge the limitation of their own perspective. People having responsibility as an attribute would carefully consider the consequences and implications of the action undertaken in practice, be totally aware of what they are doing and why they are doing it; and take cognizance of education as a moral enterprise (Grant & Zeichner, 1984; Rodger, 2002). Boud et al. (1985) argue that the reflective process involves cognition as well as emotions which are closely connected. Recognizing that emotions or feelings play a critical role in acquiring abilities and dispositions to reflection has a significant impact in promoting reflective practice for the pre-service teachers, giving to new understandings and appreciations in the context of learning.

The following sections discuss the important components in a triadic relationship formed by the student teacher, mentor and supervisor and the climate required for Group Dialogic Reflection.

Triadic Relationship in the Group Dialogic Reflection. The following section discusses the roles of the mentor and supervisor as the key component in the context of this triadic relationship during practicum.

Mentor and student teacher relationship. Increasing evidence have come from the Reggio Emilia (Edwards et al, 1993, in Abbott & Pugh, 1998) and early learning project (Pascal et al, 1994b, in Abbott & Pugh, 1998) suggesting that good mentoring play an important role in teacher development. Mentoring is one of the most powerful means of effecting change. It is a concept built on relationships, and this relationship has to do with extending one's understanding and knowledge about working with others (Ebbeck & Waniganayake, 2005). Traditionally, as described in Greek mythology, Ulysses entrusted his son Telemachus to his dear friend named Mentor while Ulysses was away. Mentor's main roles would include developing Telemachus' skills and knowledge to be a strong and effective citizen. Mentor has been traditionally described as trainer, developer, teacher, coach; more experienced colleague; confidant, counselor, and advisor; protector and a defender as well as source of information and knowledge.

The mentoring relationship is built on trust, allowing the student teacher to open up for learning, and accept one's professional responsibility to the class. Mentoring based on a command and follow approach does not build relationships (Ebbeck & Waniganayake, 2005; McIntyre, 1993). Open and honest reflective dialog and discussions allow the mentee to learn, validate perceptions, and develop ideas. The

mentor will equally benefit from the generative outcomes of collaborative effort personally and professionally. As Ebbeck and Waniganayake (2005, p. 24) so rightly suggest, the "building of a learning community or a common culture within an organization is an important outcome of collective mentoring. In such a community there is a commitment to learn and creation of new understandings and knowledge". It is the cornerstone for establishing a 'critical mass' of people who are committed to professional practice, which is the precursor toward change in the larger perspective (Boud, 2010; Ebbeck & Waniganayake, 2005).

Clarke (2000) argues that the mentor-mentee relationship will impact on learning for each other, and is not a one way relationship. Teacher educators and placement mentors play an important role in developing the teaching profession. Lave and Wenger (1991, p. 57) suggest that teacher development is a generative process to produce future teachers. Teaching is a highly complex and active process involving considerable interaction between thought and action so there is a real need for mentors to explicitly articulate the knowledge that guides their actions in specific contexts.

The section that follows discusses the roles of the classroom teachers who act as mentors in the early childhood practicum. Firstly, the mentor's key role is to identify realistic targets for structuring the student teacher's progress, overall performance, and ongoing formative feedback. At the end of the placement, a mentor makes summative evaluation on students' overall performance. A mentor needs to take an active role in recording the student's performance, such as weekly written log, target outcomes, and engage students in reflective practice as part of the feedback provided. Continuous feedback through dialogs on teaching and learning is an important aspect of a mentor-mentee relationship (Battersby & Gordon, 2006; Lord, Atkinson, & Mitchell, 2008; McIntyre, 1993).

Secondly, mentors provide opportunities for team teaching in a safe environment for the student teacher to learn. Student teachers could improve their teaching skills by observing good practice, gaining new ideas or techniques, and so forth. The mentor-mentee dialog will allow validation of ideas and assumptions, thus enriching the teaching process for both mentor and student teacher. Mentors and more experienced senior colleagues have honed their teaching skills to a greater extent, have developed good rapport with the children who are aware of and understand the expectations of the teacher (Battersby & Gordon, 2006; Pultorak & Educators, 2010). While student teachers are not expected to become the exact replica of the mentor, reflection within a collaborative relationship could help validate and affirm their teaching skills (Ohlsson, 2013).

Thirdly, the mentor acts as a good role model to the student teacher as one demonstrates exemplary teaching and management techniques; observes and gives feedback; guides lessons and resource planning, and most importantly, modeling. This process itself is an encouraging and educative one for the reflective teacher (Palomo, Beinart, & Cooper, 2010; Jones & Jones, 2013; Pungur, 2007).

Supervisor and the student teacher in dialogic reflection Supervision of student teachers is one of the key strategies in teacher education to improve the student's teaching skills. Continuous reflection and inquiry sets the center stage of the cycle of supervision and evaluation that includes establishing readiness, preconference, teaching observation, data analysis, post observation conference and an overall evaluation of the process. Throughout the cycle of supervision, teachers are given support to develop their strengths, teaching styles and strategies that are unique to their classroom and children through a data-driven decision making process (Noble, 2007; Noble, Macfarlane, & Cartmel, 2005; Nolan et al., 2010). A collegial model of

teacher supervision rather than a hierarchical one is said to assure a collaborative approach (Johnston & Milne, 2012; Thompson & Pascal, 2012). collaborative reflective dialog allows for scaffolding that helps learners to construct a deeper understanding of what is experienced during practicum (Gladding, 2012; Johnston & Milne, 2012; Masson, et al, 2012). Trust and positive communication are needed in the supervisory relationship to develop the sense of "we are in it together". It can begin with an open, non-judgmental, and engaging dialog that carefully explained supervisory activities. The key roles of the supervisor will be discussed in the following paragraphs:

Firstly, supervisors play a critical role in modelling and promoting continuous reflection, as well as inquiry into teaching from technical to critical analysis. Data can be collected systematically, discussed and analyzed collectively. Decisions can be made based on the teacher's developmental level, knowledge base, instructional skills, intrinsic motivation and capacity for introspection and reflection on practice, including meta-reflection skills (Nolan et al., 2008; Johnston & Milne, 2012).

Secondly, the supervisor also plays an essential role in fostering a professional learning community (Nolan et al., 2008). Even though schools are supposedly learning organizations that promote learning, teachers lack opportunity to learn within a Professional Learning Community that promotes learning and good practice. Facilitation through collective reflection triggers questions that improve student learning (Palomo et al., 2010; Scaife, 2010). For instance, what do supervisors want students to learn? What do you learn from this episode? How do you respond to this child who experiences difficulty in learning?

In summary, a reflective culture emerges through right attitudes such as responsibility, openness, trust, allowance for risk taking and commitment to continuous development (Hargreaves, 1997, in Nolan et al., 2008; Lave & Wenger, 1991). A strong culture of collegiality and experimentation is needed in a reflective environment that will benefit the learning community members. Without perspective changes, little learning or transformation is likely to occur. Everyone in this collegial relationship needs to assume responsibility for their own learning and development to internalize meaningful change in their perspectives (Clark, 2000; Mezirow, 2003; Nolan et al., 2008). The climate required for Dialogic Reflection for early childhood practicum in this study may include the possibility of informing us about attitudes that could nurture the growth of Dialogic Reflection.

Dialogs on Early Childhood Education

This section discusses the type of dialogs that take place in early childhood settings. Many theories and perspectives reflect the different emphases on young children's learning premised on different paradigms (Nolan, Macfarlane, & Cartmel, 2013). Postcolonial and poststructuralist theories are challenging the image the child in the 1970s that are largely influenced by the Piagetian theory (Piaget, 1951) characterized by individualistic and romantic understandings in aspects; developmentally appropriate practices and non-interference approach in children's play as ethnocentric.

The developmental perspective emphasizes the child as the learner and the constructor of knowledge influenced by developmental theorists such as Piaget, Freud, Erikson, Vygotsky, Bruner and Kohlberg. These developmental theorists suggest that children have innate capacity to learn. Brain research has also confirmed this innate search for meaning and the brain's natural capacity to integrate information by

constantly perceiving meanings and generating conceptual patterns. Children develop and change from one stage of development to more complex stages continually. The role of the teacher is to facilitate maximization of young children's potentials the child's emerging abilities. For instance, instructions on numbers and alphabets before a child could understand these concepts is believed to limit the child's own abilities to think. On the other hand, a teacher must also be able to gauge a child's abilities in order to challenge and extend learning such as engaging in real situations where real problems arise and have to be solved. The aim of education is to develop creative and inventive explorers who are critical, and not easily accept everything offered (Raban et al., 2007). It opposes formal and academic teaching for very young children (Bredekamp, 1987).

In the play based approach, long, uninterrupted time to engage and investigate is given. Explicit teaching instruction given is related to the work and investigations of the children. Open-ended tasks and creativity are encouraged rather than cloned art work, and a limited use or no use of worksheets that all have the same stenciled outline or content, or 'diagnostic assessment'. A wide range of play and experiences allow children to be immersed in the rich diversity of integrated thinking, oral, literacy, numeracy and social emotional development. These include imaginative play and socio dramatic play; constructive and investigative play; explorative play; directed and scaffold play and sensory play.

Although many of the Western developmental approaches to early childhood education are generally accepted by early childhood teachers who have used them to justify many aspects of their curriculum, critics have cited their over-reliance on developmental theory, Western culture and failure to recognize the interconnectedness between the child, the family and society.

The widespread introduction of preschool curriculum has raised questions on the content of preschool curriculum, and how decisions are made in the selection process. The 'areas of learning' or 'learning outcomes' identified in recent preschool curriculum guidelines in many countries such as England, Australia, The United States of America, as well as Malaysia, focus on areas relating to personal and social development, language and literacy, mathematics and technology, knowledge and understanding of the world, health and physical development, creative development and thinking skills. Most of these learning areas seem similar to the learning areas in the higher levels of schooling. It may seem as though decisions concerning preschool curriculum content and the desired outcomes are being influenced by decisions concerning curriculum content at higher levels of education for continuity. The pressures to achieve those outcomes can influence teachers' decisions on instructional methods (Katz, 2008).

The Foucauldian theory (1980) in the 1990s seeks to reconceptualize the image of the child as one that should be more informed by multiple perspectives rather than mere regimes of truth that led to the social construction of childhood. The hermeneutical inquiry and narrative inquiry have brought a different dimension to the understanding of interpretation about children, leading to questions on children's participation in research. Taken for granted assumptions about childhood and practices are now being challenged, giving rooms for researchers to make further investigations for better understanding about childhood, culture and practices in a more diverse environment. As such, the works of Vygotsky (1978); Bronfenbrenner (1979); Roggoff (2003) and Malaguzzi (1993) have widened the perspectives to include children, families and the community. There is an emphasis now on the voices of

children, practitioners and parents in collegial, collaborative and co-construction of relationships (Nolan, MacFarlane & Cartmel, 2013)

For instance, young children's play activities feature a wide range of behaviors, and situated in different contexts with multiple meanings for the children. Play can be regarded as deeply serious and purposeful. It can be characterized by high level of motivation, creativity and learning. It is believed that children could actively construct their own understandings and contribute to others' learning. Therefore, they have the capacity to initiate and lead learning, besides participating in decisions that affect them, including their learning (Walker, 2011).

In summary, when student teachers plan, implement, assess and reflect, many considerations have to be taken into account. Responding to children, families and communities' diverse social and cultural knowledge and experiences help develop confident learners. Dialogs promote children's holistic learning and development; and provide opportunities for scaffolding via play and projects. Children are also active participants and decision makers, moving beyond preconceived ideas about what they can do. This requires student teachers to reflect and work with each child's unique qualities and abilities. As a result, children thrive when families, practitioners and the community work together collaboratively to support young children's learning.

Issues in the Traditional Approach to Practicum

With the current trend on linking theory to practice in teacher education, and strengthening school-university partnerships, research in the interactions between College Supervisors, Placement Mentors and student teachers during practicum is necessary. Some research studies suggest that practicum mentors are poorly prepared for working with student teachers. Some held assumptions that becoming a practicum

mentor requires very little preparation, and mentoring could be done by anyone, requiring no on-going support (Clarke, 1997, 2000; Stenberg et al., 2016; Zeichner, 1987, 2011).

Some of the innovations coming from practicum in the United Kingdom, USA, Australia and the Scandinavian countries attempted to provide solutions to issues faced in the practicum; for instance, implementing an explicit practicum curriculum, reflective practice as a collective activity; extending the practicum as part of the local community, and fostering stronger relationships between the school and the teacher training institution, and so forth (Allen & Wright, 2014; Escalié & Chaliès, 2016; Loughran, 1999; Noble, 2007; Stenberg et al., 2016; Young & MacPhail, 2016; Zeichner, 2011). The following passage will examine some of the key issues in the traditional pre-service teachers' practicum:

Firstly, tacit knowledge of practice that should be made explicit through practicum. (Russell & Loughran, 2007; Zeichner, 1996). What student teachers are expected to do in the class has to be congruent with how teacher educators teach (Darling-Hammond, 2005; Korthagen, 2001). The challenge is to facilitate a coherent process between lectures and practice.

As a teacher educator, the researcher had encounters with student teachers who became discouraged when they discovered that what they learnt did not always happen in the early childhood settings of their practicum. For instance, play did not have a dominant place in the classroom. Play resources were not visible on the shelves for the children to use. To practise the play approaches learnt during lectures, student teachers found themselves standing up against many opposing voices and pressures from parents, principals, senior teachers and all. As a result, many of them gave up on the

notions of child-centered practices, and conformed to the prescribed practices which were more favorable solutions. For instance, worksheets given out within fixed schedules is a more common scene than children playing freely in the role play corner supervised by a supportive adult. Interactivity was kept to minimal level as opposed to adult facilitated interactions during activities or transitions between activities because of limited time and resources. As a result, some supervising lecturers who had certain expectations over the students' work were disappointed with some of the observed outcomes.

Practice is influenced by experience, context, cultural values and belief systems (Korthagen, Loughran, & Russell, 2006). In the current cultural, political and social context where academic achievements are major concerns, the gap in theory- practice has created an either/or scenario rather than a more holistic view of early learning. The "historical wisdom" or romantic notions of practice may not withstand the complexity, uncertainty and insecurity of working with young children and their families in the current context. Furthermore, the diverse context involved in transnational teacher education, or the use of foreign (predominantly western) textbooks where the prescribed experiences and cultures are somewhat different from local contexts pose many challenges to making explicit the typically tacit knowledge of teaching and learning.

According to the report from the Malaysian Inspectorate of schools on the teaching and learning component of pre-school teaching observed, only 19% of the pre-school teachers are in the rating of 'Cemerlang' (Excellent) and 0% in 'gemilang' (Extra-ordinary) and not many apply the best practice required in their classroom (Unit Pendidikan Prasekolah, 2010).

Secondly, the conventional practicum situation usually adopts an individual rather than a collective approach to reflection. Students very often find themselves reflecting in isolation as they record their reflective journals to be submitted to the supervisor. Very few had the opportunity to reflect together with the college supervisor and placement mentor who are in it together even though they are capable of offering insights into the reflection of the teaching and learning experiences, and benefit from mentor teachers and college supervisors who are able to provide alternative perspectives on problems of practice.

Hayden, Moore-Russo, and Marino (2013) also argue that the usefulness of the administrator's observations on novice teachers in some practicum practices is questionable as the short glimpse of the session only informs some isolated, observable behaviors that are poor indicators of practice as a whole. It does not provide formative feedback to move the novice's practices forward. Hence, traditional supervision practices need to be reviewed. Observation and evaluation need to be linked to reflective inquiry in the pursuit of learning and change in teaching practice. Strategies for more active engagement such as peer reflection, portfolio and professional development plans are recommended (Danielson, 2000).

Thirdly, many teacher training institutions face difficulty placing their students in quality settings for their practicum experiences (Bassok, Fitzpatrick, Greenberg, & Loeb, 2015; Fukkink & Lont, 2007; Katz, 2008). Apart from the physical infrastructure and logistical and social elements of the placement settings, the more critical issue in placement is the placement mentor-students relationship. From a pedagogical perspective, this relationship is a complex and multi-layered one, as placement mentors have enormous power to influence the student teacher's learning processes. Practicum experiences are able to powerfully shape a new teacher's pedagogy.

Modeling of good practice for student teachers is crucial but learning to teach is more than a process of apprenticeship of observation. It is a relationship between mentors and student teacher built on mutual respect and trust (Russell & Loughran, 2007).

Lastly, the supervisor in the traditional practicum model usually assumes the dominant role in determining the nature and direction of the learning process. The student teacher plays a passive role as consumer of knowledge, complying with the expectations laid out. Even if there are reflection exercises, very often, only minimal input come from the student teachers. Yet working with young children is an extremely complex process. Becoming a teacher requires more than a set of theories, activities, ideas, strategies and techniques. The relationship between their teaching and the quality of their students' learning in complex situations, using multiple strategies, making decisions about what to do best, and understanding why they do so require deep reflection (Kilderry, 2012). All these cannot be achieved by a transmission model of teacher training focused on imparting the skills and theories about teaching to be acquired, with student teachers applying in practice without much thought (Russel, 2007). The traditional model of practicum holds little promise that it will bring lasting impact on practice; and change will be a necessity (Osterman & Kottkamp, 2004).

Past Research on Collective Reflection as a Reflective Strategy

This section discusses research studies of reflective strategies in the area of Dialogic Reflection as a reflective strategy during practicum. The strengths and weaknesses of the strategies will be examined.

Calderhead (1987) conducted a study on ten student teachers studying primary education in a postgraduate program during their practicum experience. The study aimed at exploring the quality of reflection of the student teachers. It studied the

different conceptions of teaching and learning processes, how student teachers reflect and evaluate their own practice; as well as the role of college supervisor and placement mentor in promoting reflection. The research was conducted using semi-structured interviews, and the findings indicated that student teachers conceptualized and reflected on their own practice in different ways. They progressed through their practicum in these three stages: fitting-in, passing the test, and exploring. This research also found that the quality of student teachers' reflection affected their professional learning. There was a connection between the stages of their reflection and learning during practicum but the study did not elaborate on the approaches to reflection or the role of dialogic reflection. The researcher suggested new research to focus on the design and assessment of pre-service education courses.

Moran and Dallat (1995) investigated how student teachers were being encouraged to become reflective practitioners, and identified difficulties experienced by both student teachers and teachers in developing and sustaining the intellectual inquiry into practice required for critical reflection. It was a case study on five school-based teacher education schemes in England and Scotland. The findings indicated trainee teacher awareness of the importance of critical reflection on practice, but found variations in the implementation in the understanding and interpretation of the term reflective practice, as well as how it was used in the inquiry oriented approach to teacher education. The teacher trainers interviewed recognized the need to develop reflective skills in their students, but to a lesser extent than those of their teacher mentors. The nature of co-operation and collaboration in training the student teachers was threatened by assumptions and reluctance to recognize each other's expertise. It was found that coherently theorized and practical approaches to initial teacher education, guided by research and reflection on experience was lacking. Additionally,

mentors not only play a strategic role in stimulating reflective conversation in relation to both their own practice and that of the student teacher, but also in supporting the reflective process by using a variety of techniques, such as questioning, listening, challenging assumptions, describing behavior based on observations and offering insights and observations. Barriers to mentoring were identified. For instance, mentors were unable to fully realize their potential, and faced difficulties when carrying out the responsibility particularly when it required opening up their own practice for scrutiny and analysis. The knowledge embedded in the skilled activity of professionals may be demonstrated in practice, but it was seldom disclosed verbally (Moran & Dallat, 1995).

Bean and Stevens (2002) conducted a comparative analysis of 54 reflection studies where 18 were on literacy programs and 36 on general teacher education. The research goal was to clarify the concept of reflection as studied in the literacy field. An inductive paradigmatic analysis that produced descriptive observations between the two data sets and five interpretive patterns that characterize researchers' conceptualizations and problem solving was used. The researchers proposed future research in developing a reflection continuum that describes typical phases of cognitive and dispositional growth in relation to teaching. For instance, how does reflective thinking change as novices shift from their student role to that of the teacher; and what are the features of reflection in new teachers as they adapt to the realities of everyday practice? They further raised an argument that writing itself, as frequently used in the popular journal writing strategy, has little impact on the level of pre-service teachers' reflective thinking. Rather, it is the "socially constructed reflections -- those built through the interactive tug and pull with a more informed other -- that lead them to more in-depth considerations and penetrating ideas" (Bean & Stevens, 2002, p. 24).

Korthagen and Vasalos (2005) developed the Core Reflection model, named as the 'onion model' aimed at supporting student teachers' reflection during practicum. The assumption was that behaviors, skills, and beliefs influence how teachers function. The inner levels determine how individuals function on the outer levels, but there is also a reverse influence (from outside to inside). Two new levels are added to the levels of environment, behavior, competencies and beliefs: professional identity and mission. Reflection on the level of mission triggers such issues as 'why' they decided to become teachers, or even what they see as their calling in the world. In essence, this level is concerned with what inspires them, and what gives meaning and significance to their work or lives. This transpersonal level involves becoming aware of the meaning of people's existence in the world, and their role in relation to fellow human beings. The level of identity, in contrast, has to do with how people experience themselves and their self-concept, while the level of mission is about their experience of being part of the community. This model has dealt with the levels of identity and mission, addresses their strengths rather than their deficiencies. However, teacher educators have to deal with cases in which something 'deeper' needs to be dealt with. Many of them may be unprepared to conduct such in-depth analysis.

Kilderry, Nolan, and Noble (2004) conducted a study on guided reflection for pre-service teachers in an Australian early childhood teacher education program. Their findings suggest that various techniques helped to enhance the student teachers' ability to reflect more deeply about teaching and learning; clarify their teaching philosophy; make connections between personal beliefs and teaching and learning; as well as gaining a better understanding of the influences on their own development as teachers. The study found noticeable changes in student teachers' ability to analyze teaching and learning in more depth. The group discussions conducted in focus groups brought

about a deeper level of reflection, through which student teachers articulated their philosophy and listened to the views of others. Discussions also became a stimulus for further individual reflections, particularly, where they stood in the context of what was learnt, and what is the next action. It argued for the need to teach critical reflection skills to pre-service teachers.

Noble et al. (2005) researched the Learning Circle Approach as an alternative model to the conventional model in reflection during early childhood practicum in Australia. This approach was premised on self-managed learning groups based on key principles of adult learning to promote critical reflection. It was a qualitative case study research using primarily interview, observations and document analysis. The researchers used the Learning Circles Approach in six Australian childcare centers involving 48 students. Following six individual visits prior to the block practicum experience, students attended their placement three days per week for three weeks. Three hours on one designated day per week was set aside for participating in the Learning Circle when childcare center staff and lecturers guided students in the processes of critical reflection, evaluation, assessment and debriefing of the practicum experience. Students were encouraged to reflect on their experience, confronting issues and highlighting best practices. The findings of the study suggest that using the Learning Circle Approach during practicum provided participants with the opportunities to think differently. The context of practice in the field enhanced the student teachers' ability to critically reflect on practice. This facilitated increased understanding in the negotiation of theory and practice through the support of the more experienced practitioners, and enhanced relationship between the participants. The researchers argued that Learning Circles Approach provided a student-centered focus and a flexible approach to teaching and learning. It helped student teachers to analyze

and critically reflect theory and practice, and improve the practice within the field of early childhood education and its community (Noble et al., 2005).

Further research is required in the pedagogical and operational contexts of guided reflection and the learning circle approach to reflection during practicum. More empirical evidence is needed to determine if the approach was bringing the critical reflective outcomes as required, and if the approaches could be replicated in other early childhood contexts. Further research could also address how social power relations affect the knowledge and experience constructed, and if this integral part of the process led to a barrier or enabler. Particularly, research is needed on the power and defense mechanisms occurring in Western countries, their cultures and thus the assumptions underpinning the collective reflection approaches, the dynamics of the interactions and mechanisms in an Asian context, and so forth. The number of target students involved in the case study was 48, which was quite a large number for in-depth analysis of the issue that may have surfaced if face to face interviews were conducted. A more comprehensive design in the research methodology would allow triangulation of the data collected as it was unclear if it was the techniques used in the guided reflection or the increased interactions taking place in the focus group that brought about the deeper reflectivity, and how. Although both studies mentioned the intention to improve the level of reflection, the criteria of the reflective levels was not clearly defined for more in-depth analysis (Noble, 2005; Nolan, Raban & Waniganayake, 2005; Raban et al., 2007).

In another study, Raban et al. (2007) developed the Self-Assessment Manual (SAM) to explore pre-service teachers' developing identity as early childhood practitioners toward their impending professional career. The instrument was used to help teachers review and reflect on their training and experiences and to clarify their

philosophical stance on teaching and learning. Their responses were used as a basis for team reflection as a group by focusing on specific sections as appropriate as part of a "learning community" for the group members to share their reflections on teaching and learning.

A year later, Nolan (2008) published the findings of a study using guided reflection techniques with a group of undergraduate early childhood education student teachers in Melbourne. Various guided reflection techniques were used to facilitate reflection. This was followed by focus group discussions based on reflective principles that engaged the students in the reflective process for a one-year duration. The study aimed at helping student teachers become aware of the teaching philosophy held, how it was shaped by past experiences, as well as their beliefs and knowledge. The findings indicated that guided reflection enhanced student teachers' reflection about teaching and learning; helped to clarify their teaching philosophy, and in making connections between the two. It also generated awareness about student teachers' own development as teachers.

Research studies on reflections done collectively suggested that facilitation, appropriate guidance and support enhanced student teachers reflection and alleviated fear, uncertainty, and anxiety. Student teachers could discuss any dominant discourse in early childhood, its impact on their work, and validate their practice with other professionals in the field. In the process, alternative solutions or innovative practices could be generated (Bolton, 2014; Sumsion, 2003).

The next section discusses other research studies conducted on reflection strategies of pre-service teachers and its impact on teacher education. Hatton and Smith (1995) studied the use of reflective journals by 60 student teachers in a four-

year secondary Bachelor of Education program at a university in Sydney. This study examined the effects of structured strategies and coursework with tasks and activities that assisted student teachers with their reflection. It also investigated the types and patterns of student reflection, whether the nature of the data or evidence is affected by the types of reflection and in particular, which strategies in the courses facilitated reflection. The findings indicated that dialogs, questioning, or confronting through peer reflection helped the reflective process in a safe environment. A framework of reflective writing was identified in this study: descriptive writing (not reflective) such as report of events; descriptive reflection where student reasons based on personal judgment; dialogic reflection where students had discourse by themselves through explorations of possible reasons; and critical reflection where students considered the broader historical, social and/or political contexts when reasoning for decisions or actions taken.

LaBoskey (1999) investigated student teacher reflectivity by assessing spontaneous reflectivity through case investigations to study the patterns of reflective processes and student attitudes. It was found that the reflective thinking process required the ability and attitude of the student teachers such as a strong belief, a passion to know more, and higher order thinking skills such as the ability to analyze, synthesize, and evaluate. The study also found that student teachers in pre-service programs need opportunities for interacting with records of their teaching; other means to broaden their scope of reflective context; and need the skills and attitude of reflection itself for them to become reflective practitioners.

Lee (2005), in her doctoral studies, researched the criteria for assessing reflective thinking, and investigated how the reflective thinking process developed in pre-service teachers. Reflections of pre-service teachers were assessed from the

perspectives of content and depth. The findings included variations in the content, and the pace at which reflective thinking deepens depends on the student teacher's personal background, field experience contexts, and the mode of communication.

Etscheidt, Curran, and Sawyer (2012) studied the development of reflection over time using multiple strategies for different learners in teacher education. Based on those conceptualizations, a three-level model of reflection for preservice students was developed and described. The model taken from Van Manen (1977) included technical reflection involving a critique of lesson development and delivery; deliberative reflection involving interactive journal writing and video-based analysis; and critical reflection involving topical discussion during seminars. This tier-structured model offered opportunities for reflection in various orientations, namely technical, deliberative, and critical. In addition to instructional competence, students were engaged in an informed and reasoned analysis of pedagogy as well as an ideological inquiry into the moral and ethical consequences of teaching conducted prior to student teaching; concurrently and in both phases. This structured approach integrated multiple orientations to achieve a cohesive and responsive educational experience. Further study could be done to determine if the increase in the level of reflectivity is due to those structured reflection activities provided, or through the discussions taking place throughout the research duration. One limitation of the model was the link between reflection and practice or the experiences, assuming each type of reflection only operate when those designated activities took place (Etscheidt et al., 2012).

In a study on assessing reflection for six early childhood student teachers, Nolan and Sim (2011) used a model adapted from Boud, Keogh, and Walker (1985)'s reflective thinking framework. Their responses from the experience were aligned to

those six levels of reflective thinking. The initial results suggested that this model provided a clear and objective framework for evaluating student teachers' levels of reflection. However, the research design did not indicate if there was a shift in the student teachers' reflectivity to higher levels of reflection and the study was conducted in the Western context. It will be meaningful to study the use of this framework in the Malaysian context.

Hayden, Moore-Russo, and Marino (2013) researched how systematic reflection could improve teaching practice, impact student learning, and develop pedagogical content knowledge for high school mathematics teaching. This was a case study on one student's progression from descriptive reflection to comparative and critical reflection. It was found that the student's engagement improved with an application of the core mathematical principles, as well as changes in the focus of his reflection. For instance, from a novice who focused on his own performance in the classroom, to one that focused on how he could transform his teaching to cater to both the mathematical content and the learners at hand. Hayden et al. (2013) argued that, with guidance, systematic reflection by the students facilitated deeper reflection and transformative learning. However, this qualitative study was conducted only on one student; further studies could be done with other student teachers in a different context.

Toom et al. (2014) conducted a study based on a constructivist account of teacher knowledge through a detailed analysis of various patterns of reflection in student teacher portfolios. Data were collected using guided reflection that was video-recorded, and stimulated recall interview. The student teachers selected a critical incident showing their own intentions during reflective discussion and in portfolio. With the help of the researcher, they considered the incident from different perspectives and in a wider context during the reflective discussion. They were then

requested to write a reflective portfolio on their teaching experiences, considering the aims and goals of the practicum teaching, and how they achieved it in relation to the theoretical perspectives. They were also requested to reflect on the video- recorded critical incident in a wider context. The researcher then analyzed the portfolio texts using the deductive and inductive framework, along with a static and dynamic dimension. It was found that, when supported by guided reflection, student teachers were able to reflect beyond merely practical issues on teaching, raise various concerns about practice and integrate practice with theoretical understanding. However, this reflective discussion was researcher-led and was not part of the course requirement in a natural setting. The researcher influence on the discussion was not elaborated further in the study.

Malthouse, Roffey-Barentsen, and Watts (2014) investigated situated reflective practice in professional settings, carried out in a professional education and training organization with 15 participants who were a group of trainers. The study focused on reflection in the context in the setting as framed to be relational among people, place and activities. Data were collected through qualitative interviews. The findings highlighted contextual differences in reflections among practitioners. Although the nature of professional reflective practice within this field of corporate training was the main thrust, the expressions of the contextual elements as mentioned intriguing and social life was seen as an interplay of agency and structure. It was argued that certain situations at a large corporation led to people having little control. The major finding was that five characteristics represented increasing structural distance in space and time between the reflective practitioner and the professional situation in which they work. Self-distance and structural- distance were immediate personal constraints; experience by proxy; circumstances where the locus of power is

separate from the participant; issues beyond the organization, and anticipations on the horizon.

Emerging research evidence has suggested that early childhood teacher training programs that combine lectures with ongoing pedagogical guidance support, such as collective reflection, have improved early childhood program quality, as well as cognitive and social outcomes for children (Eurofound, 2015). Research findings have indicated that reflection groups are effective regardless of the contexts, drawing from results of countries that have well established early childhood systems, as well as those with poorly subsidized early childhood systems.

In Malaysia, limited published materials on reflective practice in teacher education are found. Maarof (2007) examined the reflective journal entries of 42 trainee teachers who underwent teaching practicum in schools. This study investigated the types of reflections using the framework adapted from Hatton and Smith (1995), strategies used, and trainee teachers' perceptions on reflective journal writing. The findings revealed that the trainee teachers engaged in all the types of reflection: Descriptive Reflection, Dialogic Reflection, Descriptive Writing and Critical Reflection. Approximately 77 per cent of the trainees stated that the journal writing task helped them to evaluate their teaching methods, be more aware of their own teaching and associated problems, and identify materials and aids for their teaching. The study advocated more explicit training in using reflective journals for teacher training and using reflective journal writing in daily professional teaching.

Asmawi (2011) in a PhD study explored reflective practice and the affordances and limitations of the blog technology used in one Malaysian TESL community. The research focused on ten student teachers of the Bachelor of Education (Teaching of

English as a Second Language) degree at a university in Malaysia during practicum. It examined the student teachers' reflective stance, how they participated in online reflection, the role of the moderator in mediating reflective practice, and the different ways that blog resources were used for reflective practice within the online community of practice. Data were collected from the student teachers' blogs, the moderator's journals, and online interviews and analyzed using the theories of reflective practice, sociocultural theory, community of practice, as well as the appraisal theory of linguistic analysis. The study found that certain approaches to blogging were significant for reflective practice in blog-based learning environments, while other approaches were limiting.

Choy and Oo (2012) conducted a study using an interpretive data analysis approach on a sample of 60 lecturers from institutions of higher learning in Malaysia. They found that the lecturers lack critical reflection characterized by assumption analysis, contextual awareness, imaginative speculation and reflective skepticism. Instead, the samples were interested in how they were assessed by their students and superiors implying that they had difficulty accepting assessments from those perceived as subordinates. It was found that lecturers viewed student feedback as being judged by them. They focused on maintaining their own perceived sense of self- worth and self-efficacy, rather than seeing students' comments as a means for improvement. A lack of high meta-cognitive awareness of their own strengths and weaknesses formed a barrier to learning as well as effective teaching. This study did not delve deeply into the teacher reflective process. The values, beliefs and assumptions could have been analyzed further for possible intervention and professional development. The reflection process, interactions between teachers, students and colleagues and how these affect learning deserve further investigation.

Research evidence has pointed to collective reflection as a more appropriate pedagogical approach for nurturing the reflective teacher. Student teachers' reflective thinking could be enhanced by a skillful mentors, engaging and meaningful dialogs, and a conducive social climate.

The chapter has discussed the literature pertinent to this research study. The gaps in the knowledge base and empirical research were identified for further research in the area of Group Dialogic Reflection as a Pedagogical Approach in pre-service early childhood practicum. To make theory and practice coherent and productive within this complex and intellectually demanding professional practice, reflection requires quality support given by college supervisors and placement mentors. The next chapter will present the research methodology used in the study.

CHAPTER 3: RESEARCH METHODOLOGY

Introduction

This chapter presents the research methodology, particularly the research design and paradigm appropriate for addressing the research objectives and questions. The Case Study method and the research design will be discussed. The research site and sample selection process will be described. This is followed by the strategies for verification required to give the design trustworthiness, as well as the data collection techniques, phases and processes. Data analysis strategies are also discussed in terms of data condensation and data display methods, leading to how the conclusions are drawn and verified.

Qualitative research method is an appropriate method for this study as it seeks to understand Group Dialogic Reflection as a phenomenon in a context-specific setting. Qualitative research as a method has received growing acceptance in educational research (Denzin & Lincoln, 2005; Firestone, 1987). The study aimed at exploring and acquiring an in-depth understanding of student teachers' reflective thinking and the meanings constructed during Group Dialogic Reflection in the early childhood practicum. Particularly, the participants' perspectives, the meanings that student teachers, mentors and supervisors had constructed, how they had experienced it, and how they made sense of it. The focus was on the process and what participants interpreted about their experiences, rather than the outcomes (Merriam, 2009). Hence, a qualitative research method allowed the researcher to find illumination, understanding, as well as application to similar situations, as the patterns or similar methods might be applicable to other early childhood practicum contexts.

Qualitative research is "situated" as it "locates the observer in the world" (Denzin & Lincoln, 2005, p. 3), through which interpretations of the practices in this study make the complex and dynamic social contexts visible. A fuller account of the many interactions that occur in the research site can be captured through qualitative research (Merriam, 2009). The researcher needs to get a closer and clearer picture of this phenomenon, specifically, how reflection is conducted in group situations among student teachers, mentors and supervisors during the early childhood practicum. This is not a common practice in the Malaysian early childhood teacher training institutions, as mentioned earlier in the preceding chapter.

More importantly, this research may find new perspectives in reflective practice, or deeper insights into already known information, but may not be found easily quantitatively. From the reader's perspective, qualitative data might help other student teachers, teacher educators and mentors to understand better by information presented in the form they usually experience, as the study would provide typically rich experiences and insights into the phenomena (Firestone, 1987; Lincoln & Guba, 1985). Further meanings and significance in teacher education could be pursued when the phenomenon is investigated in the natural setting where student teachers work, and meanings of what the student teachers and supervisors say are interpreted (Denzin & Lincoln, 2005; Lincoln & Guba, 1985).

Research Paradigm

The underlying theoretical paradigm of this research study was interpretive constructivism. Interpretive theories are rooted in various fields and philosophy such as hermeneutics, semiotics, phenomenology, and symbolic interactionism. The interpretive paradigm opposed the positivist ontological view that there was one reality and that it was capable of being studied in parts. Constructivism began with the

publication of naturalistic inquiry in 1985 by Lincoln and Guba, leading to the development of the constructivist paradigm in 1989. Its presupposition was that social reality was relative to the particular individuals involved, and their context. Relativism was the ontological presupposition of constructivism (Firestone, 1987; Lincoln & Guba, 1985, 2013).

The choice for a constructivist paradigm in this research study came from the researcher's intention to explore reflection activities among early childhood student teachers and how Group Dialogic Reflection activities promoted reflective thinking. It was not so much about how many of the trainees were involved in the process or its effectiveness. Each student teacher, placement mentor and college supervisor's experiences would be different from another. Therefore, transactional subjectivity is the basic presupposition of constructivism. The participants' prior experience, knowledge, and social status influenced their interpretation or construction of the particular context. Hence, knowledge was created, rather than discovered; and existed only in the space in which it was generated (Lincoln & Guba, 2013).

This study was not about finding out about the absolute truth, but subjective transactions between the researcher (the human instrument) and the research participants involved in Group Dialogic Reflection. Realities were constructed and co-constructed through interactions between the researcher and the research participants, from which, meaning and desired practice in the early childhood practicum could be created (Lincoln & Guba, 1985, 2013). Although the researcher was not aiming at generalizing the findings, the meanings created may possibly offer some transferability. Those constructs would become the end product of inherently subjective interpretations. For instance, what did early childhood student teachers understand about Group Dialogic Reflection? How did their mentors and supervisors

understand it? Different representations of the constructs could lead to different understandings, expressions or formulations. Hence, it was of paramount importance that each participant contributed to the dialogs on reflection of their practice, as each participant brought a different perspective about early childhood practices.

As what Lincoln and Guba (2013) argued, constructions were the products of individual or shared sense-making efforts and did not represent the truth. They were literally the creation of the individuals as a result of their interactions within a particular context. There was no absolute truth as it depended on the expressions of construction, just as there were always many views of the mountain, depending on which side of the mountain you are located. The lived experience of the participants (student teachers, mentors and supervisors) involved in Group Dialogic Reflection was socially constructed (Firestone, 1987; Lincoln & Guba, 1985; Merriam, 2009; Patton, 1990).

In this constructivist paradigm, the methodology appropriate to interpretive constructivism would be one that featured reading of the mind and meaning making, as well as sense making of the knowers. The processes involved uncovering the constructions held by the various knowers through sharing and pursuing issues deemed critical by both researcher and participants (Lincoln & Guba, 2013).

As such, the axiology, the value inherent in this study, was the belief in shared and co-creation of reality, in which the values of the researcher, the research participants as well as the values of the context of the practice in early childhood education and teacher education were uncovered. Ultimately, the values of the researcher and participants and the implication on practice would hopefully be made

known to the others in the same field and for extending early childhood teachers' reflective thought process and knowledge building.

Review of Research Objectives

The following section discusses the review process of research objectives and research questions. Through the researcher's interactions with the research participants and the data collected, it became increasing obvious that the parameter of Group Dialogic Reflection in this study was not as absolute and static as it appeared to be in the specific social setting. Taking cognizance of the constructivist paradigm, and Merriam (1998)'s stand on capturing the social phenomena by doing as little as possible to disrupt the natural setting, the researcher views reality as being constructed by individuals interacting with their social worlds. To acknowleldge the meanings constructed by the participants, the researcher asked semi-structured research questions, listened to the particpants and shaped the questions further.

In a qualitative research, the researcher was not seen as the expert with the best questions (Creswell, 2007; Lincoln & Guba, 2013). Questions were not static and meanings were being constructed in the process. Research question could change during the process of research to reflect a deeper understanding of the problem (Creswell, 2007). The researcher was obligated to present the data from the research participants' views, rather than that of the researcher who is a detached spectator. For instance, the field notes collected from the program leader's interview changed the researcher's perspective of the scope of Group Dialogic Reflection that was beyond just the dialogs that took place as conceptualized originally. The program leader suggested that apart from Group Dialogic Reflection, there were other opportunities to reflect and supporting activities that reinforce reflection. However, Group Dialogic

Reflection gave opportunities for student teachers to think in a different perspective and link theory and practice, making the practice more real and valid (INT/PL/page 2).

As the research proceeded, many findings supported what she said. Many other activities that influenced the student's reflection were uncovered. As this was an exploratory case study, the researcher had to be open-minded about the process, model, or approach, so that important details other than Group Dialogic Reflection would be captured. As a result, the researcher decided that the research would focus on the opportunities that would engage student teachers in reflective thinking and otherwise. Further analysis on the data also revealed recurring patterns and themes consistent with this viewpoint (DOC/FN). Therefore, the researcher had decided to review the research objectives and questions. The following were revised.

Revised Research Objectives:

The following are the objectives of the research study:

1. Identify opportunities for student teachers to engage in reflective thinking during practicum.
2. Explore opportunities that facilitate deep reflection in student teachers, individually and collectively.
3. Examine the facilitation process in group dialogic reflection that supports student teacher' reflective thinking and practice.

Revised Research Questions:

This research was designed to answer the following research questions based on the research objectives:

1. What are the opportunities for student teachers to engage in reflective thinking during practicum?

2. How do these opportunities facilitate deep reflection in student teachers, individually and collectively?

3. How does the facilitation process in group dialogic reflection support student teacher' reflective thinking and practice?

The rationale for the changes made to the research questions are recorded in Table 3.1.

Table 3.1

Rationale for Changes to Research Questions

Original Research Questions	Revised Research Questions	Rationale
1. Explore what student teachers reflect on during practicum, individually and collectively?	What are the opportunities for engaging student teachers' in reflective thinking during practicum?	The scope of the three way dialogue was beyond what was originally conceptualized. Many other opportunities that supported and reinforced reflection. The research questions should focus on the opportunities that engage student teacher in reflective thinking or otherwise.
2. What are the processes in Group Dialogic Reflection during early childhood practicum?	How do these opportunities facilitate deep reflection in student teachers, individually and collectively?	Each of those opportunities to reflect involved rather complex processes beyond just the three way dialogue. To direct the data analysis towards how these opportunities facilitate deep reflection in student teachers, both at the individual and collective levels. Three way dialogue conducted in groups offered unique opportunities for student teachers to think and reflect in different perspectives, link theory and practice, and making the practice more grounded. Other dimensions such of the facilitation and supervisory styles, the learner's learning styles, situated learning, etc, expanded understanding of the phenomena.
3.How do the processes in Group Dialogic Reflection impact student teachers' reflective thinking during early childhood practicum?	How does the facilitation process in Group Dialogic Reflection support student teacher' reflective thinking?	The preceding questions explored the opportunities for individual and collective reflections. The 3rd question focused on the facilitation process during the three way dialog, an important theme that emerged from the observation and interview data.
4.Identify the enabling factors in the Group Dialogic Reflection process that impact student teachers' reflective thinking		This question was similar to the earlier one on the process, except that it focused on the facilitation process during group dialogic reflection where the conceptual framework featured situated learning, double loop learning, sharing with multiple perspectives Both facilitating factors and barriers would be explored.

Research Method

The following section discusses the research method used for this study. The case study method is chosen for this research study as it is appropriate for qualitative

research and the research paradigm pursued. Case Study is known to be a useful method for investigating contemporary cases aimed at illumination and understanding, studying information-rich cases in greater depth (Merriam, 1998; Patton, 1990, Stake, 1995; Yin, 1994). This method allows the researcher to unveil in-depth understanding of a "case" within the bounded system. Specifically, this case study will reveal more categorical and in-depth meanings in Group Dialogic Reflection during early childhood practicum.

Many research studies on reflective practice in teacher education use case study as the method of inquiry (Calderhead, 1987; Goodman, 1984; Hume, 2009; LaBoskey, 1994; Moran & Dallat, 1995; Ortlipp, 2008; Stewart & Lessner, 2010; Sumsion, 2003). Case study involves an in-depth description and analysis of a bounded (*a case*) or multiple bounded systems (*cases*) over a period of time. It also recognizes the many variables operating in a single case. Therefore, more than one source of evidence is required in order to capture the implications of these variables (Silverman, 2011). "Multiple sources of information" (e.g., observations, interviews, audiovisual materials, and documents and reports) were required to produce the case *description* and case-based themes (p. 73, in Merriam, 2009, p. 43).

This case study is heuristic in nature. Its objective is to illuminate the understanding of the phenomenon to bring about the construction of new meanings in Group Dialogic Reflection during early childhood practicum of the Case. Thus, it locates or constructs the unit of analysis of Dialogic Reflection Groups between student teachers, placement mentors and college supervisors during early childhood practicum to create meaningful interpretations from the construction. As each student is placed in a unique and complex social context, case study caters to the sensitivity in each setting, or what Yin (2009) defined as "an empirical enquiry that investigates a

contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 18).

Case study is also useful in retaining holistic and meaningful characteristics of real life event of individuals or a small group of participants, drawing conclusion only about the participant or group, only in that specific context (Nolan et al., 2013; Yin, 2009). Hence, it allows "naturalistic generalization" from the constructions that emerge from those "icons of experience" (Stake, 2007, p. 3, in Merriam, 2009, p. 44). It is intended that the new insights from the study can be construed as tentative hypotheses that would help in developing the pedagogical approach, and for future research. This research, therefore, could help in advancing knowledge in the area of reflective practice in early childhood teacher education.

Case study design. The following section presents the design of this case study research. This case study is based on the "embedded, single case design" with more than one "unit of analysis" incorporated into the design of the study. Data were collected from each of these units of analysis separately (Yin, 2009, p. 46). This is a single Case involving an early childhood teacher training institution in Selangor, Malaysia. The units of analysis were selected within the Case involving student teacher, supervisor and placement mentor in a triad. Each unit of analysis would provide literal replications of the results in relation to the theories reviewed in the earlier chapter. It was expected that the contexts of the placement settings would be different from one another. Therefore, the researcher would be looking at a range of similar and contrasting results to add confidence to the data, and at the same time enhancing data precision, validity and stability (Miles & Huberman, 1994; Yin, 2009). If the differences in each of the triad could still bring us to common conclusions from all the cases, they would have *immeasurably expanded external generalization* of the

findings as well as the degree of certainty with the results in this study (Yin, 2009, p. 54). Its generalization would be done on conceptual grounds within the case boundaries, and not on representative grounds. This is the common stand in qualitative research (Yin, 2009).

Sample Selection

The Case in this study was selected based on purposeful sampling technique. The criteria was teacher training institution that offered early childhood teacher training program at undergraduate level, and conducted Group Dialogic Reflection involving student teacher, college supervisor and placement mentor in its practicum program. These criteria would provide rich information for an in-depth study in this research. In the Case chosen, the unique sampling method applied, where it displayed the characteristics required by the research study. The unique sample could reveal insight for a case study into Group Dialogic Reflection activities during early childhood practicum, and how these activities could answer the research questions (Patton, 1987). The following paragraphs discuss the process of sample selection.

In February 2014, the researcher started to identify possible cases through the Malaysian Qualifications Agency website, looking for colleges and universities that conducted programs in early childhood education. There were about fifteen higher educational institutions offering pre-service early childhood teacher education programs. From the list, only a few offered a bachelor's degree in early childhood education. Website searches as well as telephone interviews with the colleges and universities, experienced teacher educators and professors in early childhood teacher education were conducted. It was found that very few institutions could offer an opportunity for the study as most practicum programs did not offer reflective dialogs conducted in group settings involving placement mentor, student teacher and

supervisor. One institution conducted reflective dialogs between the student teacher, mentor and supervisor during practicum, but it did not offering any early childhood pre-service teacher training programs. Finally, in March 2014, the researcher found a teacher training College located in Selangor that offered early childhood programs, and had a franchised Bachelor's degree in Early Years Education from the UK which fitted into the criteria for purposive sampling required for the research. It was a private teacher education institution offering early childhood pre-service teacher education programs in Selangor. In this particular franchised program from the UK, various reflection activities for student teachers were conducted during practicum, such as journal reflection, shared reflection; as well as the three-way dialog, which is a group dialogic reflection (DOC/RJ:3).

The Case – An Early Childhood Teacher Training College

This Teacher Training College provided a case within the bounded system, in which it offered various reflection activities conducted individually and in groups, and reflective dialogs took place among early childhood student teachers, placement administrator mentors and college supervisors.

According to the website, this College was established in January1999 as one of the first private early childhood teacher training institutions in early childhood education. It belonged to a large education group. Its history dated back to 1975, and it has a student population of approximately 25,000. Located in Subang Jaya, this College had approximately 6,500 students and offered a wide range of programs from foundation and diploma up to master's level in various fields of Early Childhood Education, Business and Accounting, Technology and Innovation, Engineering, and so forth. The Faculty of Education and Social Sciences of the College offered early

childhood pre-service teacher education programs ranging from certificate to master's degree, with about 800 students.

This research site was recognized as one of the leading institutions for early childhood teacher education programs with over thousands of graduates in early childhood since the Faculty establishment in 1999. It was also appointed as Champion of Entry Point Project 2 by the Performance Management & Delivery Unit (PEMANDU), Prime Minister's Department. Through this, the government of Malaysia has appointed the College as the Champion of Entry Point Project (EPP) 2 under the Education National Key Economic Areas (NKEA) to promote and train ECCE practitioners in the country. In 2013, a Centre of Excellence concentrating on the ECCE programs was established for developing and improving Early Childhood programs.

The program of focus in this research study was the Bachelor's degree in Early Years Education, a franchised program from the United Kingdom. According to its brochure and website information, this London-based partner University was founded in 1890 with 3 campuses in south-east London and north Kent. The student population of the university was approximately 23,000 with students from over 140 countries. This University aimed at transforming the lives of students from a wide range of backgrounds by providing an education that enabled them to become creative and confident contributors to society. It had a long history of partnering with Malaysian tertiary institutions offering various programs for local students. Its Faculty of Education & Health in the UK had over 100 years history of delivering high quality education and training, emphasizing on graduates who would make a real difference to their communities. Its teaching staff had both practical know-how and academic expertise and they consistently receive high ratings from students. The faculty aimed

at exemplifying the very best practice in learning, teaching and assessment through using electronic media, interactive lectures and seminars, peer learning, tutorials and a wide range of resources. Pastoral care and student support, as well as strong and diverse partnerships with educational institutions in practicum experience in ensuring professional growth are stated as one of the strengths of the faculty (DOC/RJ:7).

On 26 May 2014, the researcher made some enquiries regarding the local program from the College administration, particularly about the general program information and its practicum policies, and how three-way dialog was incorporated into the program. The researcher was keen to find out if there were student teachers undergoing practicum during the period of data collection from April 2014-November 2014. The Faculty program leader gave the researcher a copy of the program handbook. The handbook had a comprehensive description of the program including how the practicum was conducted. A review on the program before the research study was conducted helped to plan the research design.

According to the program coordinator, there was a small cohort of about 12 students doing their practicum during the period. This Bachelor's degree in Early Years Education program was jointly coordinated by two program leaders, one from the UK, and one from Malaysia. The local Malaysian students in the program were registered into the program of the UK University. Some brochures about the program information were collected (DOC/RJ).

The early childhood pre-service teacher training program. From the program brochure and website information, this Bachelor's degree in Early Years Education program aimed at developing students' knowledge and understanding of the care and education of young children. It incorporated common core values practice

and policies of the UK early years workforce. The program duration was three years full time. The entry requirement was STPM / GCE A-Level passed with at least 3 principals; or University Foundation Programme (or its equivalent); and Diploma in Early Childhood Education or equivalent qualification (with Credits in English & Maths in SPM). A unique feature of the program was its expectation that student teachers would undertake work based placement throughout the 3- year program.

According to the UK early years teacher's status requirement, student teachers were expected to demonstrate the ability to reflect and adapt in the changing context of the early years environment, which is the result of the social, political and economic development of the environment surrounding the child, locally or internationally. The early years teacher was expected to model skills and behaviors to safeguard and promote excellent outcomes for young children's education and care. They were also required to have the leadership skills and personal qualities to change practice; support and mentor others, raise expectations; and encourage and support learning and professional development. These statements demonstrated the importance of the student teacher being trained to be early years teachers to become a critical reflective practitioner in order to bring about change in the workplace (DOC/INFO: 4).

According to the settings experience guide, the objectives of the practicum experience were as follows (researcher's emphases were highlighted in italics):

- plan, implement and evaluate an integrated and inclusive curriculum which meets the learning and developmental needs of individual and groups of young children.
- Reflect on their practice in order to improve the quality of their practice and to identify their own professional development needs (researcher's emphasis)

- evaluate their planning and reflect on the needs of the children (researcher's emphasis)

- communicate effectively with children, families, staff and other Early Years professionals demonstrate ethical practice within the context of children's rights and equality

- provide active and alert supervision of children and show initiative in the safeguarding young children and maintaining a safe and healthy environment

- to provide effective evidence of developing skills to support the common core framework. (DOC/INFO:7)

The objectives of the practicum experience emphasized the need for student teachers to reflect on practice in order to improve their workplace practice, as well as identifying the need for their own professional development. Student teachers were also expected to evaluate on their planning and reflect on the needs of the children in the placement center as part of the core standards required for early years practitioners in the UK.

Typically, a year one student had to undertake a 40-day (2 days per week over the academic year) of practicum experience in an early childhood setting. During this experience, the students were expected to gain practical experience of working within an early years setting, gain experience in planning, implementing and evaluating the Early Years Foundation Stage and key stage 1; as well as developing skills and understanding of child advocacy, ethical practice and the context of children's rights and practice implications (DOC/INFO:4). This course was conducted alongside Introduction to Children's workplace experience, and student teachers were required to complete the setting experience throughout the whole academic year and develop a portfolio of evidence. Students enrolled in practicum would have completed courses

in 'The World from a Child's Perspective', 'Understanding and Managing Children's Behaviour', 'Engaging Children's Play', 'Children as Confident Learners', and 'Introduction to Health and Well Being'.

This program emphasized practice that supported the theories integral to the theoretical knowledge gained from studies. Student teachers were required to experience the early years practice through practicum experience. This experience aims at extending and enhancing their skills and knowledge in order to work within the common skills framework. For instance, student teachers were expected to carry out activities and demonstrate evidence of knowledge and skills of common core standards in effective practice; relationships with children; communication and working partnerships with families and carers; team work and collaborative practice and personal development.

In the UK, the students may progress on to different routes including Early Years Professional Status (EYPS) and Qualified Teacher's Status (QTS) by the third year of the program. The EYPS is a graduate level practitioners award for the Early Years Foundation Stage (ages 0 – 5), based on 39 standards for the assessment and accreditation. QTS is required in England and Wales to work as a teacher of children in state schools under local authority control, and in special education schools. Student teachers are expected to regularly reflect on their practice to ensure they are working toward professional standards.

Practicum. During the researcher's visit to the College, the program leader and tutors revealed how the courses were conducted, the practicum process and placement arrangements, for instance, how three-way dialogs were held at least twice a year. They showed some of the materials such as their program handbook and course

requirements. For instance, the handbook informed the researcher on workplace practicum and reflection journal (DOC/RJ: 17). Student teachers was required to develop a comprehensive portfolio collected over three semesters demonstrating understanding of the Early Years Professional's role including planning for children's learning; showing good working knowledge of the Early Years Foundations Stage and Every Child Matters agenda. This work based portfolio was a form of summative assessment that forms 100 percent of the weighting. The visits from the supervisor were required to support student learning. In the portfolio, reflective journal was one of the assessment requirements. The course did not specify the format of the journal, but student teachers were advised to show evidence of the aspects over the course of the workplace experience as follows:

As I look back on the day what were the most significant events?

In what ways was this day unique; different from other days?

Did I have any particular meaningful conversations?

What did I learn today? What did I accomplish? Did I fail at anything?

What can I learn from this?

What links/ insights have I made or can I make between policy theory and practice?

Did I do any reading? What were my reactions to this?

How did I feel during the day?

(DOC/RJ: 17)

The placement mentor. Placement mentor was one of the participants during the three-way dialog. The role of the center based placement mentors was described in the

Setting Guide. They were assigned as placement mentors to student teachers involved in this study, supervising them with the setting policies and practices, particularly with regard to health and safety policies; roles, responsibilities and duties regarding planning for the children's learning and development covering all activities relevant to working with children in the early years setting. It included daily, short term and long term planning. The mentor and the student teacher were expected to be in constant dialog and discussion on the objectives, experiences, strategies, techniques and resources to support planning and implementation; observation and evaluation of children and appropriate documentation as well as administrative responsibilities. Feedback about the student teacher's skills and knowledge were required, and documented in the progress review meeting forms with regard to the Setting Experience General Objectives and the Professional Standards (DOC/INFO).

The university/college supervisor. The supervisor, or what the University referred to as Link Tutors, was the College staff who supported the student teachers involved in this study. The Supervisor made visits to the setting to monitor progress and support practice of candidates, and conducted the three-way dialog with the student teacher and placement mentor. At various times progress review meetings were held with the student teachers to ensure that they work toward Professional Standards.

The placement settings for the student teachers were organized by the College. Student teachers usually contact placements themselves to organize a pre-setting interview, bringing with them an up-to-date Curriculum Vitae and personal and emergency contact details. Prior to starting their practicum, students were required to develop a personal action plan to be shared with the setting. All early childhood student teachers were required to spend a minimum of 40 days over the academic year (equivalent to seven hours per day), involving themselves with the planning and

implementing experiences for the children, care and education routines, as well as working with and communicating with parents and attending staff meetings (DOC/INFO).

During practicum, group reflective dialogue sessions, in what the University referred to as a three-way dialog, would be held with the student teacher, supervisor and placement Mentor at the workplace. A progress review form would be filled in at least twice during the placement. During the three- way reflective dialog, the supervisor and mentor focus on the student teacher progressing toward achieving the Setting Experience General Objectives and the Professional Standards.

Selection of unit of analysis. Having identified the Case, locating and constructing the unit of analysis within the case was the important next step in de-constructing the meanings and constructing new meanings to group dialogic reflection (Merriam, 2009). Unit of analysis was necessary for literal replications of the results in relation to the theories. Based on purposive sampling, the criteria for selecting the units of analysis were student teachers who were i) undergoing their practicum, ii) placed in early childhood setting that conducted Group Dialogic Reflection with their placement mentors and college supervisors in a triad. These criteria for purposive sampling for the unit of analysis were critical cases and convenient cases as referred to by Patton (1990). Critical cases were those that would yield maximum information, or information rich cases to contribute to the study. The shortlisted student teachers were those undergoing practicum, and were involved in the group dialogic reflection in the same year when this research study was conducted. This selection process was done in consultation with the College program leader.

After the researcher had received consent to conduct the research study at the College, numerous visits were made to establish contacts with the program leader from the UK, the program supervisors, students, as well as sitting in their meeting sessions with mentors, program leader and students (DOC/RJ). On 26 June 2014, the program coordinator emailed a list of the students who were undergoing practicum and were about to have the group dialogic reflection or what was referred to as the three-way dialog at the placement center. Four students were from Year 1 Term 3, and 8 students were from year 1 term 2. There were 15 new students in year 1, and nineteen year 2 students in the program. However, their name list was not provided as they were not on practicum during the period of the research. The researcher visited the College for more detailed understanding of how the placement worked (DOC/RJ: 9).

Upon request by the faculty, on 4 July and 18 July 2014, the researcher conducted a Reflective Practice Workshop for its students. The participants from various stages of their studies from year one to year three attended the session voluntarily. As the researcher wished to know more about the student teachers' understanding on reflection, all students were welcome to the session. Informed consent forms were distributed to all participants at the workshop (DOC/RJ). Those who wished to participate were requested to fill in the consent form. At the end of the workshop, the researcher distributed a paper pencil preliminary questionnaire (Refer to Appendix 1: Preliminary Questionnaire). The questionnaire was adapted from the Self-Assessment Manual (SAM) for early childhood practitioners developed by Raban et al. (2007). This self-assessment manual was originally used to assess the developing identity of early childhood practitioners through reflections of their training and experiences; and to clarify their philosophical stance on teaching and learning. This instrument was adapted to obtain demographic information of the student teachers

including their past and current educational and training experiences, and reflection of their philosophical stance on teaching and learning. From the workshop participants, 45 questionnaires were returned. Overall, the researcher had a better understanding of the reflection skills of the participants and their motivations and aspirations as well as their personal philosophies through their sharing sessions. Some participants did not submit the forms after the workshop. It was assumed that they were not keen on taking part in the research.

During this exercise, the researcher had learnt that although the researcher had personally known some of the College staff there, the presence there was a different role as a researcher who had embarked onto a journey of discovery. However, it must be acknowledged that the trust they had for the researcher as someone they were familiar with was really important. The researcher was able to have face to face sessions and open discussions with the staff and students who shared their aspirations, challenges and struggles as early childhood students (DOC/RJ).

Selection of research participants. Once the preliminary questionnaire data were analyzed using the rubrics adapted from Larrivee (2000), the data were used in selection of student teachers. Their ability to reflect on their personal teaching philosophy was categorized from those requiring assistance to those who appeared more competent. There were 14 Year One student teachers who had given informed consent for this research study. Eight student teachers were randomly chosen from the 14 consenting students ensuring that all levels of reflective ability were represented in the sample. But some of the students had already completed the three-way dialog, two had transferred to another university, and one student was unavailable. In the end, four student teachers were selected from the Year 1 cohort of the Bachelor of Early Years Education degree in consultation with the College Program Coordinator. The selection

was based on pre-service teachers who were involved in group dialogic meetings relating to their placement at the time when the research was conducted, and were willing to give consent to participate (DOC/RJ:23). The process of participant selection for the units of analysis is as summarized in the flowchart shown in the following Figure 3.1:
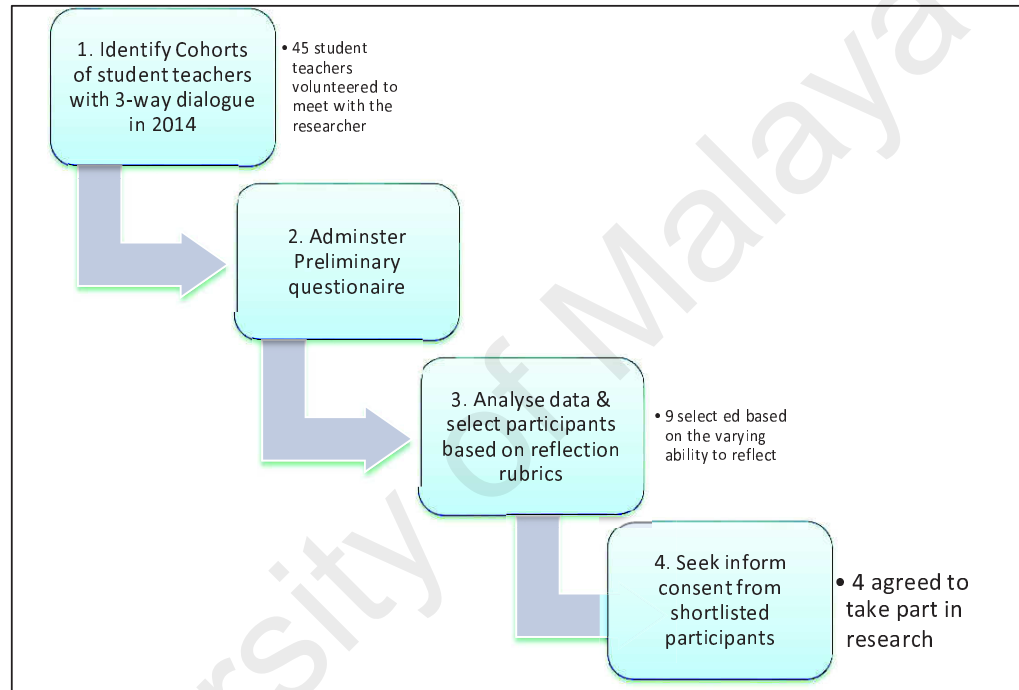
Figure 3.1 Participant Selection – Unit of Analysis.

Finally, there were four units of analysis of the case consisting of student teacher, practicum mentor and practicum supervisor that were involved in the three- way dialog. Each unit of analysis involved a triad relationship comprising a student teacher, placement mentor and college supervisor that conducted Group Dialogic Reflection during early childhood practicum as shown in the following Table 3.2:

Table 3.2

Participants in this Single Case Study

Unit of Analysis	Participants		
	Student Teacher	**Mentor**	**Supervisor**
A	1	1	1
B	1	1	1
C	1	1	1
D	1	1	1
	4	4	4
Total	12		

Finally, in the four units of analysis identified, four triads of three participants in each unit of analysis were included, totaling eleven participants in the research study, as opposed to twelve as one of the supervisors had two student teachers in the same placement center. Hence, the final units of analysis consisted of four triads with three interacting participants. The details of each research participant are presented in Table 3.3 as follows:

Table 3.3

Research Participants

Sample No	Pseudo-nym	Age	Gender	Year/ Semester	Teaching Experience	College Teaching Experience	Age group of children taught	Highest Qualification
R7	ST1	21	Female	Y 1Sem 2	½ year	-	5-6	Pursuing Bachelor's degree
R8	ST2	20	Female	Y1 Sem2	Less than one year	-	6	Pursuing Bachelor's degree
R9	ST3	19	Female	Y 1 Sem2	½ year	-	4	Pursuing Bachelor's degree
R12	ST4	20	Female	Y1 Sem2	½ year	-	5	Pursuing Bachelor's degree
M1	M1	32	Female	-	14	-	4-6	Diploma in Montessori
M2	M2	45	Female	-	10	-	4-6	Diploma in Montessori
M3	M3	44	Female	-	12	-	2-6	BA in Accounting, Diploma in Montessori
M4	M4	37	Female	-	7	-	2-6	BA in IT
SV1	SV1	44	Female	-	4	10	2-6	MEd, Diploma in Montessori
SV2	SV2	44	Female	-	8	5	2-12	M Ed, B Ed TESL
SV3	SV3	45	Female	-	2	13	2-6	MA, BA, Diploma in Montessori

Data Collection

In this study, the researcher acted as the primary instrument for data collection and analysis. In the process, the researcher learnt to be responsive and adaptive in order to capture the elements of idiosyncrasy; as well as expand and clarify understanding through verbal and non-verbal communication, seeking uniqueness of each situation in the study. The researcher also acknowledged and was mindful of the biases and weaknesses of the method and to monitor how data were shaping the results of the study (Patton, 1990).

The following section discusses the three methods of data collection as sources of evidence: interviews, direct observations, and document analysis (Yin, 2009). Data collection in this study occurred over a period of one year four months between April 2014 and July 2015. The schedule for data collection and a summary of the research activities and actions are displayed in Figure 3.2:

Begin Data Collection **April to June 2014**	
Data Collection Procedures Sample/case selection Case Review Communications with Case selected Participation in College meetings, workshops with program leaders, lecturers, student teachers for more in-depth information about the Case Unit of analysis selection Obtain informed consent Review of documents Field notes and reflection	Instrument/Protocol/Documents Searched MQA, local college and university websites Reviewed programme handbook, practicum handbook, programme brochure, any other documents Reviewed meeting documents Reviewed preliminary questionnaire Researcher's reflective journal – on communications, the Case, the participants, issues and challenges, research method, emerging needs, etc.
Phase 2: Observation **June – December 2014**	
Prepared observation checklist and protocol Expert review of observation checklist and protocol	Protocol for observation and observation schedule Recorded Field Notes, audio and video recording of observed 3-way dialog using a

Make appointment to observe 3-way ~~od practicum~~ placement centres Observations made during 3-way dialogue sessions Filed notes	SONY IC Recorder (Model ICD-AX412F). Recorded files imported with IC recorded into the Sound organizer in the researcher's working laptop. FUJIFILM 10.0 Mega Pixels Digital Camera FinePix (Model S2000HD) ultra-zoom compact digital camera, connected via the cable to the researcher's laptop. Reviewed student teachers' preliminary questionnaire, past weekly reflective journals, evaluation forms, reflection assignments, etc. Researcher's reflective journal – on communications, the Case, the participants, issues and challenges, research method, emerging needs, etc.
Phase 3: Interview **January - August 2015**	
Prepared interview protocol based on reviews of observation records and theories Conducted interviews with student teachers, college supervisors, and placement mentor Review of final practicum evaluation forms, portfolio, and any other relevant documents Field Notes	Interview Protocol (one to one) Interview Protocol Group) Documents: Student Reflective Journals and relevant reflective assignments used during practicum
Phase 4: Data Analysis **April – December 2015**	
Data analysis using thematic method Conducted verification, member checks, peer review and triangulation for internal validity Researcher's journal	Case study database to be organised for basic inductive and comparative analysis strategies. Data management: preparation; identification; manipulation Peer review Member check Peer validation Maintain chain of evidence Use triangulation analysis Use researcher journal for reflexivity on self as human instrument

Figure 3.2 Research Schedule.

Observation. Observation is useful in describing the nature of the settings, activities, people, and the meanings of what is observed from the participants'

perspective. The researcher used observation in this research study as an important tool to obtain rich description and a deeper insight into the process of three- way dialog situated within each unit of analysis. While allowing the researcher to examine the interactions taking place during the three way dialog, it also provides opportunities to see things that participants themselves are not aware of, what are not discussed, or the moments of silence (Merriam, 2009; Patton, 1990; Yin, 2009).

Observation protocol. An observation protocol was developed in the early stages of the research. The observation was a checklist that helped the researcher capture the context, content and behavior observed in relation to Group Dialogic Reflection. Particularly, the content of the discussion, how it was discussed, and the length of the discussion. The behavior exhibited, specifically how they interact with each other, the words used, the matters raised, repeated issues, the tone used, as well as non-verbal communication. The protocol was completed in June 2014 to be ready for observations to be held from September to November 2014, at convenient dates advised by the College.

On 11 July, 2014, the researcher had the observation protocol reviewed by Professor Dr Andrea Nolan who was an early childhood expert, author of the book "Research in Early Childhood" during her visit to Malaysia. Some comments were made. For instance, structuring the observation protocol with the headings: i) context – where is it held? ii) behavior- what I see, what they do, and iii) content of what they say- verbal and non-verbal. She also commented some of the questions were more appropriate for interview; and those were removed from the checklist. New items such as who responded to the dialog and how they responded, including non-verbal responses and power relationship was added. It was also suggested that the researcher triangulate the analysis from various sources of evidence of the three parties (student,

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supervisor, mentor) involved in the three - way dialog. (Please refer to Appendix 2 on the validation report).

On 30 August 2014, another review was done by a registered counsellor on the key dialogic aspect of the observation protocol (Appendix 3). The comments received from the review were as follows:

i. Item No 4: What was the main content of the reflection discussed? (Ambiguity in the word content, and is it referred to teaching and learning?)

ii. Item No 7: To state more specifically, and in a neutral way: who is speaking? who is listening? who leads? who dominates?

iii. To add an item for group communication: to observe the climate, atmosphere of the dialog, and to include examples (e.g., openness, trust, responsibility, warmth, etc.)

However, as these were non-behavioral terms that were rather difficult to observe, the researcher was advised to look for the opposite of the climate versus what would happen otherwise. For example, open mindedness vs reserve or close mindedness; feeling safe vs insecure or caution; trust vs mistrust, defensiveness or suspicion; sense of responsibility vs sbsent mindedness, indifferent, easily distracted or lack of interest.

Once the observation protocol was ready, the researcher made appointment to observe three-way dialog at early childhood practicum placement centers. After approval for carrying out data collection was given by the placement centers, the researcher conducted observations at various kindergartens where the four student teachers were posted in November 2015. Informed consent forms were received from the schools prior to the observation. Four observations were conducted in each

placement center focusing on three way dialogic reflection sessions using the observation protocol (Refer to Appendix 4). Each observation took place for approximately one hour. The researcher observed the processes during three- way dialog sessions between the participants, namely the student teachers, placement mentors and college supervisors during the early childhood practicum. The researcher paid attention to both verbal and non-verbal language and interactions.

The researcher in the observation engaged in limited interaction, intervening only when further clarification on the research was needed, or when the researcher's opinion was invited. For instance, when the mentor or supervisor needed further information on the research on Group Dialogic Reflection. The researcher was consciously aware that the presence of an observer might be likely to introduce a distortion of the natural scene, or discomfort to the participants. Therefore, effort was made to minimize any interference or unnecessary tension to the dialog, since there was an ethical responsibility that must be carefully observed.

Observation records. During the observation, the researcher kept field notes on the descriptions of settings, participants, the naturally occurring talks and interaction during the three-way dialogs, activities, and any relevant information. Other documents such as name cards, brochures and flyers were collected from the center visited. Those were later constructed as the case study database. In order to make a deeper sense of what was happening in the actual setting, the researcher kept short notes taken at the time of observation, expanded notes after each field session, a researcher journal, and records of transcription for conversations recorded (Appendix 5: samples of field notes).

In the expanded observation notes, the researcher included a detailed description of the kindergarten and the venue where the three-way dialogs were conducted, including diagrammatic sketches of the venue where the dialogs were held at the various kindergartens (Appendix 6: Expanded observation notes).

In order to make accurate transcription of the dialog sessions that took place, audio and video recording of the observed 3-way dialog sessions were done. A SONY IC Recorder (Model ICD-AX412F) was used to record the dialogs between the student teacher, the placement mentor and the College supervisor. After each observation, the digital recorder was connected to the laptop using a USB connecting cable. Recorded files in the IC recorder would be transferred into the Sound organizer in the researcher's working laptop. Each file was labeled separately in a folder for observation data. For safety measure, another copy was saved in a hard drive.

Writing observation report and transcribing dialog conversations during three-way dialog. Verbatim transcribing process entailed to allow for a credible reporting. It was useful to fall back on the IC recorder's playback speed function so that the speed of the dialogs could be slowed down and the dialogs could be transcribed and recorded more accurately. A FUJIFILM 10.0 Mega Pixels Digital Camera FinePix (Model S2000HD), an ultra-zoom compact digital camera was also used so that the non-verbal cues could be recorded. The image was very clear, as it came with a 15x optical zoom lens, and a focal length of 27.6-414mm. It could also be connected via a cable to the researcher's laptop. The playback function in the player was very useful during the transcription, especially looking at facial expressions, tone of voice and non-verbal cues (Silverman, 2011)

With all the recording devices, writing down the field notes was almost like a redundant exercise. However, the field notes were helpful for capturing the overall scenario and the researcher was able to make notes to capture some important details for further reflections on the researched area. During one of the observation sessions, the digital device failed to record when the battery ran low and the notes were important records kept. Backups were also necessary as the researcher only had one chance to observe the three-way dialog that took place during the semester and record the critical information (DOC/RJ).

The observation report writing and dialog transcribing process took place from November 2014 to April 2015. Each of the Unit of Analysis was kept in separate files under the observation folder. Please refer to Appendix 6: Observation Report and Appendix 7: A Sample of Verbatim Transcription of Three-way Dialogs. A three-phase process (Lincoln & Guba, 2013) was followed in transcribing the conversations observed during the three-way dialog sessions as follows:

Phase 1: Files containing verbatim conversations from the digital audio recorder were transferred to the laptop under audio MP3 format and MP4 video files.

Phase 2: Researcher as human instrument listened to the audio recording using a headphone and watched the video recording and transcribed the conversations verbatim into Microsoft Office Word documents in the researcher's laptop. The files were saved separately according to the names of the student teacher for easy reference. The details included at the top of the pages were the date, time and venue of the 3-way dialog reflection session, length of audio recording and page number at the

bottom of the pages. The conversations were typed into a Microsoft Office Excel table with four columns. On the left-hand side, it was recorded the participants' pseudonym, followed by timing recorded and the conversations.

Phase 3:   The verbatim transcriptions were then reviewed numerous times for accuracy in the conversations captured. In the process, the names of the people and places were changed. This included the participants, the people, and the kindergarten mentioned in the conversations such as children and teachers. The names of the participants were changed to pseudonyms. The researcher also edited for spelling and obvious grammatical errors that occurred in spoken language such as verb tense mismatch. However, the places of the country where the children originated were not changed to reflect the actual context.

At a later stage, the researcher used this observation data to interview participants about the use and meaning of the specific terms and phrases in the context of where the three-way dialog had taken place. This was also an important procedure taken to triangulate with emerging findings in conjunction with evidence found in the interview and document analysis.

Interviews. As mentioned earlier, interview was used in conjunction with observation and document analysis for data triangulation. Interview allowed the researcher to find out the feelings, values and beliefs, thoughts and intentions of the student teachers, as these are not easily obtained from documents or observations (Galletta, 2013; Merriam, 2009; Yin, 2009). Semi-structured interview was used, with

interview protocols and interview guide for student teacher, mentor and supervisor prepared to meet the research objectives.

Some 23 predetermined questions were used with each participant, but the researcher as human instrument allowed the unfolding of narratives to guide the sequence of the question, or added further questions in accordance to the needs and intensity of the narratives. As the nature of qualitative research design was to be flexible, the researcher was expected to probe and explore within these predetermined inquiry areas. The researcher listened attentively to each narrative for points in need of clarification, generation of meanings or elaboration, or inviting participant reflection when necessary. This was a critical process with the constructivist research paradigm, where an engaging communicative space had to occur between the researcher and the participant; and a dialectic bridge to conceptual space between data and theory. As Galletta (2013) suggests, "the notion of reciprocity –creating an exchange between the empirical data as it is collected and analyzed and the theory embedded in one's questions, framework, and design" (p. 76). In what Galletta (2013) describes as developing reciprocity by engaging participants in "clarification, meaning making and critical reflection" (p. 77), attention to the participant's narratives as it was unfolding was critical to obtain an in-depth understanding of the participant's perspective.

After the semi structured interview guide was developed, it was sent again to Professor Dr Andrea Nolan in Australia for a final review. Valuable comments and advice were given, for instance, on questions that needed streamlining and some to be removed (Appendix 8: Validation of Interview Questions). When the researcher mapped the questions against the initial research questions, the flow was better.

Finally, the interview guide consisting of 23 questions was structured into separate

headings as in Table 3.4:

Table 3.4

Mapping of Final Interview Questions and Research Questions

Demographic Information	Research Question
- Which course are you currently studying in the college?	Case write up
- Are you still attached to the placement center?	

The 3-way Dialogue Sessions

- During your practicum, you participated in 3-way dialog with your placement mentor and college supervisor as required by the course. What kind of things do you discuss during the 3-way dialog sessions?	RQ1
- During the 3-way dialog, who usually decides what is discussed?	RQ2
- What did you find useful about the processes involved in a 3-way dialog? (probe for benefits of 3-way dialogs such as enhanced reflection skills, provided support for teaching and learning, emotional support, or personal and professional learning, mentoring support, etc.)	RQ3
- What did you find difficult about the processes involved in a 3-way dialog? (probe for difficulties, challenges, problems they face during the 3-way dialogue session and related events, etc.)	Q4
- How comfortable did you feel as a student teacher being involved in a 3-way dialog?	RQ3/ RQ 4
- Based on your experience, can you give some examples of how participation in the 3-way dialogs has impacted you as a student teacher? (probe for any impact on skills, knowledge, attitude, feelings or behavior)	RQ2

The Reflective Journal

- Let's talk about the reflective journal. How did you choose what to write in the daily reflective journal?	RQ1
- What type of things did you include in the reflective journal?	RQ1
- How useful did you find the reflective journal? Why/why not?	RQ2
- How difficult did you find it writing a reflective journal? Why/Why not?	RQ2
- On a scale of 1 to 5 with 1 being very easy and 5 being very difficult, how would you rate writing a reflective journal? Why do you rate so?	RQ2
- Do you feel that writing the reflective journal affected your feelings towards becoming an early childhood teacher? In what ways? (probe for feelings as a result of reflection such as the things that make them happy, sad, or feeling satisfied to look for indications of affective responses leading to change in practice)	RQ2
- Do you share about what you have written in the reflective journals during the 3-way dialog. If yes, please give an example.	RQ2
- Do you share your written reflections in the reflective journal with others? (probe for who are these 'others')	RQ2
- If yes, when do you share your reflections with others?	RQ2
- Do you find sharing reflections useful? In what way/s?(probe for benefits of shared dialogic reflection. For those who do not share; Do you think it would be useful to share reflections? Why/why not?)	RQ3/5

The Dialogic Relationship

- How do you describe your relationship with your mentor?(probe for further explanations and examples, interactions that have taken place, or a particular incident to describe the relationship)	RQ3/4
- How do you describe your relationship with your supervisor?(probe for further explanations and examples, or a particular incident to describe the relationship)	RQ3/4
- To what extent has the supervisor helped you to link your reflections from practicum experiences to what was learnt from the theory?	RQ3/4
- Are there any other resources such as reference materials, activities/events, or other people that you can draw on to assist you in your teaching during practicum? (probe for any other activity/people/event that may have helped the student in teaching)	RQ3/4
- What have you learnt about yourself as an early childhood teacher as a direct consequence of being involved in the 3-way dialogues? (probe for student teacher's achievements in the behavioral/affective or perspective change in relation to reflection, teaching, classroom management, competency, confidence, professional and personal development, etc.)	RQ5

All the interviews with the participants of Group Dialogic Reflection sessions were conducted after the observations and review of critical documents such as reflective journals and student portfolio which were transcribed and analyzed. In June 2015, much time was spent on writing memo on the data collected from student teachers' documented reflective journal and observation, listening to the audio and video repeatedly, and checking through the transcribed data for any meaningful analysis. It was an overwhelming experience going back and forth the audio recordings and transcription texts, and reading into the non-verbal language of the dialog in the videos, attempting to look for any new patterns and meanings. Constant reference to the research objectives and research questions was crucial to stay focused.

Although the focus was on evidence from the thematic patterns that emerged from the analysis of data collected, the researcher had to refrain from paying excessive attention to converge with the codes. In order to capture the participants' meanings as accurately as possible, the research had to reflect on those meanings and make decisions for the codes. Using the data set collected from the first Unit of Analysis on student teacher 1 (ST1) that was fully transcribed, the researcher started analyzing the data by applying level 1 code (Miles & Huberman, 2013), which later was applied to the other sets of data. From those codes, some of the themes began to emerge, such as the types of reflection activities that provided opportunities for reflection, levels of student teachers' reflection thinking, the role of the supervisor in facilitating deeper reflection, relationship between the student teacher and mentor, and student teacher and supervisor, and so forth, which helped in preparing for the interviews.

For very practical reasons, the researcher found the interview protocol extremely useful during the interview as it ensured good use of limited interview time;

allowing systematic and comprehensive coverage in each interview, and helping to keep the conversations focused (Please refer to Appendix 9: Interview Protocol). During the interview, however, the researcher had to be flexible, and interview questions were modified following the flow of thoughts from the participants, allowing the research to obtain a deeper insights on particular important areas.

   Recording interview. Upon receiving informed consent for the interviews, the researcher planned a schedule for conducting the interview. An interview was conducted with the program leader from the UK in June 2014, and subsequent interviews with three supervisors, four mentors and four student teachers were conducted across seven days between June and July 2015. The locations of the 13 interviews were determined by the interviewees for their convenience or comfort as in the following schedule (Table 3.5):

Table 3.5

Interview Schedule

Day	Date	Participants	Time	Venue	Materials to prepare
1	05/06/2014	PL	8.30pm	Sunway Pyramid	Audio recorder
2	22/06/2015	ST3	10:00am	The College	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form A token gift
3	23/06/2015	ST2 ST1	10:00 am 1.30pm	The College	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form Token gifts
4	29/06/2015	SV3 SV4 ST4	10.00am 12 noon 1:30 pm	The College	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form Token gifts
5	30/06/2015	SV2	12 noon	The College	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form A token gift
6	07/07/15	PL	8.00pm	Sunway Pyramid	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form A token gift
7	08/07/15	M4 M2 M3	10.00am 11.45am 12.30pm	Kinder-garten 3 Kinder-garten 2	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form Token gifts
8	09/07/15	M2	4pm	Kinder-garten 1	Recorder, video recorder Transcribed data with memos Interview protocol Informed Consent form A token gift

Notes: Labels for participants in the research study:

Participants	Label
Student Teachers	ST1
	ST2
	ST3
	ST4
Supervisor	SV1
	SV2
	SV4
Placement Mentors	M1
	M2
	M3
	M4
Program Leader	PL

The interview duration ranged from 20 minutes to one hour. Before each interview started, participants were asked their permission to audiotape the interview. In accordance with University ethical guidelines, participants were informed about the purpose of the interview, how the data would be used, and how it would be stored. Confidentiality issues were briefed. Participants were provided with a Research Information Sheet and a Statement of Informed Consent to be signed. Contact details were sought from participants who wished to receive the research project summary report.

The interview data were collected through audio and video recordings of the interview sessions. The researcher also supplemented with written field notes and comments. As the researcher needed to listen attentively to the interviewees, the digital devices were crucial during interviews as they could capture verbatim in audio, and

video in case there were unusual expressions or non-verbal communication that the researcher might have missed. A SONY IC Recorder (Model ICD-AX412F) for recording the interview was connected to the laptop using a USB connecting cable where recorded files in the IC recorded would be transferred into the Windows Media Player in the researcher's working laptop. Each file was labeled separately in a folder for interview data. For safety measure, another copy was saved in a hard drive.

A three-phase process (Lincoln & Guba, 2013) was followed in transcribing the interview data as follows:

Phase 1:   Files containing verbatim interview data from the digital audio recorder were transferred to the laptop under audio MP3 format and MP4 video files.

Phase 2:   Researcher as human instrument listened to the audio recording using a headphone and watched the video recording and transcribed the conversations verbatim into Microsoft Office Word documents in the researcher's laptop. The files were saved separately according to the names of the student teacher for easy reference. The details included at the top of the pages were the date, time and venue of the interview session, length of audio recording and page number at the bottom of the pages. The dialogs were typed into a Microsoft Office Excel table with two columns. On the left-hand side, it was recorded as interviewer and interviewee, followed by the transcriptions.

Phase 3:   The verbatim transcriptions were reviewed numerous times for accuracy in the conversations captured. In the process, the names of the

people and places mentioned were changed. The names of the participants were changed to pseudonyms. The researcher also edited for spelling and obvious grammatical errors that occurred in spoken language such as verb tense mismatch. However, the places of the country where the children came from were not changed to reflect the actual context.

Document analysis. Documents were a stable source of evidence and an important strategy in this study. Relevant document of the Case, and the unit of analysis were collected to complement observation and interview methods as another course of evidence, and adding different perspective to the study (Lincoln & Guba, 2013; Yin, 2009). Documents reviewed were information related to the Case such as background information about the college, the faculty, and the Bachelor's program in the research study, program handbook, course information, evaluation forms, and so forth. Documents related to the unit of analysis such as information about the participants, placement centers, evaluation forms, practicum portfolio, reflective journal, assessment forms and other documents related to the practicum were collected.

Preliminary questionnaires were also part of the document analysis. The data were transcribed and recorded in Microsoft Office Excel. This data were also used in the selection of units of analysis in this study, where student teachers with varying reflection skills were selected.

Reflective journal was a key source of evidence illuminating information about student teachers' reflective thinking. In this program, students were required to submit a weekly reflective journal during their practicum. At the end of practicum, they were

required to submit a comprehensive portfolio that included their lessons plans, reflective journal, activities carried out, practice assessment forms, self-assessment forms, 3 way dialog forms, and so forth. These documents were unobtrusive as they were not created for the case study. They contained direct and relevant information required, such as student details, reflective thoughts on teaching and learning in the early childhood environment and their practicum experience as learners (Appendix 10: Samples of ST Practicum Portfolio). The researcher obtained this information from the program coordinator and student teachers with informed consent.

The document analysis served to illuminate opportunities for deeper reflective thinking of student teachers, and filled in the gaps, or confirmed the observation and interview data. For instance, when the researcher was analyzing the process of 3-way dialog, the program handbook was useful in confirming the information on the processes such as the role of the reflective journal, the supervisors, or any other opportunities that would enhance reflective thinking, and how. Assessment forms used for student teachers during practicum painted a clearer picture of how their performance was evaluated.

Gaining Access and Researcher Obligations

To conduct this research study, the researcher received informed consent from the Faculty, as well as the University in the UK that franchised this program to the College. The research study participants were selected through consultation with the Head of the program. Students had the option to volunteer for the research study or otherwise. Those who did not sign the informed consent form were not approached in this research study. The description of the goals of the research was clearly communicated to the participants in writing and face to face. The permission of the

use of the placement as the unit of analysis in the study was sought, and this included the mentors who participated in the three-way dialog Reflection Sessions with the University supervisor. Informed consent forms were either received by hand or through email (Appendix 11: Samples of Informed Consent Forms and member checks).

Analysis of Data

The following section discusses the approach for data analysis. A hybrid method consisting of inductive and deductive thematic analysis was used in this study to interpret the data collected. The following section will describe the staged process of data coding and identification of themes that captured the phenomenon of Group Dialogic Reflection as described by participants in the study.

Thematic analysis is a commonly used method for identifying, analyzing, and reporting patterns (themes) within the data corpus, from what superficially would look like random material. As a result, themes important in describing the phenomenon emerge, capturing the data that answer the research question (Boyatzis, 1998; Braun & Clarke, 2008; Fereday & Muir-Cochrane, 2006). Both the data-driven and the theory-driven approaches were used. A provisional 'start list' of codes was developed from conceptual framework prior to field work (Fereday & Muir-Cochrane, 2006; Miles & Huberman, 2013). This helped determine the kind of data to be included for in-depth analysis (Miles & Huberman, 2013; Silverman, 2011).

During the data analysis process, however, based on the list of provisional codes developed initially, the researcher also realized that some of the data were telling a story not from the original list of codes. The conceptual description was still based on the data about the phenomena (Rapley, 2011, in Silverman, 2011). This also

explained the reasons for changes in the original research question, as mentioned earlier.

The following section describes how the data collected were analyzed using the data analysis technique by Miles and Huberman (2013). The technique involved three main stages consisting of "data condensation, data display and drawing and verifying conclusion" (pp. 12-14).

Data condensation. Data condensation or data reduction is a process of selecting, focusing, simplifying, abstracting, and/or transforming the data appearing in the field notes, interview transcripts, observation transcripts and documents. After the field work was over, the process of data condensation started. It was an analytical journey involving writing of notes and journals, writing analytic memos, coding, developing themes, generating categories (Miles & Huberman, 2013). It was also a continuous process of reflection. An "intensive analysis" was done based on a small amount of data to obtain a good grasp of the phenomena before testing it with other relevant features in the whole data set (Silverman, 2011, p. 50).

The researcher read intensely the data collected to look for essential things that the participants said or what they did on the first set of data set transcribed from sample ST1. The researcher made analytic memo, color coded, and made notes on the main ideas (Appendix 13: Samples of Analytic Memos). After making analytic memos, the researcher read again, and systematically labelled the key essential memo notes, and color coded them, eventually running out of colors. The attempt to do this process in NVIVO proved to be unfruitful, as I did not have the description of each analytic memo yet. Manually writing down the memos was more useful as each memo was different in its expressions by the participant.

The following section describes the process of how the codes were created during the data analysis process. Code, as defined by Miles, Huberman, and Saldana (2014) are "labels that assign symbolic meaning to the descriptive or inferential information compiled during a study" (p. 65). Referring to Miles et al. (2014), there are two major stages in code development: the first cycle and second cycle were adopted. The initial cycle was assigned to the data chunks, while the second cycle was analysis on the resulting first cycle codes. The code manual for the study was developed as a data management tool for organizing the data set to assist in interpretation work later on, and provided a clear trail of evidence for the credibility of the study (Crabtree & Miller, 1999; Miles et al., 2014).

Provisional list of codes. For this study, the provisional list of codes was developed prior to field work, guided by the research questions, theoretical concepts and key characteristics understudied. Deductive coding comes from the conceptual framework and list of research questions. For this study, codes were created following Boyatzis (1998)'s framework that consisted of the code label or name; the definition of what the theme concerns; a description of how to know when the theme occurs; a description of any qualifications or exclusions, if any. The provisional list of codes consisted of three broad code categories of content, context and climate were used in the initial data analysis shown in the following Table 3.6.

A few months was spent on the analysis of the data corpus against the initial codes, where inductive data were studied line by line for meaningful codes that captured the inductive data and richness of the phenomenon (Boyatzis, 1998). The developing themes were also carefully mapped against the research questions before the researcher finalized the codes found across the three data sets. The data accounting

log (Table 3.7) explains how the themes answer the research questions across the three data sets.

Table 3.6

Codes with Definition and Description

No	Code Label	Definition (what the theme concerns)	Description (how to know when the theme occurs)
Content: Types and level of Reflection			
1	Reflection-in - action	Reflecting on the event while in the midst of action.	Work while thinking on their feet. Immediate implementation of actions that lead to further changes.
2	Reflection-on action	Thinking back on what we have done" (Schön, 1987, p. 26).	Reflect back on an experience or event, usually with the aim of explaining an unexpected outcome "Making sense of practice" and it can occur at a personal level or in the public as a reflective dialog (Ghaye & Lillyman, 2000, p. 7).
3	Reflection-for- action	Thought occurs before action.	Reflection that takes place to guide future practice (Killion & Todnem,1991)
4	Critical Incident	Critical incidents can be either positive or negative; an interesting interaction or an ordinary everyday occurrence. Sometimes, depending on the focus and the "rawness" of a critical incident, it may feel uncomfortable to undertake a critical reflection because it highlights our assumptions, views and behaviors.	Goes beyond detailed description of an event that attracted attention, to analysis of and reflection on the meaning of the event. Examining all possibilities before reaching a conclusion in order to deal effectively with multi-faceted problems as well as to identify the underlying assumptions governing their actions (Dewey, 1933) A critical incident need not be a dramatic event: usually it is an incident which has significance for you. It is often an event which made you stop and think, or one that raised questions for you. It may have made you question an aspect of your beliefs, values, attitude or behavior. It is an incident which in some way has had a significant impact on your personal and professional learning.
5/R1	Level 1: Returning to experience	Going back to the event that has happened using description of the actual event, with self or with others.	Not considered reflection, it is a precursor to reflection.
Table 3.6, continued	...perience. Level 2: Responding to emotions	ʼositive feelings and ..egative feelings in reflection.	Positive feelings: allows the learner to consciously recall good experiences, and focus on the pleasant side of the event thereby look forward to the potential benefits from the event.

Table 3.6, continued

			Negative feelings a barrier to future events.
7/ R3	Re-evaluating Experience: Level 3: Association	Connecting new information to what is already known by connecting ideas and feelings from the experience to existing knowledge.	Connecting ideas and feelings with workplace knowledge
8/R4	Re-evaluating Experience: Level 4: Integration	Identifying any patterns and relationships that have been observed during the association stage, and drawing a conclusion on the new and previous experiences forming new insights.	Synthesizing old and new knowledge, new insight is formed as a result of the previous knowledge acquired that becomes the 'new' knowledge.
9/R5	Re-evaluating Experience: Level 5: Validation	Testing and verifying the proposed synthesis for (internal) consistency.	Determine the authenticity of the ideas and feelings Mentally rehearse ideas Discuss ideas with someone whose opinion the student teachers trusts.
10/R6	Level 6: Appropriation: Action/ affective/ perspective outcomes (Generative)	Adopting new learning in the actual context of the workplace. Apply self -awareness and daily approach towards work, leading to changes in outcomes in: - behaviour (Action outcomes) - affective (Affective outcomes) - perspectives (Perspective outcomes).	Try out new concepts or strategies after reflection, if successful, will become part of their natural behaviour (professional learning). Critically aware of how and why one assumptions could constrain the way one perceive, comprehend and feel about the environment (Mezirow, 1990). Action outcomes involve a new way of doing things, development of new skills, commitment to action and or readiness for application. Affective outcomes involve a change in attitude or emotional state. 'positive attitude towards learning in a particular area, greater confidence or assertiveness, or a changed set of priorities' (Boud, Keogh & Walker,1985)
11	Situated learning and collective reflection	Reflection situated in context- the workplace provides the context for the dialogue (Brockbank & McGill, 2007)	Real problems to be solved (Boud, 2010). The 'space' for student teachers to engage in dialogues with various

			levels of professionals in a collective manner
			Multiple perspectives and understandings to be examined and employed by practitioners in the actual field (Boud, 2010).
			A conducive environment and relationships that support dialogue, rigorous subjectivity and critical thinking (Moss & Petrie, 2002)
			Share the life and work of the early childhood centre among practitioners, children and parents (Moss &Petrie, 2002).
12	Collaborative Reflection	A group of autonomous learners with common learning goals to result in purposeful learning. (Boud, 1985)	The relationship between the teacher and the student: Give support to develop strength, teaching styles and strategies that are uniquely special to their classroom and children through a data- driven decision making process ((Nolan et al., 2010). - collegial/collaborative approach. - trust and positive communication - we are in it together. - open, non-judgemental, and engaging dialogue that carefully explained supervisory activities. - equal power relationships between group members - questions and problems generated by reflection are discussed in a collegial manner that leads to learning (Pultorak & Educators, 2010). - confirm, modify, or stimulate reflective thining to deeper levels of understanding" *by* having dialogic reflection (Larrivee, 2006, p.24) to avoid biases. -'intellectual conflict' (Fullan, 1999, in Osterman & Kottkamp, 2004, P.20) provides checks and balances of other colleagues' perspectives can help novice teachers to validate their thinking. -positive engagement and collaborative reflection, debriefing (Noble, 2007).
13	Developmental and Generative	Perpetual construction, rather than reproduction of knowledge.	Play an active role in the whole cycle of turning experiences in teaching to learning.

Table 3.6, continued

			Shared inquiry and dialogues, learning take place and will then generate deep learning as opposed to surface learning.
			Deep learning will lead to transformative learning.
			The Cycle for Group Dialogic Reflection is a developmental and generative process that begins with the student teacher who has the experience through teaching activities; writes in reflective journal and shares his or her thoughts, observations and reactions with others; discusses any themes or patterns; who then forms broad principles about how the world looks, and integrate learning into behaviour as illustrated in the following diagram adapted from Pfeiffer & Jones (1998)

Climate

14	Mentoring Relationship/ Supervisory Relationship	Understanding and knowledge about working with others (Ebbeck, M., Waniganayake, M., 2005)	A relationship built on trust allows student teacher to open up for learning, and accept one's professional responsibility to the class.
			Open and honest reflective dialogue and discussions, the mentee perceives the need to learn, validate perceptions, allowing new ideas to take place.
15	Role of the mentor/ supervisor	Roles of mentors: - identify realistic targets - Makes summative evaluation -Recording the student's performance - Engage students in reflective practice - Continuous feedback - observing good practice, - validation of ideas and assumption - Role model - Supervision: - Foster a professional learning community	Identify realistic targets by which student teacher's progress, overall performance, and ongoing formative feedback can be structured. Makes summative evaluation on students' overall performance. Recording the student's performance, such as weekly written log, target outcomes Engage students in reflective practice as part of the feedback provided. Continuous feedback through dialogues on teaching and learning is an (Gordon & Battersby, 2006). Observing good practice, gain new ideas or techniques, etc. Dialogue between mentor and mentee allow validation of ideas

Table 3.6, continued

	and assumption (Battersby & Gordon, 2006).
	Role model to demonstrate exemplar teaching and management techniques; observes and gives feedback; guides lessons and resource planning, and most importantly, modeling and encouraging the reflective practitioner.
	Supervision:
	Model and promote continuous reflection and inquiry into teaching from technical to critical analysis.
	Collect data systematically, discussed and analyzed collectively.
	Foster a professional learning community (Nolan et al., 2008).
	Engage each other to improve student learning. For instance, what do lecturers want students to learn? How will they respond when a student experiences difficulty in learning? How will they deepen the learning for students who have already mastered the essential knowledge and skills?

Table 3.7

Data Accounting Log

Research Objectives	Research Questions	Themes	INT	OBS	Document			
			ST; SV;M	ST; SV; M	Journal (ST)	Portfolio (ST)	Prog. Info/ PL INT	Field Notes/ Research er Journal
1. Identify opportunities for student teachers to engage in reflective thinking during practicum	What are the opportunities for student teachers to engage in reflective thinking during practicum?	Types of Reflection Strategies: journaling, peer sharing, group dialogic, reflection on action, in action, critical reflection	√	√	√	√	√	√
		Contents of reflection - significant event, child development, teaching and learning, class management, class observations	√	√	√	√	**NA**	√
		Process and procedures (activities)- connecting reflection all the way through practicum- supervision, assignments, journals, constant dialogues focusing on practice	√	√	√	√	√	√
2. Explore opportunities that facilitate deep reflection in student teachers, individually and collectively	How do these opportunities facilitate deep reflection in student teachers, individually and collectively?	Levels of reflection recorded in journals, documents, tutorial forms	**NA**	**NA**				
		Levels of reflection recorded in group dialog	**NA**	√				
		Learning and changes in practice as evident by perspective, behavioral or action change.	√	√				
3. Investigate how group dialogic reflection could supports student teacher' reflective thinking and practice	How does group dialogic reflection support student teachers' reflective thinking and practice?	Process: 3 way dialog at placement; supervisor facilitation process (role of SV,ST,M); mentor support, unique advantages	√	√				
		Climate/principles - trust, openness, responsibility	√	√				

Data display. Following the process of data condensation, this section presents the next phase of data analysis process in data display. It involves organizing condensed data that are compressed into assembly of information that allows conclusion drawing and action. Tables and charts were used to assemble organized information into an accessible and compact format. Decisions are needed on the types of display, and which row and column were to enter which type of data were required.

Initially, the researcher mapped out the early codes, and to allow the possible themes to emerge from the early codes through drawing possible links between the codes, of something that one could make sense of, and what readers would understand (Silverman, 2011). Again, the research began with one unit of analysis, ST1, for all the dataset: interviews, observation and reflective journal. It was a matter of asking the questions about the codes, if they were coherent; what the key characteristics were, as well as the different dimensions of the codes.

It was learnt that constant reviews and refining the codes were essential. From which, early memos were merged into first cycle codes, and from first cycle codes to second cycle codes which later became the emerging themes, without thinking first how the themes should be defined. The researcher used a systematic process when going through the dataset, line by line, checking if the early codes were correctly assigned. Data analysis was initially guided by the provisional codes. When new ideas were emerging from the data, some codes were reviewed or added. Inductive codes were assigned to segments of data that described a new theme observed in the data. They were created to give some conceptual and structural unity (Boyatzis, 1998). Each code related to another in a coherent way to guide the researcher on developing categories identified from the theoretical framework (Refer to Appendix 15: Emerging Categories & Mind Map). These were later added into the memos for coding. The

whole coding process took place from January to August 2015 as summarized in

Figure 3.3:
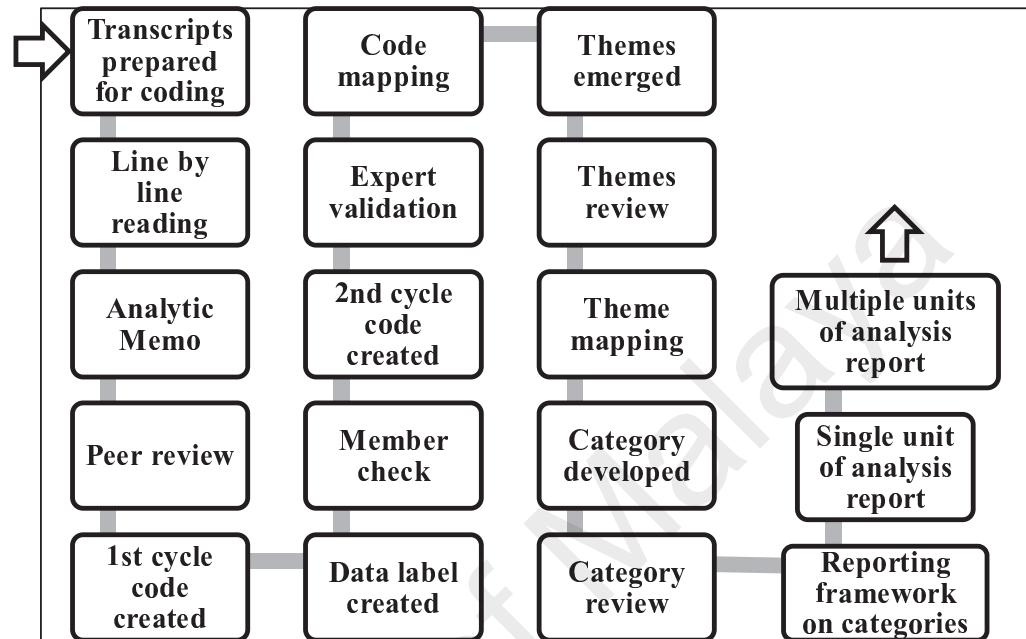
Figure 3.3 Qualitative data analysis: Analytic Code Development to Reporting

Framework.

By then, the researcher had already collected quite a large number of data set

totalling approximately 60 sets, amounting to hundreds of pages. It could be

overwhelming getting drowned in the data set if the researcher had no clue on a clear

direction to the analysis process. The major breakthrough in this process came when

an expert review discussion was held in Melbourne Australia with Professor Dr.

Andrea Nolan and Dr. Anna Kilderry from 29th July to 5th August 2015. They

reviewed the codes developed, the themes and the possible categories in relation to the

research questions. Once the research questions were clarified, the direction of the data

analysis became crystal clear. The links between the roles of the participants, the

various themes and the reflective thinking process were finally established. That was

how group reflective dialogs facilitated the student teachers' reflective process; and if they did, what were the roles of the student teacher, the mentor and the supervisor in this process. The researcher had to make some judgements about what was felt as the core themes, and focus the rest of the analysis of data on any links, patterns, associations, and relationships with them (Rapley, 2011, in Silverman, 2011). From the expert review session, the revised research questions guided the coding process. The questions provided a more focused approach to data analysis, where the analytical process was directed at opportunities that facilitated deep reflection in student teachers, both at the individual and collective levels. For example, the researcher was paying attention to themes that emerged from how group dialogic reflection facilitated the process of thinking and reflection, for instance, facilitation and supervisory styles, the learner's learning styles, situated learning, and anything that would expand the researcher's understanding of the phenomena.

The focus kept the researcher reflecting on what had happened to the participants, and thinking about the relationships between each code that was created rather than getting drowned in the overwhelmingly massive data. These codes were expanded and reviewed from the provisional codes as in the following Table 3.8:

Table 3.8

Provisional Codes

CATEGORY	CODE	Status
CATEGORY: REFLECTION TYPES	**RT**	
Reflection-in -action	RT-IA	
Reflection-on action	RT-OA	
Reflection-for-action	RT-FA	
Critical Incident	RT-CI	
CATEGORY: RELFECTION STRATEGIES	**RS**	
Reflection journal	RS-RJ	Reviewed
Peer reflection	RS-PR	Reviewed
Group dialogic reflection	RS-GR	Reviewed
CATEGORY: REFLECTION PROCESS AND PROCESS	**RPP**	
Connectedness (all the way through)	RPP-C	Inductive
Constant dialogue	RPP-CD	Inductive
Focus on practice	RPP-FP	Inductive
Set target	RPP-ST	
Supervision	RPP-SV	
Assignments	RPP-AS	Inductive
CATEGORY: LEVELS OF REFLECTION	**RL**	
Level 1: Returning to experience: Describing Events	RL-R1/DE	
Level 2: Returning to experience: Responding to emotions	RL-R2/RE	
Level 3: Re-evaluating Experience: Association	RL-R3/AS	
Level 4: Re-evaluating Experience: Integration	RL-R4/IN	
Level 5: Re-evaluating Experience: Validation	RL-R5/VA	
Level 6: Appropriation		
Level 6A: Change in Perspective	RL-R6A/AP/P	Reviewed
Level 6B: Change in Behavior	RL-R6B/AP/B	Reviewed
Level 6C: Change in Action	RL-R6C/AP/A	Reviewed
CATEGORY: CONTEXT (DEMOGRAHICS)	CD	
Demographics	CD-DM	Reviewed
Space	CD-SP	Reviewed
CATEGORY:CONTEXT(PROCESS)	CP	
Situated learning	CP-SL	
collective reflection	CP-CR	
collaborative approach	CP-CA	
Supervision and mentoring styles	CP-SS	Reviewed
CATEGORY: CLIMATE	CL	
Openness	CL-OP	Reviewed
Trust	CL-TR	Reviewed
Responsibility	CL-RE	Reviewed

Drawing and verifying conclusions. This section discusses the last phase in the data analysis process that was drawing and verifying conclusions. The researcher held conclusions based on literature review, and interpretations that arrived from the patterns, explanations and themes that became explicit and sufficiently grounded (Miles & Huberman, 2013). It was found that the whole process of data analysis from data condensation, data display to drawing and verifying conclusion was an interactive and cyclical exercise. If a similar conclusion was drawn with all these methods, the validity of these findings and conclusions could be established. For instance, the student teachers' reflection were analyzed from three sources:

- Document analysis- student teachers' reflective journal indicated their level of reflective thinking
- Observation - student teachers participated during the 3-way dialog and how they responded to the dialog, and if deeper reflection was observed.
- Interview- student teachers responded to questions on their experiences and feelings about reflection, and if there was deeper reflection expressed.

Verifying data for trustworthiness. Three strategies were used to verify the trustworthiness of the research as follows (Patton, 1999,2002):

 i. Use rigorous techniques and methods for data collection and analysis, with attention to validity, reliability, and triangulation.

 ii. Uphold credibility through training, professional and personal experience, constant reflections, and learning and engagement with other experts (DOC/RJ)

 iii. Maintain a strong philosophical belief and an appreciation of qualitative inquiry, along with a research design that utilizes accepted strategies for

naturalistic inquiry (Lincoln & Guba, 1985), as what (Strauss & Corbin, 1990) described as "theoretical sensitivity" of the researcher.

Firstly, to ensure reliability in qualitative research, the researcher had attempted to make research processes transparent by describing in detail the research methodology and data analysis methods, and making every possible effort to explain and justify the theoretical stance for the interpretations (Silverman, 2011). For instance, in observations, the researcher chose to report a verbatim account of what participants have said during the 3-way dialog, rather than what the researcher had reconstructed based of a general sense of what was said. This would reduce possibility of the researcher infusing personal perspectives in the report. A rigorous method of note making was used, such as field notes with short notes and expanded notes (Spradley, 1979, in Silverman, 2011). Data analysis comprised of ETIC analysis that was based on researcher's concepts, and EMIC analysis that was based on the conceptual framework.

In addition, an audit trail of the fieldwork was maintained so that evidence from the study was traceable (Lincoln & Guba, 1985). The verification and reproducibility of the processes can be done to trace the steps in collecting and analyzing the data (Padgett et al., 2004). The six categories of information for audit trail applied offered visible evidence from process and product in this study are presented in Table 3.9 (Halpern, 1983):

Table 3.9

Audit Trail (Adapted from Halpern, 1983)

Information	Source/process
Raw data	Interview, observation, field notes, short notes, expanded notes, documents, researcher journal.
Data reduction and analysis products	Memos and field notes
Data reconstruction and synthesis products	Memos and field notes, provisional codes
Process notes	Researcher journal, notes, data accounting log, research records
Materials related to intentions and dispositions	Documents, research proposal, literature review, notes and researcher journal, data accounting log
Instrument development information.	Protocols, preliminary schedules, observation formats

Qualitative research was concerned with standardizing interpretation of data rather than assessing coder reliability by determining agreement among coders such as those used by positivist researchers (Silverman, 2011). Even though this research study was carried out by the researcher alone, a catalog of codes was maintained systematically. This allows readers to have access to the subject, and direct access to the raw data, as well as complying with low inference descriptor. Computer assisted recording and analysis also added confidence that the pattern of behavior actually existed throughout the data. Text- reliability was achieved by having consistent use of the category in the analysis of each unit of analysis. Inter-rater agreement was achieved by having other reviewers carry out the same data analysis exercise and the reports examined. The differences were discussed and ironed out.

Although the notion of validity was not an appropriate concept for qualitative research, the researcher had learnt that one had to report a true account of the lived experiences of the participants. For instance, the researcher had made attempts to ensure that the report reflected accurately the social phenomena to which it referred.

During the course of this exploratory study, it was found that the whole process involved a highly complex scenario that other possible intervening variables such as journaling, tutorial, peers, mentors or supervisors would have made an impact on reflective thinking. Therefore, the researcher had included other opportunities for enhancing student teachers' reflective thinking; and studying the 3-way dialog from the perspectives that directed its influence, rather than the means itself. Rather, the study became one towards exploring the means to an end, rather than the end itself.

In the same vein, different sources of evidence and different methods were compared, and checked if they corroborated with each other, a form of data triangulation. The three research methods used were observation, interview and document analysis. By combining multiple theories as discussed in the preceding chapter, research methods, and empirical materials, it was hopeful that this research could produce a more accurate, comprehensive and objective representation, and ensure credibility of the study (Lincoln & Guba, 2013). Using multiple sources, methods and theories; involving all the participants in the three-way dialog, rather than just the student teachers providing the evidence protected the trustworthiness of the conclusions (Miles & Huberman, 1994; Patton, 1999).

Throughout the data collection process, the use of audio or videotape and verbatim transcripts had reduced threats to inaccuracy in data collection, thus enhancing dependability and confirmability of the study. For the data collected, member check was conducted to enhance confirmability in relation to what the participants meant and what the researcher inferred were ensured (Lincoln & Guba 1985). Particularly, the data, analytic categories, interpretations were checked with the participants involved (Appendix 12: Member Checks documents). The final transcripts were reviewed by the participants either face to face or through email, confirming

accuracy of the content, and if there were any other comments. A copy of the draft report on the results was also sent to the participants for their review and comments. Participants had the opportunity to comment on the quotations used. Most of the comments were minor correction of factual presentations except for one who expressed her views on the data from one of the participants.

In addition, cross case analysis used in data analysis allowed for credibility of the findings, as evidence in negative cases were analyzed and used to justify the theoretical fit between the data and the theory development process (Miles & Huberman 1984).

Finally, the researcher, as the human instrument and the meaning maker, had to be reflexive on the various themes emerging from the three data sources. A researcher's journal and notes were kept, where the journey of the research study was recorded to the best of the researcher's ability. The researcher reflected constantly on the extent to which each of data sources was relevant to the overall understanding of the topic, or was it only relevant in that particular context or its theoretical association. Would observations made in any setting provide similar data on the student teachers' reflective thinking, characteristics of supervisors, or student's learning styles? As a qualitative researcher, there is an obligation to think responsively to environmental cues, and interact with the situation as it appears in the practicum setting; and be methodical in reporting sufficient details of data collection and the analysis process (Lincoln & Guba, 2013; Silverman, 2011). Maintaining theoretical sensitivity for the interpretation of the themes and categories that would lead to generation of new knowledge, and presenting it in ways accessible to others is crucial in the process (Strauss & Corbin, 1990).

This chapter presented the research method and a hybrid method consisting of inductive and deductive thematic analysis that was used to analyze the data collected, leading to the conclusions drawn. Discussion on the rigorous verification strategies used to ensure that the trustworthiness of the study was included. The next chapter will present the findings of the study.

CHAPTER 4: FINDINGS AND DISCUSSIONS

Introduction

In this chapter, the researcher presents the findings and discussions on this research study. The following sections describe the thematic analysis process applied in data analysis of the study. A report on the findings from the four units of analysis within the case answers the research question as follows:

1. What are the opportunities for student teachers to engage in reflective thinking during practicum?

2. How do these opportunities facilitate deep reflection in student teachers, individually and collectively?

3. How does the facilitation process in group dialogic reflection support student teacher' reflective thinking and practice?

This report will present the results of the cross case pattern analysis, followed by a summary of major findings in this study. As what Lincoln (2005) has said, "the end results of conducting qualitative research… are the working hypotheses that emerge and the narratives that tell the stories of some human condition from which anyone so inclined can learn" (in Lincoln & Guba, 2013, pp. 111-112).

Thematic data analysis techniques unpacked the underlying phenomena that emerged from a relatively large data corpus of six volumes of three- inch arch files; and conceptualizing those interpretations and relationships into logical themes and categories. Using data collected from the first unit of analysis, the sources of data from interviews, observation and documents were transferred to the Microsoft Office Excel sheet with columns created next to the text for memos. This was followed by close and detailed line by line reading of the text, looking for essential meanings of the first unit

of analysis: on what the participants said, did or had written in the document. While reading, key lines that were considered to be essential were highlighted and memo notes were written next to the line. The researcher then read again, and labelled the data set according to interviews (INT), observation (OBS), journal (JN) and document (DOC) data, researcher journal (RJ), followed by the numbering of participants such as program leader (PL), student teacher (ST), mentor (M), and supervisor (SV). These labels were drawn from ideas emerging from close readings of the dataset, as well as prior reading of empirical and theoretical work as described earlier in the preceding chapter on provisional codes provided.

Advanced Data Analysis using NVIVO

For a more systematic data analysis process, the researcher entered all the data set including the manually developed categories and themes documents into the NVIVO version 11 for Windows, an advanced analysis tool for qualitative research software. The data corpus was organized into the analysis software so that a more systematic archival and retrieval of analyzed data was possible, which later would help in visualization and reporting.

The researcher started with the query tool, and conducted a word frequency count for the raw data. The search later found the most frequent 1000 words with five or more letters to avoid short preposition words. What appeared to be the most frequent 100 words in the data set were as displayed in the following word cloud (Figure 4.1).
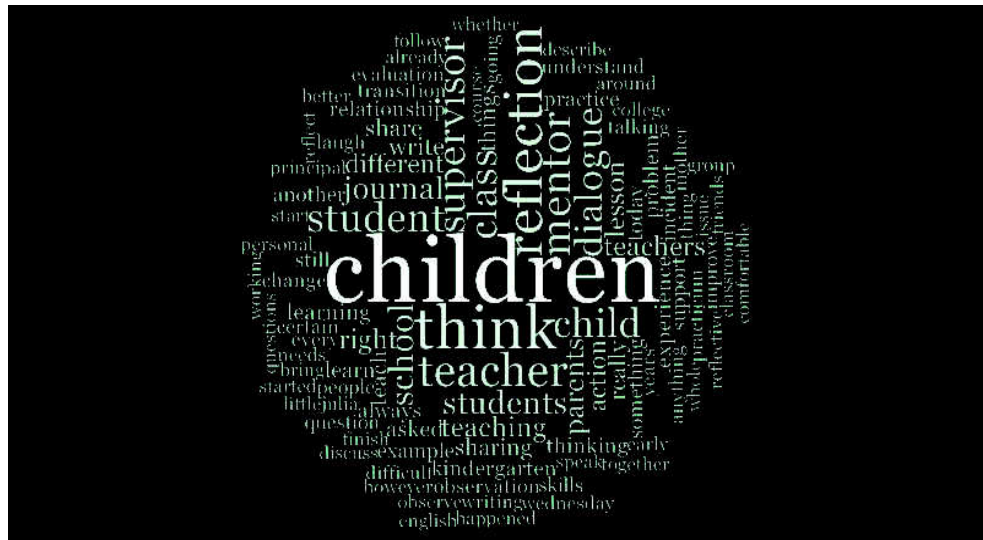
Figure 4.1 Word Cloud on the most frequent words from NVIVO 11

From the list of 100 words, the top 10 most frequently used words were children, think, reflection, teacher, mentor, class, supervisor, student, child, dialogue, school, students, journal, parents, teaching, teachers, lesson, different, action, and write as shown in Figure 4.1.

Then using word frequency report as a guide, the researcher used the text query tool to search for key words that reflected the themes from the earlier manual analysis. The part on contents of reflection were deduced from the codes and themes that were already developed, but both the deductive and inductive analysis had only approximately 50 codes that were transferred from the Excel table created by the researcher. The query tool was thorough and systematic. From the text taken from 40 sets of data exported to NVIVO version 11, 95 codes were created from 801 references. Using the query tool and nodes creation tool, more meaningful themes and codes were further developed as follows: 1) the contents of reflection: types of reflections, and levels of reflective thinking of the student teachers; 2) the context of group dialogic reflection that facilitated deeper reflection such as the roles of student teacher, mentor

and supervisor; the reflection strategies or activities involved, how situated reflection manifested; and 3) the climate that encouraged deeper reflection during group dialogic reflection, such as the enablers, as well as barriers. New questions were asked. For instance, were the themes coherent; bearing in mind the key characteristics of each unit of analysis, and dimensions of the various themes. The final 25 sets of categories, themes and codes were extracted from NVIVO as presented in Table 4.1:

Table 4.1

Categories, Themes and Codes Extracted from NVIVO Version 11

No	Category\\Theme\\Code
1	Contents of reflection\\Type of reflection Contents\\Teaching and Learning
2	Contents of reflection \\Type of reflection Contents\\school
3	Contents of reflection \\Type of reflection Contents\\problems
4	Contents of reflectiopenon \\Type of reflection Contents\\practicum
5	Contents of reflection \\Type of reflection Contents\\Observations of children
6	Contents of reflection \\Type of reflection Contents\\interactions with others
7	Contents of reflection \\Reflective Thinking
8	Context of Group Dialogic Reflection \\Situated Reflection\\situated learning\\simultaneous feedback
9	Context of Group Dialogic Reflection \\Situated Reflection\\situated learning\\generate new ideas for practice
10	Context of Group Dialogic Reflection \\Situated Reflection\\situated learning\\Create Change
11	Context of Group Dialogic Reflection \\Situated Reflection\\situated learning\\connects multiple perspectives
12	Context of Group Dialogic Reflection \\Reflection Strategies\\Shared reflection
13	Context of Group Dialogic Reflection \\Reflection Strategies\\Reflection
14	Context of Group Dialogic Reflection \\Reflection Strategies\\Journal
15	Context of Group Dialogic Reflection \\Reflection Strategies\\Group dialogic reflection
16	Context of Group Dialogic Reflection \\Learners Roles\\Learner roles
17	Context of Group Dialogic Reflection \\Facilitation Roles\\Facilitator\\Socratic Questions
18	Context of Group Dialogic Reflection \\Facilitation Roles \\Facilitative
19	Context of Group Dialogic Reflection \\Facilitation Roles \\Evaluation
20	Context of Group Dialogic Reflection \\Facilitation Roles \\Instructive
21	Climate\\Barriers
22	Climate\\Open
23	Climate\\Relationship
24	Climate\\responsible
25	Climate\\Trust

This review process was cyclical, as once the categories were established, the raw data were constantly reviewed to refine the codes during the data reduction process. This involved going through the data set line by line and checking if the early codes were correctly labelled, reducing them to key ones that would answer the research questions. From the more verbatim, descriptive memos and codes, they were reduced to more conceptual and abstract ones, such as open climate; facilitating or instructive roles of the supervisors, and the themes within situated reflection manifested during the dialog itself. A mind map consisted of the categories, themes and codes was created using NVIVO version 11 (Refer to Appendix 15: Emerging Categories & Mind Map).

Findings

The following section describes the emerged themes and subthemes from the four units of analysis in the case sample. As each of the narratives about the four units of analysis unfold, the information on the placement setting, student teacher, mentor and supervisor's demographic information; opportunities that engaged the student teacher in reflective thinking; opportunities that facilitated deep reflection individually and collectively; as well as the facilitation process in three way dialog that supported student teachers' reflective thinking and practice from the research questions will be presented.

To ensure confidentiality, pseudonyms in the form of acronyms and numerical labels were given to all the participants in this research study. A set of reference code was assigned to each participant in order to identify quotes where the name was not included. The label also included additional codes assigned to data sources as displayed in Table 4.2. A more detailed code book can be found in Appendix 15.

Table 4.2

Reference Labels for Research Participants and Data Source

	Label	Data
	ST1	Student Teacher 1
	ST2	Student Teacher 2
Participants	**ST3**	Student Teacher 3
	ST4	Student Teacher 4
	M1	Mentor of Student Teacher 1
	M2	Mentor of Student Teacher 2
	M3	Mentor of Student Teacher 3
	M4	Mentor of Student Teacher 4
	SV1	Supervisor of Student Teacher 1
	SV2	Supervisor of Student Teacher 2 and 3
	SV3	Supervisor of Student Teacher 4
Interview	**INT**	Interview
Observation	**OBS**	Observation
	DOC/PrelimQ	Document/ Preliminary Questionnaire
	DOC/JN	Document/Reflective Journal
Documents	**DOC/INFO**	Document/Information
	DOC/PF	Document/Portfolio
	DOC/RJ	Document/Researcher Journal
	DOC/FN	Document/Field Notes

Unit of Analysis 1: Kindergarten 1

This section describes the first unit of analysis of the case. Kindergarten 1 started in 1971 in a Chinese Village in Kuala Lumpur. Located at a busy T-junction, it was housed in a double story detached house, and was the largest kindergarten in this hilly village. It was run by the Alumni Association of a Secondary School within its vicinity.

This kindergarten was managed by a council set up by the association consisting of senior academics, entrepreneurs, Alumni committee members and its youth section members that formed the kindergarten management. The kindergarten operated two sessions. The morning session began at 7.45am and ended 11.45am. The afternoon session began at 12.15pm and ended 4.15pm. It also offered a full day

program which ran from 7.45am to 6.30pm, Monday to Friday. Although this was a Chinese kindergarten, English and Malay were also emphasized (DOC/INFO).

Sixteen teachers were employed in this kindergarten and managed by a Principal. Breakfast and lunch are provided to all staff (DOC/PF/ST1). It was using a traditional approach (as referred to by the Principal), and used to have the highest record of 450 students in enrolment. However, due to the decrease in enrolment, the Parent Teacher Association had decided to arrest the decline by introducing a change in the teaching approach. Hence, the Montessori approach was introduced through the current principal who was trained in the Montessori Method of teaching (OBS/ST1). They started enrolling young children of two and a half years old to six years old. It has a total population of 142 children. Hence, the kindergarten has two teaching approaches: the traditional approach that prepared the six year olds for Primary One. The Montessori Approach catered to children aged two and a half to six years old, and the center would gradually move to fully adopting the Montessori Method of Teaching in two years' time (OBS/ST1).

Most of the staff employed at this kindergarten held a high school certificate and did not have any tertiary education qualifications. The school provided in-house training and has provided sponsorship to their teachers to pursue further professional development in the Montessori Diploma (DOC/PF/ST1).

This kindergarten provided indoor and outdoor facilities such as air-conditioned classrooms, music rooms, library, ICT lab, assembly hall, canteen, child sized toilets, as well as outdoor facilities such as playground, garden for planting, a field and sandpit (DOC/INFO).

Student teacher 1 (ST1). ST1 (21 years old), was a Malaysian student teacher pursuing the Bachelor of Early Childhood Studies at the research site. When this research started, ST1 was in year one semester two of her studies (INT/ST1). In order to support her financial needs, ST1 worked in the kindergarten that she was placed for practicum. She was teaching in the 6- year old class, with 24 children (OBS/ST1).

ST1 chose to pursue a career in early childhood because she liked children and enjoyed playing with them. She enrolled in the program to gain more understanding of children. Prior to this, ST1 did not have any mentors or role models that influenced her development in the early childhood field. Reflecting on her personal philosophy or approach to early childhood teaching and learning, she believed that the early childhood teaching and learning environment should be comfortable to everyone including teacher and children. To her, comfort and safety were very important characteristics in the early childhood environment. She believed that children learn through play, communication and books. On her role as a teacher, she believed that she should be engaged with every child, helping them when they need help, teach them and help them to gain knowledge. The teacher was a role model to children.

She believed that the early childhood setting she was experiencing provided a lot of opportunity for her to learn how to become a good Early Childhood practitioner. To her,

Early childhood education should provide opportunities for children to learn when they want, and not forcing them to complete a set syllabus…a place where the teachers speak softly and gently, listening to children (DOC/PRELIMQ/ST1:1-5).

When interacting with parents, she believed that teachers should speak politely, and not always communicate children's negative behavior such as bad habits directly

to parents. She believed that the teacher's interactions with colleagues should be a supportive and positive one, where they support each other (DOC/PRELIMQ/ST1:5).

Mentor 1 (M1). M1, female, aged 32 years old, was assigned to ST1 as her mentor during practicum. M1was also the principal of this Kindergarten where ST1 was posted. M1 had a Diploma in Montessori Education and was armed with 14 years of teaching experience for four to six year olds. She was teaching in other Montessori schools before she started her job as principal of the kindergarten. This was her third year in this school, and ST1 was her first mentee received (INT/M1; OBS/ST1).

Supervisor 1 (SV1). SV1, female, 44 years old, was the supervisor assigned by the College for ST1's placement supervision. She was the senior lecturer at the College and was also the coordinator for year one student teachers' placements, and was the assessor for all the year one portfolios including the reflective journals. She had a Master in Education and a Diploma in Montessori, and had been with the College for ten years. Prior to this, she had worked with children aged two to 6 years for four years (INT/SV1; OBS/ST1).

Opportunities that engage ST1 in reflective thinking. The following section presents the findings that answer the first research question: "What are the opportunities for student teachers to engage in reflective thinking during practicum?" To begin, an understanding of the practicum process in this study is necessary. Data from document analysis, interview and observation indicated that the practicum process in the Bachelor of Early Years Education program involved the following components such as practicum placement where student teachers were placed in the three kindergartens; keeping daily reflection journal, be involved in two way dialogs

and three-way dialogs; and finally the submission of practicum portfolio, as shown in Figure 4.2:
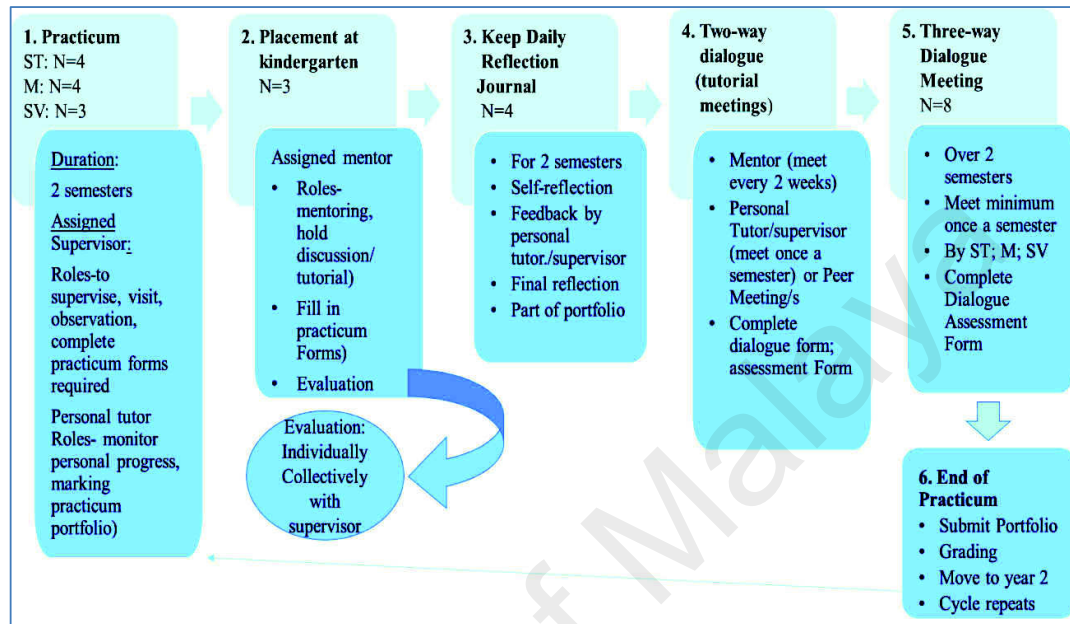
Figure 4.2 Process Flow Chart of Practicum Process in the Case

The researcher collected four practicum portfolios compiled by the student teachers over two semesters based on their placement experience. Its purpose was to demonstrate their understanding of the Early Years Professional's role including planning for children's learning; showing good working knowledge of the Early Years Foundations Stage and Every Child Matters agenda. It was a form of formative assessment that forms 100 percent of the weighting. In the portfolio, a reflective journal was one of the assessment requirements. A daily reflection recorded in the form of a journal and a final reflection at the end of the year were required. The final reflection was graded but the daily reflection was not graded (INT/SV1:L59).

Reflective journal: re-evaluation of practicum experience. As part requirement of the course, ST1 was required to write daily reflective journal during

her practicum that provided opportunities to engage in reflective thinking. She wrote about significant events, what was different or some really special event that caught her attention (INT/ST1:L58). In order to write the journal, ST1 had to conduct more observation in class. For instance, when an incident took place, she observed and reflected on the process. As a result, she gradually developed the skills to observe and respond quickly (INT/ST1:L92).

The contents of the reflective journal were mostly centered on her reflections of observations of the teaching and learning processes which included pedagogical skills, assessment, handling child health and safety issues, ethical implications of events, and so forth. The other topics in the journal were about other teachers' teaching or their advice; interactions with her mentor, as well as expressions of her emotions and aspirations. For instance, her anger, guilt, sense of satisfaction, controlling her own emotions, stress from work and study balance, and so forth (DOC/FN/ST1/Journal category).

Daily reflection helped to recall what had happened from the start of placement (INT/SV1:L65). Even though there were certain challenges for student teachers, SV1 thought that journaling was an important process for early childhood educators.

The writing itself, yes, I mean I will try to let them see, you know, how important it is. And that something very important, you know, for early childhood educator. But having to do it is, you know, it's difficult for them already. Having to think back on one significant event (INT/SV1:L228).

Daily reflections focused on the placement activities. As many of the student teachers were being introduced to this particular workplace experience for the first

time, the focus was on observations, lesson planning and different teaching approaches used at the workplace (INT/SV1:L57).

All levels of reflection thinking were recorded in ST1's journal, namely, Level 1: returning to experience; Level 2: re-evaluating experience – responding to emotions; Level 3: re-evaluating experience – association; Level 4: re-evaluating experience – integration; Level 5: re-evaluating experience – validation; Level 6: re-evaluating experience – appropriation in terms of action/affective/perspective outcomes.

Written feedback on reflective journal. The majority of the writings by ST1 were mainly describing events (117 counts) at Level One and only 20 counts of Level Six, which is showing deeper reflection involving perspective changes. However, with regular feedback from SV1, her reflection skills had improved (INT/ST1: L76). Her supervisor's written feedback on her reflective journal helped her to reflect deeper. She gradually went beyond mere description of events even though her English proficiency was the challenge to writing reflection. ST1's reflection had improved from describing incidents to deeper reflection (INT/ST1: L70). As she was writing the reflective journal, she was evidently trying out different teaching strategies, and validating her ideas (INT/ST1: L211). The following excerpt described some of her attempts:

> I started to guide him after school time. He is a child which is very hard to approach, I took some biscuits and bread to him but he rejected me and didn't want to eat. It is very hard to persuade him to eat. From my experience, when teacher- giving some small gift like biscuits, sweets or sticker to the children, M is the only one doesn't want the gift. From our conversation today, I knew that M very love his father although his father always scold him…Now, I have more understanding on M's feeling and also his family situation. Luckily, I didn't ignore the child (DOC/JN/ST1:L35).

From describing events at the beginning, ST1 progressed to re-evaluating her experiences by associating personal experience to situations. Internal dialogs were

obvious resulting in actions to be taken to manage the situation. There were evidence of dialogs between the student teacher, mentor and supervisors in the journal. ST1's aspirations as a budding early childhood practitioner was evident in her expressions of her feelings toward teaching and learning and the children, as well as attempts to create an impact in the lives of young children. Journal writing helped her remember what she had experienced, and her pledges to change her behavior or strategies, as ST1 said:

So it's always in your mind. The fact that you have written it down and you have sort of like made a decision at the end, that helps you to remember… Because if there are mistakes, mostly I will remember. So I think this time I cannot do this. Ya. If there are mistakes, it's always, always in my mind already (INT/ST1:L74).

ST1 discussed issues on managing her own emotions in class with her mentor. ST1 had a few encounters with guiding children's behavior, and how she lost her cool. There were occasions where she had said things out of anger and concerns that she regretted. Reflective journal writing had shown her perspective changes in her behavior, attitude and actions as she made reflection on action, realizing her inappropriate action and made an apology to the six year old child during the incident as recorded in this excerpt:

She always told me that she left her homework at home or she didn't bring pencil box to school. Today, she told me, she didn't bring her pencil box to school…I decided to check her bag in front of her. There was a pencil box inside her bag! …I was very angry at that time, and asked her why you lied to me. She just smiled. …She was lacking care and love because her foster parents engaged with her very little. I scolded her today, because she told a lie and her action disturbed my lesson... At the same time I felt guilty because I couldn't handle my anger, it was very hurtful to the child. I couldn't forgive myself due to this mistake. Before she went home, I told her personally, I apologized to her because I scolded her in the morning, but at the same time, I wanted her to apologize too, because she shouldn't tell a lie. I think I need to be very careful when I speak with children, I am very scared that I'll repeat my mistake again. Besides that, I need to be patient all the time, I should ask the reason before I take any action on the child. (DOC/J/ST1:L29).

On the last day of the journal writing, ST1 wrote this passage, reflecting on her feelings and aspirations for the children whom she taught for the year. When she saw their progress, she expressed feelings of satisfaction; and at the same time, she reflected on her mistakes and pledged not to repeat them.

> Even today is Children's Day, but I still received many presents from parents and children ... my efforts on these children was acknowledged by their parents because most of the parents said thank you to me. Some of the parents also said that their children have improved a lot.
>
> When the children hugged me and said "Teacher, I love you!" and "Thank you, teacher". I wished the time stop at there, I am not willing to separate with them. I just can hold back my tears and wish them Happy Children's Day and Happy Holiday. Besides that, I prepared some gifts to my class children, I also leave my mobile numbers for them, in case they miss me, they can contact me.
>
> I was very happy and glad when I noticed that my children are growing up, and they are move to Standard 1 next year. A lot of happiness and sadness came to my mind, I hardly to describe it, but they are my wonderful memories. I will remember what I did wrong and what I have to improve, and I will do better for my children next year and future (DOC/JN:L78).

Reflection during lecture. Apart from the journal, ST1 was given the opportunity to reflect during lectures. She did the practicum at Kindergarten 1 while attending lectures at the college. An introduction to reflection was done at the start of the program. During lectures, student teachers were encouraged to share incidents taking place in school, those ones that they felt strongly about (INT/SV1:L158). It reinforced reflection, and there were lots of sharing as well during tutorial sessions (INT/SV1:L172). Student teachers were also encouraged to reflect on their experiences in relation to the topic covered in class. Some reflection questions were posed to them and they were encouraged to reflect on those topics (INT/SV1:L180). The Supervisor illustrated her point as shown in the following excerpt:

1   SV1: Uh… that will be at the start of the year, uh because lot of them are
2   actually new to this and....we (think, long pause) I mean what i did in class is
3   that i will get them to bring up you know an incident you that took place in
4   school, just one incident that they feel so strongly about and they would like
5   to share their experience, in class, you know at least with their classmates.

6   Interviewer: A significant event?
7   SV1: A significant event.
8   Interviewer: Or any event?
9   SV1: Significant event, because since they will have at least started the
10 placement already in Term one, and this course very much relates you know
11 to their work place experience so that's why I'll get them to like bring an
12 incident that actually took place in school. (continue…)
13 SV1: Um… It will be one session at the start but along the way in every class
14 I'll get them to you know share again any one significant event and reflect
15 on that , because like I say earlier they were supposed to do on daily basis, or
16 the day actually clocked in the hours they are supposed to do reflection on
17 that day so they have to do it continuously so any time in class when we you
18 know , talk about certain things aa I'll get them to bring up an incident anyone
19 who is actually willing to share and they are supposed to reflect on that
    (INT/SV1:L180-202).

Apart from that, SV1 also encouraged students to reflect on the topic covered in class. Some questions were posed to them they were expected to go back and reflect on those topics. However, as it was not graded, not all students did what was required; only a few did. (INT/SV1:L169). During lectures and tutorials, students were introduced to reflection through various activities and tasks assigned so that they could return to their experiences and re-evaluate those experiences, and link those to what they have learnt in the lecture.

Shared reflection. ST1 found sharing her reflection with peers and her supervisor during tutorial sessions in the college beneficial. With a small group student teachers, they often shared about the problems faced in the placement center (INT/ST1). Two-way dialog was often conducted with her mentor at the placement center as part requirement of practicum where a dialog form had to be filled in between the mentor and the student teacher on issues raised, discussions and reflections regarding the practicum.

Three- way dialog. Three-way dialog was a course requirement for practicum, to be conducted between student teacher, mentor and the college supervisor. The researcher observed the three-way dialog session that took place on 12 November 2014

in the kindergarten. Kindergarten 1 was a purpose built kindergarten with a large foyer. SV1 who was ST1's college supervisor, first went into the classroom where ST1 was teaching. It was a six- year old class with 24 children. The children were having an art and craft session conducted by ST1. There were three groups of children seated at the tables. The activity started with a demonstration from the student teacher on how to make a party hat. All the children were involved in the activity, including clearing up at the end. They were allowed opportunities to make their own design. When they needed assistance in the craft activity, the children would go to the teacher for help. At times, children needed a lot of help in the craft making session, from cutting of pieces of decorative items, to gluing and sticking the pieces together. She handled the activity alone. The children seemed to be quite independent and completed the activity within the lesson duration.

The researcher stepped out of the class before the activity was over to set up the audio and video recording in the conference room where ST1, M1 and SV1 were going to conduct the three way dialog. The room had an L- shape adult meeting table. It looked like a staff meeting room. There was a slow moving ceiling fan. The chairs were stacked up against the wall near the 2- panel window on the right. There was a large notice board full of notices and newspaper articles on early childhood education on the left, and a large white board beside the notice board. Near the door, some boxes were stored on the floor. There were also many bags underneath the meeting table. The room has no other personnel but occasionally voices of children could be heard coming from the playground or the classrooms. The traffic noises from the main road can be heard, such as motorbikes or cars passing. Please refer to Figure 4.3 for the arrangement of the room.
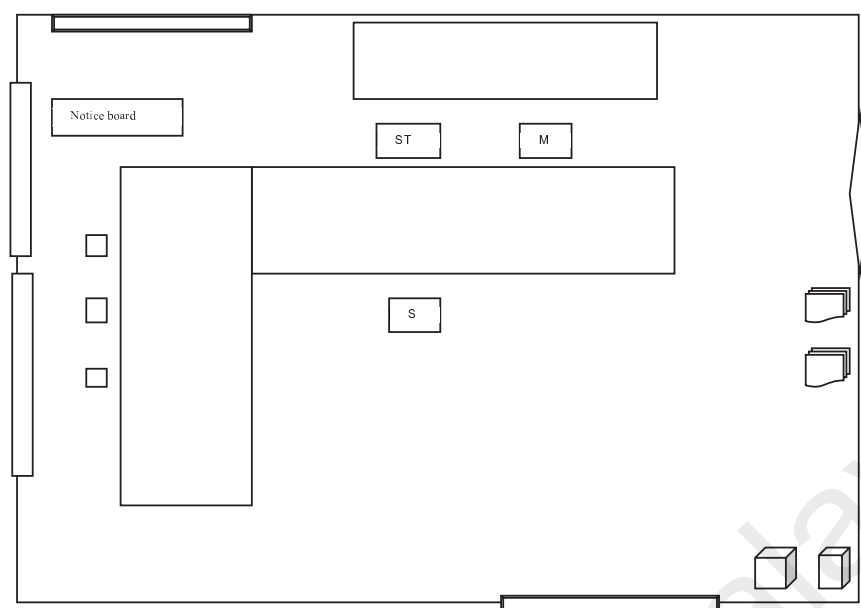
Figure 4.3 Room Arrangement for Three-way Dialogue (ST1)

Across the room, there was another glass door with a grill connected to the façade of the kindergarten. The glass door was opened although the grilled door was locked. The sunlight coming through the door brightens the room and lights were not needed. There was a large table behind the meeting table, filled with boxes of files and bags of materials.

Once the class was over, the supervisor and the student teacher came into the conference room. The researcher started by seeking their permission to record the three way dialog and went through the informed consent procedures. They agreed to the recording. M1 was not available at the start of the three-way dialog, as she was still busy with her administrative work. The supervisor sat across the table from the student teacher as shown in Figure 4.3. They started the conversation while waiting for the mentor to join in the three way dialog that required her attendance. M1 entered later and sat next to ST1. At the table, ST1 brought along the dialog forms, and her stationery case. M1 had a note book and the inform consent form for the research. SV1 had with her a folder and some documents placed at the table (OB/FN: pp 10-12).

The three-way dialog session was held for one hour and fifteen minutes from 11.30am to 12.45pm and the breakdown of the duration in the dialog recorded was as presented in Table 4.3:

Table 4.3

Length and Word Count of Conversations in Three-way dialogue (ST1)

Dialog	Minutes	%	Word Count	%
Length of three-way dialogue/Total Word Count:	00:57:41	100	6966	100
Student	00:21:31	41	2859	41
Supervisor	00:12:09	23	1855	27
Mentor	00:18:43	36	2252	32
Length of conversations minus the pauses	51.83			

Table 4.3 showed that out of the 57.41 total minutes of three-way dialog, the student teacher spoke for 21.31 minutes with a 2859 word count, which was 41% of the total minutes and word count. The Supervisor spoke for 12.09 minutes with 1855 word count, which was 23% of the total minutes and 27% of the total word count, while the mentor spoke 18.43 minutes which was 36 % of the total minutes and 2252 word count which was 32% of the total word count. During the three-way dialog, ST1 spoke the longest time, with the most word count, while SV1 spoke the least time with the least word count. The researcher decided to use both the length of the conversation made and the word count for the proportion of the dialog to ensure that the time taken was commensurate with the conversation made, and not determined by the speed of the conversation, as the student teacher spoke rather slowly due to her lack of expressive proficiency in English.

Opportunities that facilitate deep reflection. The following section discusses how the individual and collective reflection strategies facilitated deep reflection in student teacher ST1.

Individual reflection. At the individual level, ST1 used reflective journal to evaluate her experiences by describing and recording the events taking place in the school such as issues in teaching and learning, observations of and interaction with other teachers, feelings and emotions, supervisor mentor's advice, knowledge about children, ethical issues, and so forth. It was evident that reflection-on-action took place, and internal dialog was recorded in the journal. Some action plans were presented in the journal, and in some instances, further actions were taken to manage the situation. The journal entries showed it was apparent that reflection in-action took place, where the student teacher observed the children's responses and changed the lesson plan to cater to their needs. The student teacher had progressed to associating experiences with theories of child development as in the following excerpt:

> The topic of today's story telling is "You are the best". After the teacher told the story, each child is given opportunity to say what strength they have. The first child said, I am very talented in drawing. After she finished, students would clap hands and said "You are the best". And then, the next students stood up and told the others their strength. I found that this activity was very interesting, it could build a child's confidence and self-esteem. When the child's confidence is strong enough, it will help them in study. Besides that, children also have more understanding about their friends. Children will also understand each child is unique and has different ability (DOC/JN/ST1:L17).

ST1 often wrote in the journal about her reflections- on-action. Sometimes, she would link her personal experience and knowledge acquired through her academic study to particular situations in her practicum experience. The student teacher demonstrated association in her reflective thinking by identifying patterns and relationships observed and drawing a conclusion on the experiences, forming new insights. She was observing a 6 year old child who told her often about her

parents' arguments at home. She observed the child's behavior and drawing a conclusion from connecting ideas and feelings from what was observed to existing knowledge, an important cognitive structure for learning, both intellectually and affectively. The following excerpt illustrated her reflective thoughts on the child's aggressive behavior:

> Sometimes she was very aggressive in her action and verbally, sometimes she just wanted to be alone. She told me, compared to last times, she felt that her father didn't love her anymore, she was very down and upset. I understood what happened… What I could do at this moment was be her good listener and through story-telling, tell her that our parents always loved and cared about us no matter what happened. I also gave some examples of what her parents did for her was because her parents still very love her. Besides that, I also told her to behave herself, because I always heard other children complaint about her aggressive behavior in school. I suggested to her, if something happened, and she felt happy or sad, to come and talk to me, I would always be her listener (DOC/JN/ST1:L132-133).

Validation in reflective thinking involved verifying the proposed synthesis for consistency through reflection. Through which, it conceptualized ways to incorporate a new concept by mentally rehearsing their ideas, or simply discussing them with someone whose opinion the student teachers trust. For instance, in one of her reflections on a child been hit by another child in her class, many ideas and possibilities ran through her mind:

> I really didn't realize J was bullied by other student even this happened in my classroom. I felt very sorry to J and also his mother because as a teacher, I didn't know what my students did at the school. Perhaps, I was too concentrate in their academic performance because they were 6 years old and preparing go to Primary I next year…I would prevent this kind of issue happened again….After this experience, I really need to be observant and alert all the time (DOC/JN/ST1:L79).

There was evidence in ST1's journal that showed appropriation in the level of reflective thinking through perspective transformation. The student teacher became critically aware of how and why assumptions could potentially constrain the way one

can perceive, comprehend and feel about the environment. The following excerpt describes how reflection- on- action gradually changed her perception and behavior towards child M who initially did not show interest in his work. Instead of expressing anger at his lack of interest and motivation in class, she chose to spend more time guiding the child in his work after the school session ended.   The example demonstrated appropriation in reflective thinking where ST1 demonstrated self - awareness that led to changes in outcomes in behavior (action outcomes), affective state (affective outcomes) as well as her perspective (perspective outcomes):

> Now, I have more understanding on M's feeling and also his family situation. Luckily, I didn't ignore the child. It needs a long time to help them and due to my limitation, I couldn't disturb their family. However, I need to show a good role model, such as patience, [being] soft when talking, responsible and so on, I also have to engage a good relationship with him (DOC/JN/ST1:L4).

Action outcomes involved a new way of doing things and commitment to action. Affective outcomes involved a change in attitude or emotional state (Boud et al., 1985), as evidenced by her changed attitude to wanting to understand more about the child, along with her increased motivation towards learning. Perspective outcomes involved changes in perspectives and beliefs and values as evidenced by her determination to make an impact through positive role modelling and having a good rapport with the child, rather than being antagonistic towards him.

ST1 has shown persistent use of active and persistent thinking, trying out different methods, validating thoughts. As a result, she was better able to control her emotions, and had figured out various methods to make her lessons more engaging to the children, as illustrated in the next excerpt:

1 P:I think I'm getting better, because this year I didn't shout, this year I think I
2 can control my emotion very well.
3 I: Really, congratulations!
4 P:Even they are not paying attention in the class because maybe I want to teach

5   mathematics, but they didn't pay attention, so I just change, I don't want to
6   teach mathematics first, maybe I go to another activity first. For example,
7   story telling, or maybe other activities.
8   I:And it works?
9   P:Yes, it works. So after that, when I'm coming to mathematics, then they are
10   OK.
11   I:Really?
12   P:Yes.
13   I:Even now currently you continue to write the events and you try to reflect,
14   right? Which works? You seemed to be like trying different methods, that's
     one thing that's very good. You are active in using your thinking, so you are
     always trying methods. Right?

14 P:Yes (INT-ST1:L215-230).

In addition, not only had she made an impact in her own class, what she had

learnt as a student teacher had also made an impact on other colleagues at the

placement center. For instance, her change of method of teaching to becoming more

flexible to the needs and interest of the children, and not forcing the children to learn

within certain fixed periods and lesson plans, what she did has influenced the practice

of other colleagues, and in a way had brought about change at the workplace, which

was a traditional kindergarten. The following interview excerpt illustrated this

experience:

1   P:Yes. Because sometimes, because my colleagues will ask me "today you are
2   supposed to teach mathematics first, why change this way ", I say "they are
3   not interested, so I'm not going to teach first " and they say "oh, it's OK". So
4   my colleagues in other classes also want to change because the children they
5   are from the same, similar level 5 years old to 6 years old, they'd say, today
6   they are very not good in learning mathematics or what, then she also change,
7   because actually we plan all the lesson plan, but both of us know we have to
8   change, change all the time, because we need to follow the children.
     (INT/ST1:L215-234).

The following section will discuss some of the examples of how collective

reflection facilitated deeper reflection.

Collective reflection. With facilitation from the supervisor and mentor during

group dialog, reflection - on - action was done regarding ST1's teaching at the

workplace. ST1 was able to go beyond mere descriptions of events or expressions of

feelings, and there were many instances of deep reflective thinking such as integration and validation of reflective thinking observed during group dialogic reflection (DOC/FN). ST1 had the opportunity to reflect on her party hat making lesson objectives and the rationale of her action to her supervisor, as shown in the following excerpt:

> They are going to celebrate Children's day…the other classes they did it before They did earlier, then my children were very curious, they asked me how to do it. But the other class they prepared everything, they cut everything, the children just pasted. And then I want my children do something challenging I want them to cut themselves, to cut the paper. So, I didn't want to prepare anything but today I didn't prepare the materials so enough (OBS/ST1:L3).

In response to ST1's explanations on the lesson, SV1 evaluated the lesson and gave affirmation on her practice, and commented on her increased level of confidence with her group of 20 children.

> I was telling her that she was rather responsive to the children. Because, they actually approached her, walked to her, and asked her some questions. And also showed her their work. Ya, she actually responded, listened to every one of them. She was able to certain extent, control them at an acceptable level. When the students started to talk to each other, disturb the other friends then she managed to get their attention back … Confidence level has increased. And she seems to trust her children. Because she allows them the freedom to do things on their own and she has also accepted some of their ideas and suggestions as well. She also gave some encouragement to the children. She also praise them, ya, like for the work they actually did. She said "thank you" as well, that's been a good role model as well (OBS/ST1:L57).

Those were direct statements of support on her progress and changes observed by the supervisor. This verbal reinforcement on ST1's strengths, abilities, and efforts to change her behavior helped affirmed ST1's confidence toward achieving her goals.

In the case of child M who did not show interest in his work, the incident was shared during the dialogic reflection session. ST1 expressed her sense of achievement when the child could be engaged in her lesson, and had seen change in his behavior toward her, as well as his improvement in performance, as shown in the next excerpt:

I enjoyed when I saw their result, in academic, or not just in academic, sometimes in behavior, their responsibility. Before, compared to last time. Improve a lot. Ya.... For example, there was a child he….. Every time he came to the school and then he didn't want to pass up his work and he would do what he wanted to do. Sometimes, he will throw a tantrum in front of me, and said I don't want. He would just sit on the floor, ignore me all the time. So, and I now can engage with this child very well and he treats me like a good friend. Sometimes he respects me as a teacher. Also, I also saw his improvement in not only in the academic, and also in respect to other friends as well. Ya. Is very …good (laugh) (OBS/ST1:L93).

Though dialogic discussion, ST1 was more aware of her developing knowledge about the children and herself. For instance, when the supervisor asked her about her strengths, she elaborated on her realization on the need to be flexible in her lessons to fulfill the needs of the children in the class, as in the following excerpt:

During discussion we are sharing information. We learn from each other as well... My strength ah?? Maybe been flexible...? (Supervisor: Flexible in what sense?) …I must do something to interact with the children. For example, if the lesson is 30 minutes, may be other teachers teach uh... I mean ... the children have to finish within the 30 minute, but for me I will … increase more discussion part, let them understand more before they write anything in the book. I do not like, for example, just give them the answer. I want them to think. I do not want them to depend on my answer (OBS/ST1:L99).

During her reflection-on-action during the three-way dialog, she reflected how she integrated her experience with pedagogical principles to promote independence and learning of every child in the class. For instance, the following excerpt demonstrated ST1's reflection on her growing awareness of the need to allow the children to do the maths activity by themselves, and developing a good rapport with the children, rather than copying the answers from the board, as what some other classes do:

I explain a few questions, they understand. I let them go back into their seat and do it. …but for those who cannot, who still did not understand, then I will make a circle, and then we will do it together…After a few questions, maybe I left a few questions, they will say "teacher, I can go back to my seat". "I can do it myself". Ya. So, it really work. They can go back and they give me the correct answer as well. I do not like they just give the correct answer and they just copy. So, in my lesson, I believe they can complete by themselves. I allow

them to do it…Maybe their book is not very beautiful lah, not tick, tick, tick lah, but they did in the class. It really is their work…some of the other class…the work books are very beautiful, all tick, tick, tick, tick, tick... but you will see the problem. Maybe you think he understands the whole book, but when the exam comes, he is not very good…They did not try by themselves (OBS/ST1:L103).

Reflection on action during the dialog had shown evidence of validation in her reflective thinking about her practice. Various ideas to better engage the children were mentally rehearsed and had been tried out during practicum. Those ideas were then discussed with the mentor and supervisor to determine the authenticity of the idea. ST1 had also learnt the ability to encourage children to think. Instead of using the chalk and talk method, ST1 used concrete materials in the teaching of money and its value, odd and even number concepts, and the children's understanding of the concepts had been introduced, as shown in the following excerpts:

```
 1  ST1: Still can improve. I changed a lot in the teaching method but I think it can
 2  still be more creativity... because …uh…
 3  SV1: In what sense?
 4  ST1: For example teaching in the math or language, i mean, because I saw what
 5  the other teachers do, they just use whiteboard, marker pen…I mean the 6 years
 6  old class. So, uh what I do; I question, and throw back the question for them
 7  to think. And uh...For example, for maths, uh... I use the coin, the money that
 8  I do in a bigger size. So, I show them this is 50 cents. But compared to the other
 9  teacher, they just show the textbook and this is fifty cents. I also let them to
10  touch the money and put in the corner in the material there (pointing). I ask
11  them how to buy a cake or toy from your friend. I get real money in the
12  classroom but I already collect it. Then, they also try how much is that one, and
13  they say "RM 100". "I don't have RM 100 but RM50"…they really get it, the
14  meaning of money. They also understand the value ... ya. (OBS/ST1:L39-41).
```

ST1 also gave another illustration on validation, of how she made her lesson easy to follow by providing developmentally appropriate activities, and her mentor had given her perspective on her ability to manage the class, based on her own observation, as follows:

```
 1  ST1: My lesson will go from easy, medium and hard for them. For my lesson
 2  plan in the teaching.
 3  SV1: Any one specific example how to move from simple to average to
```

4 something more challenging?
5 ST1: For example. Also Maths, I more more focused on Maths. I let them
6 know, eh...yesterday I told them uh...about odd number and even number.
7 And then I introduced odd number and even number. Some of them still very
8 confused. So, I just teach the simpler numbers from one to ten. Then, I taught
9 them from ten to fifty. Which one is the odd number and which one is the
10 even number and how to recognize, how to differentiate. Uh... which one is
11 odd number and which one is even number. And then, today morning I gave
12 them a paper. Think which one is odd number and which one is even number
13 and you differentiate it. Give, say 50, is it an even number or odd number.
14 They write down. They need to think about the number and then differentiate.
15 SV1: They grasp the concept?
16 ST1: Ya. Some of them… hehe (laugh) (OBS/ST1:L35-52).

During the three-way dialog, the supervisor asked deeper questions where ST1

responded how she adopted a new classroom management strategy, and becoming a

role model. It was evident that she was applying self -awareness and daily approach

towards positive guidance strategies work leading to changes in outcomes in the

behavior, affective and perspectives domains. There was a positive attitude toward

behavior management, as well as a changed set of priorities (Boud et al., 1985). For

instance, ST1 was trying hard to be a good role model to the children and use positive

guidance strategies to manage group behavior, as shown in the following excerpt:

1 ST1: be a good role model. Like what M1 said, the children learnt what I did.
2 The children, when I count 5, 4,3,2,1. So, when some of them… they see when
3 I come, and then they count 5, 4,3,2,1 to call them back. But is not very good
4 for them because…..sometimes because the class is more, more, how to say...
5 the class is not in order. And because I think if I count this 5, 4,3,2,1 and they
6 all come back. It is ok.But when the whole class say 5, 4,3,2,1 is very noisy.
7 SV1: So it's very chaotic is it?
8 ST1: So, the class is not in order any more. So, I think I have to be aware in
9 case, in this … for example I say "thank you, sorry", it's very important because
10 they learn what I say or what I did. Because every day they see me, they... for
11 example, I saw a child uh... knock the table, just like what I did and say "hey,
12 sit down". (laugh) And then the child really learnt it.   So I stop the action and
13 not do it anymore. So when i see what they did, I know what I did wrong. So,
14 I changed it very fast. So I hope other children did not learn this bad behavior
15 from me (laugh).
16 SV1: I mean it's good that you are aware of your own actions, your words that
17 you use as well. And you've reflected on that. And you also learn from your
18 own observation on the actions that they copy. That's a good skill, that's the

19   skill that you must have with the children. All right. Just now you were talking
20   about managing your children, with different strategies , counting one to five.
21   What about the strategies? Do you think ...that's still room for improvement?
22   ST1: Uh... I just not only count, I sing songs and also action. When they are
23   interested they will come back. (OBS/ST1:L75)

Continuous dialogs for deeper reflection. Journaling was a good reflection tool that was able to help enhance ST1's reflective thinking skills. But progress in reflection was not made in isolation. Other strategies that contributed to ST1's progress included feedback given by her supervisor in her journal regarding the depth of her reflection, questioning of her assumptions, sharing of her reflections with her placement mentors and other teachers in the kindergarten, as described earlier. All of the various strategies work together, offering progressive opportunities to deeper reflections. The lectures, journals, peer meetings, tutorial, other resource persons, etc., all coming together to help the student teacher know more about themselves, and provide opportunities to engage in deeper reflection that otherwise would not take place (INT/M1: L100). The early childhood core skills standards were mapped out carefully, and were monitored by mentors and supervisors in every dialogue, for instance, communication skills, working with parents, transition activities, etc. Eventually, student teachers were expected to achieve those core skills in their practice (INT/SV1:L379).

Data from the episodes and percentage of reflection recorded on the level of reflective thinking in both individual and collective reflection for ST1 indicated that collective reflection facilitated higher levels of reflection from level four to six as compared to individual reflection. From the table below, the higher reflective thinking levels from four to six generated by individual reflection was a total of 28% but collective reflection generated a total of 50%, with a difference of 22%.

	Reflection Journal		Three-way dialogue	
Refective Thinking Levels	Episodes (N)	Episodes (%)	Episodes (N)	Episodes (%)
R1	35	0.32	5	0.23
R2	11	0.10	5	0.23
R3	33	0.30	1	0.05
R4	20	0.18	6	0.27
R5	8	0.07	4	0.18
R6	2	0.02	1	0.05
Total episodes	**109**	**1.00**	**22**	**1.00**

This section discusses how collective reflection complimented individual reflection as a pedagogical approach for deeper reflection as found in this study.

Dialogic reflection complements written reflection. From the first unit of analysis, not only did the data indicate that dialogic reflection was able to bring out the ability to reflect deeper, as discussed earlier. Dialogic reflection also complemented efforts by student teachers who did not have good writing skills in the target language. Often, student teachers' reflections were not deep, as they were comfortable with just describing events and not going much further. SV1 commented that:

> They have not reflected deep enough. Because, most of the time they were just like, you know…describe the event. And they are not able to go further, you know, sharing how they feel, sharing the feelings and what the thoughts are about what happened, and, you know, taking the next step. (31:52) So they will give like, you know, uh, uh … the whole chunk of like, you know, the incident. But in terms of how they feel, or have what they learn, it's just one line, or like you know, two sentences, where they should be like, you know, more of the other way round (INT/SV1:L196)

In such cases, the limited expressions by the student teachers could be supported by reflective dialogs as commented by SV1:

> She's able to reflect, she's able to tell you things, she's trying her best. But when it comes to writing, sometimes, something else, you know, came up in her writing.

She's not able to write and share that deeply enough. But in terms of speaking, you know, sharing her thoughts verbally, I think she does better than that (INT/SV1: L318).

Sharing of different perspectives. Every three-way dialog participant was involved in this platform, the student teacher, placement mentor, and the supervisor. Through this platform, new learning can be re-constructed among the participants. As what SV1 commented:

> When you learn anything new, you share with other people, you continue to learn and you learn more. Because sometimes you have to say out your thoughts, meaning sharing with the others, friends like I say....That helps, you know, the students (INT/SV1: L248).

Every participant brought with them different perspectives. Through sharing ideas and experiences, the participants' experiences were enriched in the process, and new ideas may be generated as what SV1 said:

> When you share with the others, you know, whether the people from the industry or not, you know, taking the same course or not, they get different perspectives. Sometimes, you know, they will gain ideas, you know, that they have never thought of, and that might help, you know, in their learning, whether it's do their assignments or not (INT/SV1:L250).

For the mentor, the dialog had enhanced knowledge of what each participant could bring to the table:

> This dialogue is good, can improve ST1 and everything, because ST1 study this. And another one also like, can help the supervisor to know more whatever ST1 done here. SV1 cannot observe what ST1 has done every day, what ST1 did. Can help both of them. Can let me know more about ST1. What she has learnt, is it brought up in work or not? (INT/M1:L68).

In summary, the dialogs had brought opportunities to share different perspectives on practice, and an avenue to connect what was learnt in the college with what was practiced at the workplace. While different perspectives and ideas were discussed, the student teacher could then base her decision making on validated ideas

to enhance her practice. As what M1 understood, the supervisor and mentor may have different opinions on how early practices should be due to the different experiences that each brought into the dialog:

> They [supervisor] have the experience for all the students, and their knowledge for the student. They can speak out, they can observe well. If about childhood maybe is different way. SV1 is not like us, we work with children. Children's experience and adult is different. Totally different. Maybe SV1 can't feel it how we work with children, they do not work with children. That's why we have dialog, and share how we work with children (INT/M1:L204).

Continuous follow through and dialogs on core skills. The common early years core skills and standards provided a basis for the three way dialog. The reflective dialogs were more focused when reference was made to the core skills required of early childhood practitioners, as explained by SV1 in this excerpt:

> That's the guideline to follow…can stay focused. Even with the reflection, because sometimes they are not too sure what specific to reflect on. So they are encouraged to refer by to what is there the set of common core skills and standards. At least you know something to be begin with (INT/SV1:L380).

Apart from the core skills standards, regular follow through on the student teacher's progress through various means such as dialog was important. It also provided feedback for students to re-evaluate the reflection- on- action, or follow up on the pledges made in the journal.

> They must follow up what you say, like you say, you pledge and all that. But sometimes I just forget along the way. Only a handful, you know, does that. Follow up and make sure that, you know, this is what I say, I try to consult with my placement mentor, or I try to observe the most senior teachers and all that, trying to improve on their skills (INT/SV1:L364).

Picking up form the reflections, they are able to turn those experiences into meaningful learning for the student teacher, and making meaningful changes in their practice as they progress on. As SV1 exerted:

If they reflect on their teaching if that's, you know, one incident they want to reflect on. If they reflect on that, you know, talking about how they feel about it… what they learn from that experience, at least they get to take the next step whether it's about, you know, about improving their teaching. It can also be, you know, things that they actually done well. But what is important is, you know, to improve their skills and knowledge, but at the same time, you know, helping the children also to move up to the next level of development (INT/SV1:L200).

Just like teaching, reflective practice is a continuous process of change in behavior, action and perspective. It is a process of making a better classroom. They are constantly asking the questions, and ask more questions, "where do I go from here?" It is an integrated process, as SV1 aptly put it:

It's not just about reflection, you know, taking into account what the next step, you know, the next action should be, but in terms of the other assignment components as well, for instance, the observation, the lesson plan, there is always the, you know, the next step component built into, into that. So they will always have to think about, like, you know, where do I go from here? (INT/SV1:L204).

Apart from that, the reasons that bind them together, as expressed by SV1: "We are there for the students" (INT/SV1:L354). Although the limitation of time and busy working schedule for all parties involved prevented them from holding the dialog more often than they should, or develop a more sustained relationship with the mentor at the placement center (INT/SV1:L356).

Validating ideas through collective reflection. Three-way dialogs centered on ST1's progress; student teacher's concerns; and areas of improvement in the student teacher's practice (OBS/ST1). The dialogs served as an important platform for ST1 to validate her thoughts, clarify her uncertainty experienced during practicum, and to confirm with someone if she was on the right track. Ideas and suggestions were what ST1 needed when her mentor and supervisors met. This was illustrated by what ST1 mentioned in the following excerpts:

They can tell me what my problem is. Because sometimes I cannot think maybe I did wrong, I don't know, so in the discussion they can remind me (INT/ST1:L48).

Actually it is good, I like people to comment on me so I can improve, because sometimes when I do my daily reflection, ok…self-reflection, but I don't know actually I did wrong or not and I need someone to give me ideas and suggestions (INT/ST1:L54).

During the three-way dialog, the discussions were spontaneous and impromptu as the conversations were not pre-planned. Much time was spent discussing the lesson that had just been observed. The student teacher was required to really think of the responses on the spot, as what ST1 remarked:

She didn't tell what she will ask. So usually I need to react spontaneously. Most questions she asked me, I need to think and then answer. (laugh) Because normally we didn't ask her what you will ask us on the day. Ya. So based on what she observed me and then she asked me question (INT/ST1:L32).

For the supervisor, it was necessary to know the progress of her student's teaching practice at the placement center, or whether she received adequate support from the center. Three-way dialogs offered unique experiences involving the student teacher, mentor and supervisor meeting together to have open discussions that would benefit the student during practicum, unlike another program that she was involved in that was without the three-way dialog, as captured in the following excerpt:

It is good that we actually have that open discussion to make things transparent …Because on the DECE program, it is just like you know between the practicum mentor and the student or it's just between placement mentor and student, we don't have really 3-way dialog like this. So it is actually [a] different experience, and so I think it benefit students to some extent (INT/SVI:33)

During the three-way dialog, both supervisor and mentor could give their feedback to the students at the same time. The student teacher could also have separate dialogs with the placement mentor. Student teacher's meeting with the mentor takes place at a minimum twice per semester. They have a number of forms to fill. The

meeting discussed the mentor's observation of the students during teaching sessions and other activities (INT/SV1:L49).

> They may discuss, you know what actually happened and at the same time they reflect on their own skills and knowledge base on the standards that is actually on the form (INT/SV1:L71).

Facilitation process in group dialogic reflection that supported STI's reflective thinking and practice. As explained earlier in the preceding section, although there were many opportunities that would allow for reflective thinking in ST1, however, it was found that the reflections taking place during the collective dialog sessions, or three way dialog promoted more opportunities for higher reflective thinking to integration and validation levels rather than just evaluation levels. The following section will answer the third research question on how the facilitation process in group dialogic reflection supported ST1's reflective thinking and practice.

To answer this question, the researcher had analyzed the data inductively from the observation data collected. From the analytic codes, the categories that emerged from the observation data as follows:

a) The roles of the supervisor, mentor and student teacher in supporting student teacher's reflective thinking and practice

b) The climate that supported student teacher's reflective thinking and practice, as well as barrier in the facilitation process

c) The characteristics of situated reflection (DOC/FN:1)

The roles of the supervisor. The following section discusses the roles of SV1 in the facilitation process that supported ST1's reflective thinking and practice during group dialogic reflection:

Socratic questioning. The codes that appeared in the observation data on the supervisor roles during the three-way dialog were asking question, probing, prompting, inquiring, seeking confirmation and seeking clarification. A search in the website on the codes that centered around those action words led the researcher to the nomenclature of Socratic questioning. This type of questioning method was used by the supervisor (SV1) to deeply probe student's thinking and to help distinguish what was known or understood and otherwise. SV1 carefully constructed and asked deep questions. She started with asking a question based on her observation of the teaching and learning process that just took place before the three-way dialog session. During the three-way dialog, she often dug beneath the surface of what ST1 had answered and engaged the student teacher deep into reflective thinking.

The following excerpt showed how SV1 asked a Socratic type of question to probe the student teacher into clarify her thinking on the just conducted lesson, as highlighted in italics.

1 SV1: Just now you had a lesson, art and craft lesson, *what was the objective*?
2 The lesson...*What was your objective*?
3 ST1: Uh...Because next week they are going to celebrate the Children's day.
4 So, I do it today. Actually uh... the other classes they did it before. They did
5 earlier, then my children are very curious, they asked me how to do it. But the
6 other class they prepare everything, they cut everything, the children just
7 paste. and then I want my children do something challenging I want them to
8 cut themselves, to cut the paper. So, I didn't want to prepare anything but
9 today I didn't prepare the materials so enough.
10 SV1: All right. *What else you think you can actually reflect well on the lesson*?
11 In terms of how it went? *How many percent* success rate did you think?
12 ST1: How many percent? Seventy
13 SV1: *Did it lead to the lesson objective? To what extent?*
14 ST1: Uh…the lesson objective. Overall is Ok for me, but there is just
15 something that out of control.
16 SV1: *Such as what?*
17 ST1: I can't control the whole group. Some of them call me, come here, and
18 I cannot go around... But my learning of the day is they can create the party
19 hat using their creativity…they cut the paper according uh...according to what
20 they want and then they draw what they want. (OBS/ST1:L1-6)

The supervisor also asked the student teacher to clarify on some points made in her self-evaluation form found in the portfolio. From what the student had written, the questions led to other questions that clarified her thinking on how she engaged all the children in her lesson; for instance, an Indian boy learning Mandarin, and some children who did not like art lessons but how they had surprised her in their interest in the cutting activity during the art lesson, as follows:

1 SV1: …She has written here, her targets, to involve all children in all
2 the lesson or activities. *Do you want to explain that?*
3 ST1: In what lesson?
4 SV1: Involve all children, involve all children in all lessons…
5 ST1: Ah. Because some of them may be not interested in all the lesson. So , I
6 will ask them to come back. There was an Indian boy. He did not like the
7 Chinese lesson. When it is Mandarin I ask him to sit in front. So, he can focus
8 on the whiteboard or on me. Because I know it is very hard to him to learn
9 Mandarin. He can speak very well. Speak ok...I can understand what he speak
10 but when in writing, to understand the words is very difficult for him. But I
11 hope he won't give up. I hope every child can really pay attention and learn
12 from me. Learn from what I teach them, yah. …. at least when he is learning
13 the lesson, he really sits inside, he didn't *kacau* or disturb other children.
14 Because he is going to primary one, and he also will be studying in a Chinese
15 school. I hope he can really catch up and what basic Mandarin is so he can
16 cope with other children when he goes to primary one. Not only the Mandarin
17 lesson, some of them did not like the art lesson. But I just say what you did
18 was very good already, you just try…Today, I was very surprised. His work
19 was very different from others. He really cut the paper and paste whatever
    shape he want (OBS/ST1: L63-66).

During the three-way dialog, the supervisor continued to probe for evidence of her competency in particular core skills as required by the early years standards in the course. Usually the supervisor asked short questions, and allowed the student teacher to expand her reflection-on-action, as in the following excerpt:

1 SV1: *What area do you think you are strong in*? Like in terms of the skills you
2 know?
3 When you work with the children?
4 ST1: In ….uh… with the children??
5 SV1: *Are there any strength in you and somehow you can show in your work*
6 *with children*?
7 ST1: May be in the story telling time because I have many expressions and is

8   very…how to say? I have many expressions. I tell them a story. They will give
9   their opinion as well. So, I like more the story telling time session.
10 SV1: *There is more interaction between you* and…(OBS/ST1:L99) continue p.
222)

Apart from probing for evidence, the questions asked by SV1sometimes prompted ST1 to reflect more on the implications and consequences of her actions during the activity, as illustrated in the next excerpt:

1   SV1: Ok. At the beginning you did show them the sample, explain to them the
2   different steps and all that. All right. And they come to a place and start working
3   in their project. Yes, uh...*what else do you think actually reflect on the lesson*?
4   Things that improve what you say the …
5   ST1: The material
6   SV1: *Ya the material...prepare more*?
7   ST1: Ya…
8   SV1: *Anything else*?
9   ST1: May be I can split into two groups because they are too big group room
10 and then some of the, they didn't really understand my explanation So, in my
11 explanation I think I go through too fast.
12 SV1: *Too fast*?
13 ST1: Ya, they really didn't catch what I said. Especially during cutting the crepe
14 paper (OBS/ST1:L16-23).

Other than the supervisor, the mentor also came into the picture in the facilitation role. The supervisor may ask certain questions, and the mentor explains and justifies the practices in the school so that the supervisors and the student teachers understood the rationale of the practice in the school. For instance, to know if the student teacher could balance her work and study life, the supervisor asked a question, and the mentor shared her opinions on ST1's performance, and explained the need to have those events such as concert, parents' day, and so forth, as part of the school activities, as shown in the following excerpt:

1 SV1: Coping with her college course and coping with her work here you think
2 She can balance? *Is she ok can so far*?
3 M1: I think she tries her best. Because I think she also... trying. Here is more
4 work already and after work is study. And also need to do assignment...
5 Sometimes she shares with me, I need to breathe for a while.
6 Yeah, I said you can come out and breathe a while like for 5 or 10 minutes.
7 Because we cannot stop our job. ….we cannot stop our job, we can just come
8 out and just relax for 5 or 10 minutes only. Because traditional and Montessori
9 is different way, totally different. Montessori, more time to give you to

10 observe. Observation and everything is more. But traditional way, like just
11 now I say already, lesson by lesson. You can't stop.
12 SV1: *You think you are able to continue?*
13 ST1: So far its ok. Because sometimes the kindergarten has event, open days,
14 or concert. We need time to prepare. (interrupt)
15 M1: Because, every school has their event. We cannot, we cannot get this is
16 our burden… This is the management already. Every school has concert,
17 every school has some events. We have to balance it, we have to know it.
18 Now I have to try to balance myself, my management of time (OBS/ST1:
   L125-137).

The Socratic questions by the Supervisor created opportunities for the student

teacher as well as the mentor to respond to questions, and sometimes leading to more

questions. The responses are usually in the form of explanations, descriptions,

justifications, confirmation, agreement, and evaluation. In other words, Socratic

questions could open up more windows of reflection as they engaged in the act of

providing explanations; more descriptions; or in higher levels of responses through

justifying, confirming, agreeing or conducting self- evaluation (DOC/RJ/291115).

SV1 reflected how she probed for more responses, as in the following excerpt:

> There are skills that you need to have, because sometimes you need to probe
> further, you know, when the student or the mentor say something, so that was
> like, you know, something new for me I will say when I started that dialog,
> when to probe, how to probe. Asking the right questions so that you get them
> to say more. (INT/SV1:L330)

The student teacher was aware that she had to be spontaneous and think hard

about the questions during reflective dialog, and answers were not given to her easily:

> 1 R: How does she [supervisor] decide what to talk about? Does she talk to you
> 2 before the meeting? Or…
> 3 ST1: She didn't tell what she will ask? So usually I need to react
> 4 spontaneously. Most questions she asked me, I need to think and then answer.
> 5 (laugh) Because normally we don't ask her what you will ask us on the day.
> 6 Ya. So based on what she observed me and then she asked me question
>   (IN/ST1:L31-32).

In summary, Socratic questioning not only probed the student teacher's

reflective thinking, it also served to assess the extent of the student teacher's

knowledge, skills and attitude in practice, and further developing their skills to analyze the critical incident following the line of reasoning.

Role model for reflection. From the three- way dialog experience, ST1 also learnt and modeled the skills of questioning and applied it in her teaching; in understanding and assessing the thinking of the children. For instance, ST1 commented on how she encouraged the children to think, rather than giving them the answers in a lesson, as in the following excerpts:

> Teaching in the math or language, I mean, because I saw what the other teachers do, they just use whiteboard, marker pen…I mean the 6 years old class. So, uh what I do; I ask question, and throw back the question for them to think (OBS/ST1:L41)

ST1 had also changed her teaching strategy to allow more opportunities for children to try, to think and work independently, rather than feeding them the answers. They'd also be lazy to think about it. First when I change to this kind, because the first was spoon speeding. When I changed to this one, some of the children did not like. They did not like to try by themselves. They think if I sit on the floor and understand what the teacher teach. They go and do it. It works. (OB/ST1:L113)

In summary, it was found that critical reflection thinking skills of student teachers could be honed. Through the reflection activities, individually or collectively, student teachers could be facilitated by their supervisor or mentor to practise their reflective thinking skills. However, SV1 commented that these activities had varying degrees of impact on student learning, as in this excerpt:

> In my current class…I have got, like, a couple of students who are there on the high end of critical thinking, skills, whereas the others they are more on the other end, or like, you know, average. So in their work, in terms of written work, and

also in terms of, like, you know, discussions in class, you can see that difference (INT-SV1:L238).

Affirmation. During the three-way dialog, it was evident that SV1 on many occasions gave affirmation to ST1 on her teaching skills, classroom management skills, as well as her increased level of confidence. This was important as an act of encouragement, emotional support and approval to the student teacher, getting affirmation on positive progress that she was on the right track. Some of the excerpts are now appended:

> You allowed them some flexibility? You allow them some room to express their… like you said their creativity (OBS/ST1:L10)

> Managing the whole class… responsive to the children. You know what they actually approach you, to ask you questions or to show them how. (OBS/ST1:L14)

> I was telling her that she was rather responsive to the children…Ya, she actually responded, listened to every one of them... Confidence level has increased. And she seems to trust her children. She also gave some encouragement to the children…She said "thank you" as well, that's been a good role model (OBS/ST1:L57).

The learner's role of in the development of reflective thinking and practice.
This section discusses the role of the student teacher in facilitating deeper reflection.

Learning skills. Firstly, the student teachers' language proficiency as well as the ability to think critically had a direct effect to their reflection skills, either positively or negatively. Proficiency in language helped them to express their thoughts in writing, and thinking skill was essential in helping them to think critically; to be able to analyze and evaluate an incident more critically, as commented by the supervisor in the following excerpts:

Students who are more able in terms of their language, they are able to write more, and they are able to reflect a bit more compare to the others who are, you know, struggling with their language (INT/SV1:L210)

She will be able to share more and speak up more if she has ... she's more comfortable with the language herself... She will try, yes, she will try. But I feel that, I personally feel that, you know, there can still be a lot more that can actually come out from her, but she's not able to do that (INT/SV1:L318, 326)

These two skills are required, the language as well as the critical thinking, the critical thinking skills, to be able to analyze, to evaluate the situation, and make some kind of conclusion (INT/SV1:L223)

Learning attitude. Secondly, the student teacher possessing such traits as passion and pro-activeness were one of the critical factors in this situation. The responsibility to learning and the ability to ask questions were important traits that result in insightful reflections, as evaluated by the supervisor as follows:

She's very passionate in what she does. She's willing to learn. She will ask questions. She tries whether it's to reflect, or whether it's to do any other assignments given to her. So I think that's actually very important in the student, you know, having that passion and initiative to approach you, you know, to ask you any questions or like, you know, to seek for clarifications. Responsible as well (INT/SV1:L314).

In the evaluation form of the student teacher's portfolio of practice, SV1 gave the following remarks:

You have made effort to reflect upon practice drawing on the skills and knowledge gained from the course. There is still much room for you to being more analytical in your work demonstrating how much more you understand about theory practice. You will need to continue to work on your language to bring this out in you. Nevertheless, you have attempted to reflect showing how you can support the children's learning and development. (DOC/PF/ST1:1)

In the dialog assessment form evaluated by SV1 the results were positive. ST1 scored 78.8 over 100. Her positive personal traits and attitude to learning contributed to the high scores received by ST1. The areas assessed on and the criteria scores were:

- Initiative (very self- directed. Contributed significantly to task planning);
- Keeping to schedule (most deadlines are met),

- Attitude (show great interest and commitment all the time);
- Inquisitiveness (Asks challenging and relevant questions all the time);
  Keeping records (fairly well documented and organized. Essential information is kept at a fairly easy to follow format. Some evidence of individual insights and reflection).
  Tutor's comments:
  Showed interest and commitment towards her studies and work placement. Asked questions pertaining to her course (DOC/PF/ST1:20)

Climate that supported ST's reflective thinking and practice. The following section discusses the climate that supported ST1's reflective thinking and practice in the first unit of analysis as follows.

Openness. Open and transparent discussions were felt to be the key enabler of meaningful three way dialog. For the supervisor, it was the space to discuss the student's progress with the placement mentor, and getting the perspective of the placement mentor in the student teacher's performance.

> About the student's progress, uh… to see how she is coping in terms of her teaching, uh, in terms of managing of her group of children. And also like to know like if they can get enough support from the placement mentor .It is good that we actually have that open discussion to make things transparent …Because on the DECE program, it is just like you know between the practicum mentor and the student or it's just between placement mentor and student, we don't have really 3-way dialog like this. So it is actually different experience, and so I think it benefit students to some extent (INT/SV1:L33).

It was important that every participant's voice is heard during the dialog, listening to each other and having an open discussion, as what SV1 commented:

> Yes, because I would actually like to hear from the students, so and also at the same time from the placement mentor. Not just me, you know, I'm talking... because it's a dialog, so it's actually an open discussion (INT/SV1:L41).

However, in order to have an open discussion, participants would need to be honest about any matters that concerned them; they also need to be willing to open up,

to share their experiences, even at times when they felt they might offend their placement center.

> It depends on how open I supposed on the students you know, and placement mentor. Sometime students are able to you know, to share a lot more and willing be honest to themselves and be able to open up, and are not be like afraid or shy over…or like you know sharing their personal experience. And sometime you know they felt like they might offend the school, the management, or the principal, and you know the mentor, so they won't be able to …they are not willing to share that much (INT/SV1:L79).

In order for the participants to discuss issues openly, the level of comfort among the participants would be an important determinant (INT/SV1:L98). The participants were treading on unfamiliar paths; for instance, the student teacher had to manage the power distance that existed, and the Malaysian culture of not offending people in conversations. There was an element of risk taking during conversations, especially if the person you were speaking to was not familiar to you, and if you were unsure of the responses received, as illustrated in the following excerpts.

> (Sigh)…uhh… of course I didn't think, feel too comfortable at start because you know it's also a new experience to me, but along the way, um… I became more comfortable but like I say depends on like whether the other two parties are willing to participate enough in the dialogue session (INT/SV1:L81).

> I will actually share with the placement mentor during the dialog what the students [are] supposed to do...so that I can kind of like you know ensure that the mentor is able to help to certain extant. Um… I am not too sure in terms of success, how that benefits you know the students that I actually have but at least `I feel that I have actually sounded it out, I sounded it out to placement mentor and she is able to ask me anything you know about what the students supposed to do at the school itself (INT/SV1:L119)

Being there. Despite the challenges of time and logistics arrangements (INT/SV1:L356), what has motivated the people to get together? As what SV1 said, just being there, and giving support to the students during their practicum placement, as what SV1 expressed in this excerpt:

I hope you know that will work better for the students being there because like I say earlier (deep sigh) umm students at start they will say I am not getting enough support because I don't have enough time to say, do observation (INT/SV1:L125)

Just like watching a football match. The fans came to support their football team, being there would mean a lot to the players! As SV1 continued to say, both SV1 and M1 were there for the students to ensure that she received adequate support for her practicum.

Um…showing that, you know, we are there for the students, I suppose. But I feel that, you know, of course it's just one time might not be sufficient, but of course, we have got like, you know, limitations like time factors, and all that. So we… I'm afraid we are not able to go out more to show that we actually give more support at the placement itself (INT/SV1:L354)

Summary.

In summary, the themes emerged from the findings of Unit of Analysis 1 in this

study are as shown in Figure 4.4:

Broad Themes	• **Themes**
Reflection Strategies	• Reflective Journal: Progress in Re-evaluation of Practicum Experience • Written Feedback on Reflective Journal • Shared Reflection • Three-way Dialog • Reflection during Lecture
Faciliatting Deep Reflection: Outcomes of Collective Reflection	• Sharing of Different Perspectives • Continuous Follow Through and Dialogs on Core Skills • Dialogic Reflection Compliments Written Reflection • Validating Ideas through Collective Reflection
The Roles of the Supervisor	• Socratic Questioning • Role model for Reflection • Affirmation
The Learner's Role of in the Development of Reflective Thinking and Practice	• Leaning Skills • Learning Attitude
Climate that Supported the Student Teacher's Reflective Thinking and Practice	• Openness • Being There

Figure 4.4. Display of Themes for Unit of Analysis 1.

Unit of Analysis 2: Kindergarten 2

Kindergarten 2 is a purpose built private kindergarten located within an affluent gated and guarded housing community. Its 10,000 square feet area housed a double- story building with six classrooms, two computer rooms, a gym, a day care room, a television room, an office and a kitchen. Its outdoor facilities included a playground, sand play area, and an inflatable swimming pool.

According to the kindergarten brochure, active learning according to the child's pace was encouraged, where the child would be given opportunities to explore, communicate, analyze, and apply information. Its goal was to nurture and develop children's overall development in areas such as creative thinking; self-confidence; independence; social and interactive skills; self-awareness and respect for others; emotional skills; language and literacy skills; numeracy and problem solving skills; physical and motor skills; practical life skills; sensorimotor skills; and so forth. To accomplish these goals, the kindergarten believed in working together with the parents and teachers in giving the best to the children.

The kindergarten's program used both the Montessori Method and the thematic approach. So that children could develop physically, cognitively, socially and emotionally. The program was also delivered in line with the Preschool Curriculum Standard Malaysia. Two mediums of instruction were offered, where parents could opt for English or Mandarin preschool education. Its operating hours were from Mondays to Fridays, 8.30am to 12.30pm for children aged 4 to 6 years old; 8.30am to 12 noon for children aged 3 and below. A day care program was available until 6.00pm.

In the three- year old program, the ratio was one teacher to eight to ten children. For the four- year old program, the ratio was one teacher to 10-12 children. The five

and six -year old English medium programs was designed to prepare the children for their Primary School. The ratio was one teacher to 15-20 children. In its delivery, thematic books, Montessori materials, E-teaching & E-Learning with structured computer software were available to the children (DOC/INFO).

There were 46 children with various ethnicity such as Chinese, Malay and Indian. A small number of children came from foreign countries such as Korea and India. The recruitment policy required the teachers to have a minimum Early Childhood Diploma qualification and experience in teaching, particularly the preschool classes. There were six full time teachers, a principal, five practicum teachers, an administrator, a cook and a helper who were working at the kindergarten during the research period.

In terms of the kindergarten's administration policies, stringent procedures of health and safety were adhered to. For instance, the use of school slippers only in the school, children must wash their hands before entering the kindergarten, after outdoor play, as well as before and after meals. To promote a healthy diet, fruits were part of the daily diet served in the school. Parental involvement was promoted at this kindergarten, where parent teacher meetings were held twice a year. Parents usually participated in the sports day, concert day, as well as festival celebrations (DOC/ PF/ST2:50).

In this second unit of analysis, two student teachers from the College were sent to this kindergarten. They were ST2 and ST3. The paragraphs that follow would report on ST2 based on data collected from documents.

Student teacher 2 (ST2). ST2 (21 years old), was a year one semester two female student of the Bachelor of Early Years Education program at the research site

during the research period. She had close to one year of practicum experience with some six year olds in this kindergarten, the same school that another of her course mate, ST3, was posted to.

ST2 chose early childhood education as a career because she believed that she was aspiring to be able shape a person when young, as what she had expressed in the preliminary questionnaire in the following excerpt:

I choose this career because I believe that we shape a person since young and I hope to be able to inspire all the children I teach (DOC/PRELIMQ/ST2:2).

Prior to this, ST2 had experienced a mentor who had influenced her development in the early childhood field. She had learnt from this mentor who had taught her that every child was unique, and that she should not make comparison among children. The following section describes her personal philosophy or approach to early childhood teaching and learning.

ST2 believed that the early childhood teaching and learning environment should be child-centered. Children should be taught what interested them and that they learn through exploring and interacting in relationships built with their peers. She believed a teacher's role was to teach, but most importantly, it was one that inspired children. On the early childhood setting that she was involved in, ST2 only had this to say "good but needs to cut down on the amount of worksheets given" (DOC/PRELIMQ/ST2:2).

She further explained that teachers should focus more on play and learning instead of academic work, and be more encouraging rather than reprimand. She believed that parents and teachers should collaborate closely to enhance the child's learning. Teachers as colleagues should have a healthy relationship and so they could

encourage one another to become better teachers. The interaction between the teachers and the community should be ongoing, and the community would allow opportunities for children to visit them during field trips (DOC/PRELIMQ/ST2:1-5).

Mentor M2. M2, female, was assigned as ST2's placement mentor at kindergarten 2. She was in her forties, and was armed with 24 years of working experience in early childhood education. M2 came from Kuching, Sarawak. She started her career at a conventional kindergarten and had worked in a Montessori program when she came to Kuala Lumpur. M2 had a Diploma in Montessori and she was the deputy principal of this kindergarten 2. She was involved in both management and teaching. She had been supervising practicum students since 1993, with a total of 13 years of mentoring experience of student teachers from various teacher training institutions.

Supervisor SV2. SV2 was assigned as the supervisor to ST2. She was a 45-year-old female lecturer who worked in the College for four years. Before working as a lecturer, she had worked as lecturer for half a year, but spent most of her early career teaching English. She obtained her Bachelor of Education in TESL. As she wanted to try something different, she pursued her Master's in Early Childhood Education, after which she started lecturing in early childhood education. She had been supervising practicum students for four years.

Opportunities that engage ST2 in reflective thinking. The following section presents the findings on the opportunities that engaged ST2 in reflective thinking during practicum.

Motivation to deeper reflection through journaling. ST2 wrote a reflective journal as part of the course requirement. She would reflect on incidents that were

different from a normal routine or something that was significant or interesting, as she explained: "any incident that is different from a normal routine or something that stands out; a conversation between two children, and if it sparks interest" (INT/ST2:L47). She was aware of the process of writing the reflection journal, as it was evident that she had attempted to write beyond just descriptive level to include her own feelings and opinions, evaluation, as well as integration of theory to practice, and consideration of future improvements in her critical incidents, as described in the next excerpt:

> First, I will write about the incident, describe in general, briefly I talk about the incident. Then I will put in my opinion about that incident like what I feel, should have been done or could have been. Or what had been done that is good and then sometimes I put theoretical research inside also like what sort of improvement that could be done (INT/ST2:L55).

> She continued to describe how she attempted to link theory and practice when she observed a situation in the kindergarten, and she would apply whichever theories that came to her mind. As she wrote:

> Let's say like if the child behaviors. Some theories I have. Like I know what they talk about it, right. So, when it happen on that incident, then I… for example, like how children copy adult's behavior… like when an incident happen, when a child copy the teacher's behavior, then I will quote Bandura's theory like that (INT/ST2: L55).

> The above excerpt showed that ST2 would recall a theory and apply the theory to the incident. It was evident that she was linking this experience to what was learnt at the college.

ST2 would reflect on the incidents on a weekly basis. The incidents that interest her were children's behavior, children's conversation, new activity, and so forth. She would first write about the incident, and reflect on it during the weekend. As ST2 was busy with practicum and college commitments, she would first write the incident so that she would not forget about the incident that happened. As reflective thinking

required time and a quiet place, she preferred to do it when she was more relaxed over

the weekend, as what ST2 explained in the following except:

> On that day, I go back and then I write the incident, I will write the incident, but my reflection would come on a weekend (laugh). Because I am busy, right. So, I write the incident so as I would not forget what incident that happened but sometimes I do not write the whole reflection on the spot. Because I, I am the type of person who write something I think a lot. So, it does not come out that fast. So, normally, I do it, like in weekends when I am more free (INT/ST2:L65).

> She found the reflective journal useful, as it gave her an opportunity to reflect,

which would otherwise be passed as the days went. Writing it down helped her to recall

what she had learnt, and make evaluation and improvement as a practitioner. The

journal recorded her progress throughout her practicum. Importantly, she realized that:

> It is useful because it helps me reflect. If I don't do the reflective journal, I would not reflect on my practicum. Like it helps me to think back on what I have learned, and then what I can improve on myself as a practitioner... I can see my progress through that journal (INT/ST2:L73).

> Comparing her earlier journals and the later ones, ST2 remarked that there was

a noticeable difference as her reflections were getting deeper, and not just description

of events, as she referred to her supervisor's comments,

> The depth of reflection. Like at first you are really on the surface and then
>
> towards the end you reflect more deeply (INT/ST2:L79).

ST2 also explained how writing the journal motivated her to reflect and

improve on her practice by associating the theories learnt to practice:

> It motivates me to …do better ... or help…let's say about this child, about the learning difficulties or something,…and after I reflect it helps me to come up with more ideas to help the child and it makes me want to help the child more….if I didn't reflect right, then I will just think about it, remember the incident, and then I will forget about it. If I reflect, right, then I will, makes me want to help the child more also…writing the reflective journal makes me … umm… understand my…what I learn in college also, like my lectures, it helps me relate my lectures and my practicum, like, sometimes when I write, I

like…oh now I know what the lecturers are talking about in the lecture (INT/ST2:L101).

However, ST2 admitted that it was a difficult task because she had to think of significant events to write about. And sometimes there were hardly anything that she could write about, especially on a usual day. It took her a lot of time and effort to think through and write those reflections. At times, she spent an hour writing a daily journal. She found describing easy, but evaluation was harder

ST2 shared her reflection on her feelings over journal writing, how she felt motivated to write, as a result of journal writing, her own beliefs was shaped by her reflexive thinking, and her teaching pedagogy and approach clarified through reflection as follows:

> Sometimes after I write it I feel … more motivated, yah. I can do this like…and sometimes I feel like umm… sometimes is a bit ... is not discouraging, it is when you write it you feel a bit sad because you know that it is wrong but you can't do really much to change it. Because you are just a practitioner. You are not a full time teacher. But most of the time when I write the journal, it makes me have a clearer idea of my own belief. When I write it there, I know like this is what I believe in. It helps me to clarify my teaching, and my own pedagogy. How I would approach things, yah (INT/ST2:L93).

However, being a practicum student who was not a permanent staff, she also expressed her sense of helplessness as she was unable to make changes happen even if certain practices were not desirable. Although at times the little achievements made had motivated her to do better for the children, as she was constantly reminded to think of ways to help the children, for instance, those with learning difficulties. In a way, it helped to stay connected with what was learnt in the college.

All the levels of reflection thinking were recorded in ST2's journal. Most of her reflections centered around her observations of issues around children's development and behavior, play and learning, health and safety, transition, social

relationship; as well as classroom management, inclusion, school policy, parenting, staff welfare, and so forth.

ST2 also re-evaluated her experiences by associating and integrating her experiences to a variety of information sources such as readings, observations, theories learnt at college, cultural values, as well as from the senior teachers in the school or her mentor. There was evidence of perspective changes from her many realizations, for instance, new skills required to be a more effective practitioner; following the child's interest; inclusion and achieving racial harmony and social justice through education; developing positive values in young children, as well as developing empathy and moral responsibility of the teacher of young children (FN/JN/ST2/ ST2 Category)

The following was an excerpt written on 20th March 2014, about three weeks after her first day of placement. It was about a four year old Korean child who was undergoing transition into a new school, and her observations about the child. She described the incident and made associations to this experience to information related to the phenomenon, and attempted to identify a pattern and relationship observed, and drawing a conclusion on the experiences, thus forming new insights:

> At first I thought she was attracted to my shirt because it was the same color as her towel. However after a while she started saying dog so I knew she was talking about the picture on my shirt. I was surprised as I never taught her before and yet she was talking to me because what I heard from the other teachers, she usually isn't very cooperative. I wanted to converse with her so I started asking her questions like "where is the mouth", "can you, point to me the nose of the dog?" She got really excited and for that moment she wasn't looking for her mother. After a while, I ran out of questions to ask and I didn't know what to do. I realized that I still need to have more experience in trying to communicate with children who speak a foreign language. It is difficult because M has limited English vocabulary and I do not understand Korean. Maybe that is the reason M is not cooperating in class because she is frustrated that she does not understand what is going on in class and that the teacher does not understand her also. As a practitioner I believe it is important to learn a

little of our foreign student's language so that the child will feel comfortable in the setting (DOC/JN/ST2:L14-16)

In another section of the journal, almost eight months into her practicum, she experienced handling a conflict between two children who were fighting over some bricks. In this piece of reflection, she had described the event, and made association of experience and what she has learnt, and was testing and verifying the proposed synthesis for consistency, as in the following excerpt:

> Today I wanted to test my skills in solving conflicts, therefore I took the initiative to talk to both of the boys. First I asked child L to share his toy with Child S and he refuses. I then told child L to give two of the bricks to child S so they both have a telephone and they can both play together. He still refused; I was firmer this time in saying either "you give me all the bricks so you have nothing or half so u can play with your friend." Child L looked at me for quite a while then he finally took half and share with child S. After that they were both playing happily as if the conflict did not happen. Personally I feel it was accomplishment for me because I managed to solve a conflict on my own. I managed to persuade the child to share through reasoning and not by forcing. Child L is a strong minded child and he usually finds it difficult to share. This situation showed me that it is not impossible to get child L to share. I just have to be firm and not give in to the child. Another key thing I learn is patience, even if it takes a long time I have to continue with [what] I am doing because if I were to give up halfway the child would be able to recognize it and they would not take you seriously. I would definitely apply this in my teaching more often (JN/ST2:L126-128).

ST2 often made careful attempts to describe the incident, and reevaluate experiences by associating feelings, association to theory, and in two journal entries ST2 had demonstrated appropriation in terms of perspective, affective or action outcomes. In this episode where ST2 had to manage children who had to stay in class because of the rain, reflection led to her awareness and realization that a new skill is required, as shown in the next excerpt:

> I always taught the 6 year olds only I do not really have much experience leading the children into singing. Therefore I asked the opinions of the children on what songs they would like to sing. After a while I realized I did not know some of the actions and even the full lyrics for some songs. It was an eye opener for me that I need to go and touch up in this skill. Although my class is 6 year olds and we do not really have singing sessions, I still need to improve in this

area as I do not know when I will be put in this situation again where I will need to lead the children into singing. I will practise more especially on my nursery rhymes (DOC/JN/ST2:L84-86)

Peer reflection. Reflection also took place with her course mates and lecturers during lectures, individual or group tutorials (INT/ST2: L109). They often shared about practicum experiences, or if there were any questions, or if there were doubts to be cleared, and so the issues were brought up (INT/ST2: L147). Peer reflection helped ST2 to anticipate solutions to future problems, which became an important learner strategy during practicum, as reflected by ST2:

> I am in year one the other peers in year two, and year three, and I get to hear their problems and what they are facing ...like helps me to be mentally prepared when I have the same problem. You get to hear more problems, and then you hear solutions how you should deal with the problem. So, is like, in case it happens to me next time, I will know what to do already (INT/ST2:L145).

SV2 felt that sharing during lectures was aimed at checking if they were on track with their reflection journal, and if the course learning outcomes were achieved. Student teachers were encouraged to share, but the intention was to check on their writing, and it was not done all the way through (INT/SV2:page6/L150). Apart from the student teachers learning from the sharing sessions, for SV2, she also learnt from hearing the experiences shared by the student teachers, and she would also share with other student teachers in her lectures so that they could learn from her experiences. For instance reminding the other students on writing of lesson plans as required by the centers (INT/SV2:L221).

Three- way dialog. An observation visit was made on 27th November 2014 during ST2's three-way dialog with her supervisor and mentor at Kindergarten 2. The

kindergarten was located at a high end residential area in Subang Jaya in a gated and guarded community. It was housed in a bungalow at a large compound, a brightly painted purpose built kindergarten. Before the dialog began, the researcher was brought into the classroom for the five and six year- old children when the class activity was still taking place. The researcher sat at a corner of the classroom to observe how the class was conducted. ST2 conducted a literacy activity on adjectives. It was a small group activity and children were invited to participate in it. Both the mentor and supervisor were also observing the lesson, which lasted 20 minutes. The children were very engaged when participating in the activity. After the activity, the students went for lunch in another room. The student teacher and mentor stayed behind for the three-way dialog. There were no children in the class. The researcher gained permission to record the dialog at this meeting. The camera and audio aid were set up beforehand. The researcher needed to manage the camera, hence she was sitting at the corner of the room so that the dialog session could proceed uninterrupted.

During the three-way dialog, the student teacher, supervisor and college mentor were seated at the table where the children's activity was held. It was a Montessori classroom for the five and six year olds. Montessori materials were available on the shelves in the room, and there was a bookshelf as well. The materials were neatly displayed on the shelves. The layout of the room is shown in Figure 4.5 as follows:
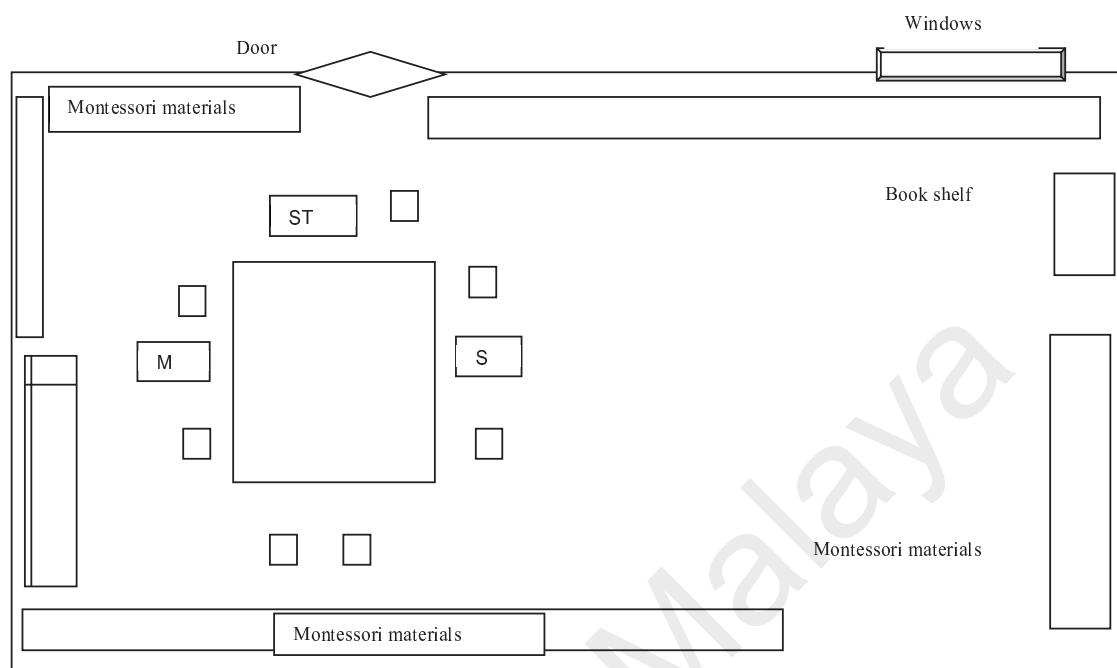
Figure 4.5 Classroom Layout for Three-way Dialogue for ST2.

The three-way dialog session was held for one hour from 11.30am to 12.30pm. The breakdown of the dialog duration recorded is shown in Table 4.4 as follows:

Table 4.4

Length and Word Count of Conversations during Three-way Dialog (ST2)

Dialogue	Length	%	Word Count	%
Length of three-way dialogue/Total Word Count:	59:30	100	2414	100
Student	09.20	17	526	22
Supervisor	32:34	61	980	40
Mentor	11:41	22	908	38
Length of conversations minus pauses and conversations with researcher	52.95	100		

Table 4.4 showed that during 52.95 minutes of three-way dialog, the student teacher only spoke for 9.20 minutes, which was 17% (526 word count which was 22% of the total word count) from the session, while the mentor spoke for 11.41 minutes

which was 22%. (908 word count that was 38% of the total word count). The Supervisor spoke the most during the dialog for 32.34 minutes which was 61% of the total session and recorded the highest word count which was 908 words or 40% of the total word count.

The supervisor started the three-way dialog by discussing the observation made on the lesson ST2 conducted just before the session. The supervisor went through the lesson plans prepared by the student. The three-way dialog started when M2, who was also the principal of the center entered the room. While they were waiting for M2, SV2 and ST2 discussed observation of the lesson conducted by ST3 that had just taken place. SV2 was seeking clarity on the lesson plan regarding the materials and equipment. The lesson was on adjectives. The lesson plan was different from the lesson observed but ST2 explained that she adjusted the lesson for better understanding. ST2 was asked to make the lesson plan more specific, for instance, description of materials used, and the specific learning outcomes. SV2 commented that the lesson was supposed to be conducted in 30 minutes but was completed within 20 minutes, and it was suggested that ST2 improvise her lesson to make it more interesting and more child friendly. She went on to suggest the use of story books with a lot of adjectives inside. She commented that the lesson could be made more fun and interesting, as illustrated in the following excerpt:

1 SV2: Ok so can you say what sort of cat you know you heard from the story
2 just now? Oh it is a fat cat. Alright. Then you explain to them you know, fat
3 is actually the adjective, I think it makes more sense to them.
4 ST2: Hmmm.
5 SV2: And then cat is a noun can so the word before the noun, that is the..?
6 Adjective (Continued) Then if let say you have slow learners that's when they
7 will be problematic.
8 ST2: Ah okay.
9 SV2: And then you know like what I said know children need to have fun
10 when they learn ok so it's like. Except for the end part the sentence they got
11 they got excited of answering other than that the initial part you need to drill
12 a bit in that (OBS/ST2:L12-39).

As evident from this excerpt, the responses from ST2 were short and brief. There was little attempt to explain the rationale of her activity. During the reflective dialog, the mentor was also invited to give her perspectives on how the lesson could be done alternatively.

1 SV2: What about your comment from you know? You are the main observer
2 here. (turning to the mentor)
3 M2: My comment…ah...My comment if I am the one, I mean , is that I would
4 like them to have some action.
5 SV2: Ehem…
6 M2: You know for example, if you put the script the boy is fat or whatever
7 you know they can act it up..
8 SV2: Ehem…
9 M2: Which I think is more fun. Correct or not?
10 SV2: Yeahhh...
11 M2: Act it up. You know...They can use thing in the class room, act it up la,
12 I think it would be better children love acting.
13 SV2: Ya lah
14 M2: Express themselves whether it is a mistake or whatever, it does not matter
15 right.
16 SV2: Yes...Even they can describe. Even by describing themselves, their
17 friends or acting they would learn much better.
18 M2: Yeah...
19 SV2: They would learn much easier.
20 M2: Like too much... right like is like too rigid you know…you know what I
21 mean..
22 SV2: Yeah (OBS/ST2: L12-39).

Self-assessment form as a guide for reflection. SV2 based her dialog sessions on the form provided by the college, which was used as a guide to conduct the three-way dialog. She also used it as the checklist for the core skills required for early years practitioners. The mentors were also given the same forms. However, SV2 was very focused on ensuring that the student teacher received enough opportunities to teach during the three-way dialog, and whether the mentors were aware of the procedures, and if they received lesson plans from student teachers. It was a platform for her to give and collect information related to students' performance at practicum as required by the college and useful in enhancing the reflection skills and in giving the student

teachers the necessary support and information in the actual workplace (INT/SV2:L34-44).

From the student's perspective, the forms were used by the supervisor to check if the criteria for the core skills required for early years practitioners were met. The mentor could also evaluate those criteria, such as supporting children's behavior, understanding their well-being, as well as the student teacher's performance. The form guided the discussion like a sign post, as demonstrated in the following except:

```
1    ST2: Normally we would have the list, the criteria, the supervisor would come
2    and check if I have met the criteria. So, she discusses with my mentor and
3     see…like some of the criteria are like, have I supported the children's
4    behavior and understand well-being? And then they will discuss and then they
5    will ask me also on what is my opinion. Most of the time is just that, and then
6    my supervisor ask my mentor about my performance in the placement.
7    I: These are the core standards of early years practitioner. (ya) What is
8    required in the form that is usually stated. Like, inclusion, transition, spotting
9    behavior that need support?
10   ST2: Yah
11   I: Safety procedures are there, right? So, you are already familiar with the
12   criteria before you go in?
13   ST2: Em…we have the criteria ... I mean, I looked through the criteria before
14   but I did not really … (laugh ) memorize in or be familiar with it. But it is
15   mostly what do you do in the practicum is actually connected, it's linked to it
16   …yah.
17   I: Ok. You mean the practical during the setting. Placement setting experience
18    is linked to the criteria?
19   ST2: Ok. You don't realize you are doing it but you are doing it, yah.
20   I: Ok. Sign post, like a sign post right?
21   ST2: Yah (INT/ST2:L3- 3).
```

Opportunities that facilitate deep reflection for ST2. The following section will report how the reflection opportunities facilitated deep reflection in ST2, individually and collectively. Data will be reported from the reflective journal and the three- way dialog observed, as well as the interviews conducted with this unit of analysis.

Reflective thinking levels: individual reflection. The previous section has discussed how the individual reflection strategy using the reflective journal method provided opportunities for the student teachers to reflect, and how other strategies such as feedback and comments on various aspects, such as language, clarifying; guidance on observations made, or encouragement to go deeper in reflection. With this daily practice, it was evident that ST2 made progress in her reflections, and some higher order reflective thinking such as association, validation and appropriation levels were shown. For instance, in the journal, ST2 described how the principal rewarded the children who were restless with sweets to motivate them to practise well, and she associated the incident to conditioning theories thus making some conclusions on the use of rewards through integration based on her observations, as demonstrated in the following excerpt:

> This is an example of Skinner's operant conditioning where a reward is given to the children to increase and encourage a positive behavior. The teacher also keep emphasizing on rewarding the children with lollipops on the sports day itself hoping that the children would do well that day because due to past experiences the teachers know some children when they see their parents there they would cry and not do what they are supposed to do. I think it is a good way to encourage a child to perform well, however I think it should only apply to certain context like sports day or concert day which only occurs once a year where the children are not used to it therefore it is a motivation for the children to do well.

> However I do not think that using this operant conditioning method for daily routines is good such as getting the child to do their work or trying to stop a child from fighting. This is because if a child gets rewards daily their motivation is the reward and not on the task itself. Therefore everyday they would do their work for the sake of the reward and not on the benefit of learning. Yes this operant conditioning could be used in our teaching but I believe it can only be applied to certain context (DOC/JN/ST2: L96-98).

In the following excerpt, ST2 was reflecting at the association level, linking what she observed about young children sitting for baseline assessments in certain schools to wider issues concerning developmentally appropriate practices as well as issues around social justice on very young children sitting for such tests.

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I find this system a little torturing for the children… they are under a huge amount of stress because they know they need to do well to be able to enter that school. I believe that children at this young age do not need to sit for standardized test. They should be graded based on their own capabilities and not on what is expected of them at that certain age. Primary schools should find other ways to assess the students instead of asking the students to sit for the standardized test. They could probably have their pre-school teacher write a report on the child and create interesting games or activities to assess the child who is being assessed would not realize that they are being assessed especially for those students who are slower learners they will feel stressed out (DOC/JN/ST2:L105).

The following excerpt showed ST2 having to take over a class when her mentor was on leave. She was testing and verifying the proposed synthesis on how she should manage the class. The ideas were mentally rehearsed to find the best way to manage the class.

At first it was difficult to handle, but after a while the children started listening to me after I was firm to them. Because I only come in to the kindergarten twice a week sometimes the children do not take me seriously and do not listen to me as much as compared to the permanent teachers. Usually my mentor is always there to help me when the children were not listening in me. I learned that in order to gain respect from the children I have to first respect them and also keep my word and not make empty promises. I realized threatening the children, for example if you do not listen to me I will send to the 4 year old class does not work because it is always an empty word and the children know that too therefore they would not take it seriously. I learned that reasoning with the child is the best way to solve children's behavior. Explaining to them what they did wrong and the consequences of their behavior as this will benefit the child in the long term. They will then think before they act as compared to just punishing the child, they will never understand what they did wrong (DOC/JN/ST2:L119-120)

Writing the journal had also helped the student teacher to become more observant and sensitive toward children's needs as they reflected on their needs and development on a daily basis and documented their actions as teachers. SV2 who also taught the course on transition noticed that student teachers had become more in tune to children's needs during transition, as mentioned in this excerpt:

I think they become more sensitive toward children's needs. Because we are looking at transition. Children are going through transition. So, this is how they learn to be more observant of the change in children. So, based on the reflective

journal, they can see whether, you know, things are going from bad to worse to the child, and how they act on it, to get them back on track. (INT/SV2:L132)

In her final reflection, ST2 had shown evidence of appropriation in reflective thinking. She was able to recall how she had changed her perception, behavior and action changes throughout the practicum. For instance: she used to compare children in her class, and queried why some children learn slower than others. Over time, she learned that every child was unique and each individual child displays his or her own learning style. Practitioners should alter the teaching to fit each individual child's learning. She also learnt that children should develop holistically in different areas and not merely focused on academics. She has also learnt how to support children's personal, social and emotional development and model good behavior (DOC/FN/ST2:53-57).

Collective reflection: going deeper in reflections. Involvement in the three-way dialog had helped ST2 enhance her reflective thinking through discussions and feedback given. However, she does not share everything written in her reflective journal as some parts she felt were private and some consisted of her opinions about others, and she wished not to share it in her mentor's and supervisor's presence. On the issues brought up for discussion, both supervisor and mentor were engaged in developing her skills further in teaching. The following excerpt in ST2's journal expressed how, during the three-way dialog, ideas were being verified and negotiated, resulting in ST2 adopting new learning in the actual workplace context:

> Today my personal tutor came and visits me at my workplace. I conducted a lesson for her to observe me. I taught the children about adjectives and I started off the lesson asking children to describe objects. My personal tutor commented that it is too difficult for 6 year children to describe objects. My personal tutor commented that it is too difficult for 6 year old children to understand and proposed that I introduce adjective to the children by either reading a storybook or singing a song. She also suggests that I make my lesson

to involve children to do more actions instead of just sitting down and listening to me (DOC/JN/ST2:L138).

After the three-way dialog, ST2 reflected, and was aware of the areas for improvement such as making her lessons age appropriate and more interesting, which was her area of weakness. With her mentor's guidance, her self-awareness led to changes in perspective outcomes and decisions made based on recommendations of her mentor, as ST2 reflected:

> I have limited experience in carrying out lessons in my workplace. Usually my mentor conducts the lessons and I am comfortable just being the assistant. But I know that in order for me to improve myself and to gain the most that I can from this workplace experience I would have to start being more initiative and ask to conduct some of the lessons. I should also conduct lessons for all subjects and not only those that I am comfortable with. Having more experience in conducting lessons would allow me to be more confident in my teaching; it also helps me to be more aware of how children learn and how I can adjust my lesson to meet the needs of each child.

> After my discussion with my mentor we have agreed to allow me to have more opportunity to conduct more lessons next year. I would do my lesson plan and let my mentor to have a look at it so that she could guide me and let me know how if it is needed, I can improve my lesson. Hopefully this would be able to increase my skills and knowledge as an early years educator (DOC/JN/ST2:L139-142)

ST2 also had the opportunity to expand on her ideas during the dialog, for instance, on how she provided personalized lessons for children with special needs, as in the next excerpt:

> 1 SV2: Ok. So do you adjust the lesson according to their need or do you still
> 2 teach using the same method like how you teach the rest of the normal
> 3 children?
> 4 ST2: Normally we would teach same but you just offer more guidance unless
> 5 they don't understand at all. Because the slow learners here they actually
> 6 understand it's just the language they cannot read…if you were to teach
> 7 something new, it's not like they, they would not be like be completely
> 8 lost…It's just that they need more repetitions (OBS/ST2:L119-120).

Through dialog, the mentor also managed to clarify the strategy further by adding on to the comments made by the student teacher. In this case, M2 attempted to explain

how she would work with the children with special needs by trying various methods

so that the child would learn from her, as in the following excerpt:

1 SV2: Ok. So any methods to help them on that?
2 M2: Method? Just need more practice...I conduct something I have concrete
3 thing, for example some children at one or two time can be able, but this
4 particular child sometimes I have to sit with them for three or four time just
5 to show them again. Until they grasp the idea yeah...that's what I do... That's
6 the way to help. Sometime also if that way doesn't work we have to use other
7 method. A must, ah... I mean a simpler method so that they are able to
8 comprehend with what you are trying to tell (OBS/ST2:L119-120).

In a conversation about positive guidance strategies and children fighting in

the class, ST2 shared how her observations of the phenomena on children's

complaints, and her idea were validated by both her supervisor and mentor, as in the

following excerpt:

1 ST2: In this class not so because they are more mature, but the others are
2 younger ... Yah. Is not normally fight, they do not fight actually, they just
3 complain.
4 M2: Yah. A lot of complain any way. When they are six years old, they have
5 a lot of complain. Not much of fight, but complain you know. (laugh)
6 ST2: Complain (echo after mentor). But sometimes I will tell them … their
7 complain is like...you know in small small things you do not have to
8 complain, you can solve it yourself. Just like, someone spill water and you
9 have to complain...
10 M2: (interjected) I do not like to friend you (OBS/ST2:203-205).

When this phenomenon was brought up, the supervisor went on to probe further on

how ST2 handled the cases of children making small complaints to her as part of

positive guidance strategies, and she was able to offer a few alternatives based on

situations she had observed. At the same time, M2 was able to offer her feedback on

ST2's performance in positive guidance strategies, as follows:

1 SV2: So, how do you handle this case when they complain to you?
2 ST2: It depends … let's say... um... the six years old, sometime I would advise

3 them to solve it themselves because sometimes their complaints is like … I
4 feel lah, their complaints are for the sake of saying something you know.
5 Actually, it does not really affect them that much. It's just that they want to
6 complain they will complain. Sometimes…they just want you to listen to
7 them. So it's like when someone spill water, you just say it's ok, I ask them
8 to go wipe it. Or let's say like ah.... like someone say like somebody forget to
9 put their toy back and then I said you don't have to come to me .... you just
10 have to ask the children to put it back. But let's say younger children their
11 complaints will be fight because this child is more aggressive with ..... like
12 this child, that child bit me. This one need to take matter in my own hands
13 because it is more serious.
14 M2: Ok lah. She has the skill of handling these children (OBS/ST2:203-205).

Having a discussion on new ideas with someone would help to confirm those ideas to be adopted for future practice. As novice teachers, discussions of this nature would provide opportunities to discuss ideas based on issues and problems faced by the student teacher.

ST2 responded to a question on promoting positive behavior in young children, and she reflected on how she managed children who misbehave or forgot their manners. However, after she had validated a few ideas on pro-social strategies used, she realized that in order to promote positive behavior, she had to be the role model for positive behavior. There was an indication of appropriateness in her reflective thinking, demonstrating perception and action changes, as shown in the following excerpt:

> If I see a bad behavior then I tell them but normally I try to do it…uh… get the children... because in this class the children forget to say like "please", so I remind them. But mostly I think positive behavior I try to promote through my own um… self like you know in order for the children to learn you also have to practise it (OBS/ST2: L195).

Higher levels of reflection during collective reflection. Data from the episodes and percentage of reflection recorded on the level of reflective thinking in

both individual and collective reflection for ST2 indicated that collective reflection facilitated higher levels of reflection from level four to six as compared to individual reflection. From the following Table 4.5, the higher reflective thinking levels from four to six generated by individual reflection was a total of 21% but collective reflection generated a total of 69%, with a difference of 48%.

Table 4.5

Episodes of Reflection and Reflective Thinking Level (ST2)

Reflective Thinking Levels	Reflection Journal		Three-way dialog	
	Episodes (N)	Episodes (%)	Episodes (N)	Episodes (%)
R1	37	41	3	9
R2	18	20	2	6
R3	16	18	5	16
R4	7	8	3	9
R5	7	8	17	53
R6	5	6	2	6
Total Episodes	90	100	32	100

The following section discusses some of the unique opportunities for deeper reflection provided by collective reflection as evident from the data obtained:

Problem solution. During the three-way dialog, the mentor, supervisor and student teacher will discuss a problem, and the student teacher was given feedback and suggestions for solutions. The student teacher learnt a different approach to her teaching, as well as learning through mistakes pointed out to her, as shown in the following excerpt:

> When we discuss about a problem and then my mentor and supervisor come up with a solution. Normally, from there I learn different approach to my teaching…I learn through what mistakes I have made. Yah. And then when they point out my mistakes and that is when I learnt to be better (INT/ST2:L171)

Although there was solution to the problem, the solution probably did not promote deeper thinking in ST2 as the solution came from her mentor and supervisor, and not from the student teacher. Nevertheless, the next question that concerned the researcher was the condition that allowed the student teacher to be open to the suggestions, as often people do not like mistakes been pointed out to them. Hence, a safe and non-threatening environment would be one that would welcome suggestions and criticism.

This additional support was useful to the student teacher as the feedback was based on actual hands-on scenarios at the kindergarten, rather than just hypothetical situations as children's needs and responses vary. Feedback could be given based on actual implementation of the student teacher's teaching plans to meet the wide ranging types and needs of the children, as what SV2 commented:

> It is very good because whatever we are teaching here may be not sufficient because they need to face the reality. So, out there they really have that, you know? Hands-on. And when we are out there we observe their teaching. This is where we give them feedback. They can further improve because in the real scenario rather than here sometimes we get them to present in class but to present to colleagues or classmates, to present to children that is totally different and children are of different types. So, the handling of the individual child is totally different (INT/SV2:L46).

Another benefit of the three-way dialog, as suggested by SV2, was that it allowed for immediate feedback and validation conducted face to face with all parties involved in the exercise, as compared to the two-way dialog conducted with the student with either the mentor or supervisor only where any issue has to be taken on a big circle before it could reach the student, as she said:

The student is there and get the message through, whatever the issues, be there and then solve the problem then going through a big circle to come back to the student, yah (INT/SV2:L78)

Learning from multiple perspectives. Three-way dialog provided a new platform for building rapport and creating opportunities to collaborate between the college and the kindergarten, as suggested by SV2 (INT/SV2:L210). It created a platform for sharing and learning from multiple perspectives. Compared to the two-way dialog when she met with either the mentor or the college supervisor only, this three-way dialog connected the academics, practitioner and student teacher in a new platform.

> It connects everything together. So, like I get to hear opinions from my mentor and my supervisor about me. Like I don't hear them talking about me. So, when they talk to each other like I can understand my behavior more, my performance more also. And also, it clarifies things between the college and my setting. Like if my mentor has problem, she will ask my supervisor. So, she will also be more clear like what this course is about…yah (INT/ST2:L15)

Not only had the student teacher learnt from the three-way dialog, the supervisor also learnt from it. She would share with her college students what was learnt so that they would be aware of what was expected at the kindergarten during practicum placement, such as preparing a lesson plan for the teaching, not just during the visit. (INT/SV2:L221)

As the participants were individuals who had different ideas, learning to accept each other's ideas for improvement in practice was necessary. Group Dialogic Reflection brought various ideas together, not a homogenous one. In order to learn, each participant valued others' ideas to develop practice. There was no one absolute way that was right, although in the Asian culture, relatively speaking, many people were compelled to do it right all the time.

> Yah, everybody is open about the discussion. Because we are individuals. Each one of us can come with a different idea. We have to accept each other's ideas in order for us to improve in this type of line, especially this early childhood. Ya, through the college, through the supervisor, through the student herself.

> Not necessary I am a mentor, I am always right, you see! That's why this three-way dialog is good (INT/M2:L146)

Having different perspectives also helped to validate ideas and assumptions. For SV2, she was able to confirm ideas about her student teacher's performance.

> I get views, I get confirmation rather than I get one-sided story. The student may say "I did not get the chance to do this" and but the mentor says "no, I have given you the opportunity." You know on the spot itself then you tell ok they have not been given the chance. Probably you can give them the chance because the truth is out there. So, it is good for both parties for all of us (INT/SV2:L56)

Even though SV2's approach was instruction focused, M2 played a role to moderate and made a difference to ST2's progress, when she was willing to adapt to student needs. It emphasized the importance of a three-way dialog such as this, that every participant could play a role to moderate the comment, to reflect and to promote good practice through reflection. The assessment on performance could still be validated through the other perspective. For ST2, she felt it was a good platform for all participants to clarify any doubts on the problems she faced, or validate ideas being discussed, mainly centered around the student teacher's performance and to help enhance her practice, as apparent in the following:

> My mentor and my supervisor were giving their ... they were talking about how to improve, and then they gave their own personal experiences. I think that one really help because… normally when one person discuss their experience, it's ok, but when two persons discuss about the same thing it's more… they clarify it better and like when both persons [have] the same opinion, then you feel like …oh… it's more enhanced I think. (INT/ST2:L15)

During the dialog, the different perspectives were presented but toward the end they somehow come to some conclusions that were acceptable to the participants.

In any forms of written work, they remain static if the essence of the writing was not translated into any form of meanings to life. During a dialog, communications take place with individuals who have feelings, experiences, perceptions, values and

belief systems. Therefore, it is important to be aware of, and be able to consider the perspective of another person, rather than having assumptions, or imposing your views without clarifications of the actual perspective. This was the essence of reflective practice achieved through group dialogic reflection. The more you are aware of each other's perspective, the more you are able to understand their perspective, and better able to develop empathy towards them, as what M2 had commented in the following excerpt:

> To fill up the form is just... forms! But when you meet with a lecturer or a supervisor, is actually live, and I think is good. To me it's good but I think it just takes too much of time, but I think it's not going to be this long when you have the three-way dialogue (INT/M2:L120).

> *Connected strategies for reflection.* Data indicates that the reflective mechanism taking place is connected for reflective learning. The student teacher's journal writing, shared reflection with supervisor and mentor, either separately, or together as a group during the three-way dialog, along with the evaluation, feedback, lectures, assignments, peer reflection were giving opportunities to ST2 to reflect and learn from her practicum experiences. As M2 rightly pointed out:

> It is everything that she has gone through from writing her own reflection, to having three-way dialog, filling up the evaluation form herself, reading my comment in the evaluation form... um...picking up all these things.. I think the teaching practice student will gain much more (INT/M2:L130).

> Reflective journal has helped ST2 to feel more motivated to reflect, as writing the journal enhances the awareness of her personal teaching philosophy, as ST2 suggests:

> It makes me have a clearer idea of my own belief. When I write it there, I know like this is what I believe in. It helps me to clarify my teaching, and my own pedagogy. How I would approach things, yah (INT/ST2:L99).

The three-way dialog connects the people and the perspectives on the practicum experience. It created a unique platform where feedback were given to the student teachers together, and presented two perspectives from both the college and the placement center so that expectations and requirements were made clearer to all parties involved in the three-way dialog, as shown in the following excerpt by ST2:

> This three-way dialog ... it connects everything together. So, like I get to hear opinions from my mentor and my supervisor about me. Like I don't hear them talking about me. So, when they talk to each other like I can understand my behavior more, my performance more also. And also, it clarifies things between the college and my setting. Like if my mentor has problem, she will ask my supervisor. So, she will also be clearer like what this course is about INT/ST2:L15).

Facilitation process in group dialogic reflection that supported ST2's reflective thinking and practice. The following section will discuss the results from an inductive analysis that revealed analytic codes and categories for the roles of the supervisor, mentor and student teacher in supporting the student teacher's reflective thinking and practice.

The roles of supervisor and mentor during the three-way dialog. The dialogue started with questions raised from her observation of the lesson conducted on objectives. The dialog was facilitated based on the student teacher's self-assessment form based on the early years core skills standards. M2 commented that the dialog was based on the lesson conducted, and was led by the Supervisor or the Placement Mentor as show in the following excerpt:

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1 P: Yah… about her lesson plan, and how to improve it actually.
2 I: Mainly, about her lesson plan during the three-way dialog?
3 P: Yah, mostly, most of it… about her teaching and the way she communicate
4 with the children, and also relating to the children.
5 I: So, who decides what is discussed during the dialog?
6 P: During the dialog…decide (think) is either me or the mentor ... I mean the
7 supervisor… we advise her actually, yah.
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8   I: So, like on the topics to be discussed, do you initiate some topics as well?
9   P: Yes I do. Because... she did ask my opinion, for example, she told me she
10 want to do language, and which part of language she would like to do …
11 whether nouns or adjectives. We discussed and then come out with an idea,
     yah (INT/M2:L27-38).

Different roles were observed in SV2 when facilitating the Three-way Dialog as
follows:

Probing questions. SV2 raised many questions based on the self-assessment
form on core skills standards achieved, such as guiding positive behavior, working
with parents, manage transitions, and so forth. ST2 would respond to the questions
raised based on her self- assessment as well as her reflection and further evaluation.
However, the questions invited responses but short. SV2 used strategies such as
probing questions, asking further questions, and seeking clarification. She would probe
the student teacher if there was no response, or posed a question on transition as
follows:

If I do not get the answer I will prompt them (INT-SV2-Page3-62).

1   SV2: So, besides this kid are there any other transition cases? (looking at the
2   student)
3   ST2: Uh… in this class.. No.
4   M2: Except that boy there?
5   ST2: Yah.
6   SV2: Quite early in the morning, I saw you all there downstairs during the
7   play time. Do you assist other teachers with their children or just take care of
8   yours?
9   ST2: No , no … every time I interact with all children from other classes as
10 well   (OBS/ST2:L180-185).

When the student gave short responses, SV2 probed further to elicit more
information from ST2 on any other example of transition that would provide evidence
that ST2 was able to spot transition in the class.

1 SV2: Any other transition cases you come across?
2 ST2: The 3 year old class, they have a lot. Students coming in, like middle of
3 the year.
4 M2: Still crying (laugh)
5 ST2: Yah, still crying... but there is also one girl that always cried when she
6 just came. But then now she is ok. She is now more mature, you can say like
7 among all her friends she is more mature. But when she just came in she was
8 always crying and did not play. So, you have to slowly soothe her. She don't
9 want to play in the playground for herself, don't force her, sit with the teacher,
just sit-down. After a while slowly she would start playing... (continued)
10 SV2: Ok. So there is no issue lah hah for spotting transition. So you are pretty
11 good at that already lah yeah, know what to do … you know…
12 ST2: Normally I observe what the other teachers do and I just follow
  (OBS/ST2:186-192).

Offer suggestions. Secondly, SV2 often offered suggestions to the student

teacher based on her feedback on her observation and evaluation of ST2's self-

evaluation. For instance, she was giving feedback to ST2 on the lesson observed in

order for her to improve her lesson to be more fun for the children, as follows:

> Describe it, it is like so boring right, don't you think… You see the first session
> especially the first 10 minutes right... they have to look, they have no idea what
> it is. So let's say for an example if you were to use story say in a story there is
> this fat cat and the fat cat is yellow, then you see, based on the story there is
> connection to what you are going to teach. Don't you think is more fun
> (OBS/ST2:L18).

As SV2 had feedback on ST2's lesson and suggested ways to improve her

teaching, she was also quick to offer many other suggestions to ST2 so that she

improved herself. For instance, she suggested that ST2 could be given more

opportunities to prepare lesson plans and teach in various curriculum areas as shown

in the next excerpt:

1 SV2: So, what I mean if she got the chance, but now whatever we can
2 grab that you can learn through here first while the other
3 opportunities...when they come … like communication with parents is
4 something that we do not have to wait for the chance but something that
5 we can work on, so that you can improve in the skill and then like
6 teaching. I know that you have your own standard syllabus, so do you
7 still need to prepare lesson plan and all that? (looking at the mentor)

8 M2:Yah, we do have. As a teacher I have to write lesson plan every
9 month.
10 SV2: So, may be, I do not know if you could but assign something to her
11 to do lesson plan?
12 M2: Yah, can
13 SV2: You do lesson plan and then show your mentor, see ok or not before
14 you actually, yes before you conduct the lesson. You actually come on
15 Tuesday, Wednesday, Thursday?
16 ST2: Monday, Thursday…
17 SV2: So let's say if you come on Thursday you will actually give
18 Monday's lesson plan ... Then when she comes in Monday, then she will
19 hand in Thursday's lesson plan, whether ok or not. Because if let's say
20 certain thing that is not right she can go home and improvise on the lesson
21 plan before she can actually conduct the lesson (OBS/ST2: 258-264).

These excerpts showed how SV2 shared her expectations on how ST2 could work on her teaching skills during her practicum. SV2 suggested that the mentor give ST2 more opportunities to teach during her placement. She was required to conduct two lessons per day which was agreed by the mentor. M2 suggested she participate in the carnival activity where children will use money to purchase anything that they liked. SV2 also suggested for ST2 to work with different age groups, as agreed by the mentor, since the children had different skills and expressions of emotion. During the three-way dialog, they had agreed to give ST2 more exposure, and an action plan was set for ST2 to be more involved more in teaching, and to be more creative in teaching.

Recognize stages of development of student teacher. ST2's mentor had played a significant role in recognizing and developing this teacher to be. Acknowledging the expectation of the supervisor and the skills requirement, M2 made careful observations about ST2's ability, and was sensitive to her needs. They too need time to develop, as each one's development, personality, and pedagogical philosophy is different. As what M2 had rightly said, without knowing their stage of development, it will be counter-productive to impose certain expectations on them. They need someone to observe and guide them, and allow time to work on their strengths and weaknesses. Here is the excerpt from M2's interview transcript:

You want it to be that level and suddenly you want to come up to that level. It is not that way. I found that … give them stages of it. Which I found is very difficult. The expectation sometimes can be quite high. Which I found that because ST is never experienced … I mean… just a new student…at what year is it? You cannot expect the lesson to be like experienced people like me! …when I look at her, this is what she can do. So I will tell her try to improve this part. People need time to improve, need time to change….ST2 is different another person can be different. So, you cannot put the level to be like this is my expectations. Can't! Different individual is different. (INT/M2:L48)

Just as children go through different stages of development to grow and mature, student teachers, too, go through stages of development, where there are certain competencies demonstrated at each stage. The mentors and supervisors need to be observant and sensitive to each of these developmental stages, and recognize their needs and ability so that appropriate guidance could be offered as they are learning to be teachers.

Offer guidance. Since the student teacher was placed with a mentor during practicum placement, one on one guidance by the class mentor was possible. ST2 had a mentor who was able to recognize her learning needs at the beginning stage of her teaching career, and guide her on appropriate activities to improve her performance on the job. ST2's mentor played a role in providing guidance to her mentee, leading to changes in perspective and action outcomes as demonstrated in her journal entry. After the three-way dialog, her mentor guided her to make action plans, as ST2 reflected in the following excerpt:

After my discussion with my mentor we have agreed to allow me to have more opportunity to conduct more lessons next year. I would do my lesson plan and let my mentor to have a look at it so that she could guide me and let me know how if it is needed, I can improve my lesson. Hopefully this would be able to increase my skills and knowledge as an early years educator (DOC/JN/ST2:L139-142)

M2's persistent guidance for ST2 was key to ST2's progress, as she was diligently acting on suggestions as a result of the three-way dialog, and ensuring that

ST2 was able to improve on the skills and knowledge as required by the early years standards, as evident in the following excerpt:

> I am the mentor…I have to take the SV2's comment and implement it into ST2, yah? Whether it is going to be difficult or not but we try to meet her expectation even though it is difficult. I try my best to help her with that. (INT/M2:L66)

The learner's role of in developing reflective thinking and practice. The following section will discuss how the student teacher plays a role in developing reflective thinking and practice.

Self-initiative. Data has indicated that the student teacher's initiative undertaken to learn is an important characteristic of a learner. It was found that ST2 usually learnt from peers, reference materials, text books, and so forth, as a continuous effort to learn and improve. For instance, when she was in peer sharing sessions, she would learn from her seniors of the problems that she might be encountering as follows:

> I get to hear their problems and what they are facing ...like helps me to be mentally prepared when I have the same problem. You get to hear more problems, and then you hear solutions how you should deal with the problem. So, is like, in case it happens to me next time, I will know what to do already … so, yah. (INT/ST2:L145)

> She also frequently referred to books or articles. The information from the

reference materials would help her in situations requiring action.

> Reading like books or articles…and like just getting more theoretical views I guess, from the readings… like how you should approach a certain situation. I guess when I read more then I get more knowledge and then...it's like it's easier. (INT/ST2:L165)

> ST2 also shares that she speaks with teachers in the school, during lunch time,

or listens to conversations when teachers discuss about children's issues. Such interactions helped student teachers in their exposure (INT/ST2:167).

ST2 also took the initiative to identify strategies and resources to work with the children with learning difficulty. Given the opportunity, she would reflect and suggest different strategies for children with special learning needs. M2 recalled a situation where ST2 took the initiative to help a child with learning difficulty, as recorded in the next excerpt:

> She said "why don't I do it individually with him? So that he will improve"… we do it in a group. It is not so effective. So, she said "why don't we do it individually. When it is time for the lesson, I will take him alone with me, perhaps it can help." …make this initiative. Before I even open my mouth, at least she knows that this child needs individual attention… This is the thing that is positive about her. She can see and react to the situation. Which is needed in the situation. (INT/M2:L118)

Receptive to learning. ST2 appeared receptive, and willing to learn. She was learning from her peers, colleagues as well as her mentor and supervisor who gave her much feedback during the three-way dialog. She perceived criticism as something constructive that would help her to learn and improve on her skills. She commented that as the supervisor was correcting her, she clarified the mistakes ST2 made, and gave instructions on how to improve her lesson plan and teaching skills. Hence, she felt that even though it came as a criticism, she was not defensive (INT/ST2:L175), as she said:

> I did something wrong but … for me is more like acceptance. I know they are more experienced and then I am new. So, when they said what I did wrong, I mostly take it as a learning experience. Ya, I am normally not defensive on like criticism… so it's ok (INT/ST2:L173)

The tutor of ST2's practicum has evaluated her on her ability to reflect on practice with attempts to draw upon her existing and new skills and knowledge gained through the course as a student and as an early years professional. Evidence of appropriate integration of her own personal experiences to reflections; as well as

linking theory and practice through her readings. It was a commendable effort that she had learnt to be a more effective early years professional. (DOC/JN/ST2:1)

Individual insights and reflection. Comments in the dialog assessment form evaluated by SV2 were positive. ST2 scored 86 over 100. She has shown good progress and high scores received by ST2, and strong evidence of individual insights and reflection were cited. The areas assessed on and the criteria scores were:

- Initiative (very self- directed. Contributed significantly to task planning);
- Keeping to schedule (all deadlines are met),
- Attitude (show great interest and commitment all the time);
- Inquisitiveness (asks challenging and relevant questions all the time);
  Keeping records (well documented and organized. Essential information is kept in a well written follow format. Strong evidence of individual insights and reflection).
  (DOC/PF/ST2:20)

Toward the end of the year one practicum, ST2 felt that she was more confident in handling the children in her class although she needed more practice in conducting lessons. She was glad that she was able to handle situations, such as children fighting, without her mentor's intervention. Her mentors commented that she was making progress on the action plans given, and she was reliable when given a task and showed initiative as a team member. (DOC/PF/ST2: 6)

ST2 has grown in her knowledge and skills over time. In her final reflection, she made some insightful reflections and was able to link theory to practice in various issues around core skills standards of early year professionals such as supporting children through transition, working with individual children, communication skills, working with parents, as well as her own personality. For instance, she learnt to be patient, flexible and meet children's individual needs and interest in her lessons. However, through the opportunities offered to her during her practicum, she wrote this last paragraph in her final reflection as in the following excerpt:

The most important thing that I have learnt is the importance of reflecting on my practice….Indeed reflecting on my practice has made me grow as a practitioner. It helped me realize which skills and knowledge I am weak at and seek ways to improve myself so that I can give my best to the children. There's no doubt that there are still areas that I need to improve on such as creating creative lesson plans and working with parents but this is a learning process and the learning does no stop here. I will continue to do more readings to equip myself with knowledge and also to seek for more opportunities in my workplace to develop my skills and knowledge (DOC/FN/ST2:53-57).

Climate that supported the student teacher's reflective thinking and practice. The following section will discuss the climate that supported ST2's reflective thinking and practice in the second unit of analysis as follows.

Commitment to follow through. During ST2's practicum, M2 demonstrated her commitment in her follow through activities to ensure that ST2 was able to fulfil the course requirement, as well as the expectation of the supervisor. One on one tutorial or two way dialog; discussions and observations were held to follow up on what was discussed. M2 had even gone to the extent of adjusting her timetable so that ST2 could conduct more lessons, as shown in the following excerpt:

> Every Monday when she comes, I will ask her to conduct a lesson because I WANT THE supervisor's (stress) expectations to be there now. So, every time on Monday, I tried to slot out. Even though I have a timetable but I try to slot out to like putting other subjects instead of language. I am not too rigid with that because I am trying to help (ST) with that because according to SV's expectation!... I have to really, really try to put my timetable away when SHE is around because I want her to conduct more lessons for SV's expectations (INT/M2:L54).

Her sense of responsibility toward the student teacher's growth and development was strong, as evident by the following excerpt:

> I am the mentor and SV2 is the supervisor. So, whatever the supervisor comments, I have to take it. I have to take the SV2's comment and implement it into ST2, yah? Whether it is going to be difficult or not but we try to meet her expectation even though it is difficult. I try my best to help her with that. (INT/M2:L66)

As an analogy, when someone comes to her house and tells her what to do with her stuff, it can be hard to swallow. However, as a professional, what takes place at the workplace becomes a public matter, not a private matter. There is a professional obligation to improve the work at hand (DOC/FN/Interview memo M2).

Openness and humility. Apart from her commitment to follow through, it takes a lot of humility and openness to be able to accept someone's idea in her territory of work. M2 commented that participation in the three way dialog was a wake-up call for her as she too reflected on many things she needed to learn, from new knowledge, as well as new perspectives, and not from the way it had been done in the past, as she suggested in the following excerpt:

> It wakes me up and tell me that …um… there are a lot of things that you have to learn through this dialog…and through this three-way you know it is not always stagnant ... new ideas [have] to come. New ideas [have to] be more interesting. This is the thing which is good for the student, also. I also can brush up on ST. Not the same old way, you know. Because in industry there are things that are supposed to be updated, have to be improved in certain way. You know, new perception. (INT/M2:L80)

One had to be very open with feedback and criticisms and not take it too personally. To the point that even if you did not like a comment, you still needed to take it so that work can be improved and work is not perfect as yet, as what M2 commented in this next excerpt:

> l have to be very open about it. Criticism coming in. You don't take it like very personal like things are not right. So, make yourself very open about it. Even though there is a mistake, or you do not like it. Take it! Bear in mind that things have to be improved, and bear in mind that we are not perfect. Take it easy. Just take it easy… In the way that you have openness, you will be successful (INT/ M3:L144)

Open to learning. Openness to learning within a platform consisting of multiple perspectives generates new ideas for practice. The three-way dialog had breathed new life into M2's long established career, to update herself, see new perspectives, gain

new ideas, and solicit improvements to her work that could get stagnant and too comfortable at times.

> Being in this line so long. I found that with the three-way thing I found it really help me to see, to update myself in this line. Sometimes, when you are long in this line you intend to have the same idea. So, as being a mentor and the three-way dialog it gives me a lot of awareness that things… new things have to come up, new things have to improve, you know. So, in that way is good. Because things can be quite stagnant and quite comfortable, too long in this line (laugh) (INT/M2:L140)

For SV2, she was hoping to see changes in the student teacher, in the form of progress, new learning, acquisition of new skills and perceptions towards young children. Her aspiration was recorded in the interview excerpt:

1 P: Yes, I am hoping to see the change in the students, you know.

2 I: Right.

3 P: Because they must be learning. (INT/SV2:4)

Summary.

In Summary, the themes emerged from the findings of Unit of Analysis 1 in this study are as shown in the following Figure 4.4:

Broad Themes	• Themes
Reflection Strategies	• Motivation to Deeper Reflection through Journaling • Peer Reflection • Three- Way Dialog • Self-Assessment Form as a Guide for Reflection
Faciliatting Deep Reflection: Outcomes of Collective Reflection	• Problem Solution • Learning from Multiple Perspectives • Connected Strategies for Reflection
The Roles of the Supervisor	• Probing Questions • Offer Suggestions • Recognize Stages of Development of Student Teacher • Offer Guidance
The Learner's Role of in the Development of Reflective Thinking and Practice	• Self-Initiative • Receptive to Learning • Individual Insights and Reflection
Climate that Supported the Student Teacher's Reflective Thinking and Practice	• Commitment to Follow Through • Openness and Humility • Open to Learning

Figure 4.6 Display of Themes for Unit of Analysis 2

Unit of Analysis 3: Kindergarten 2 with ST3

Unit of analysis 3 was located at the same kindergarten where ST2 taught with the same college supervisor. Student teacher (ST3) and mentor (M3) were part of this unit of analysis. The following sections describe its demographic information.

Student teacher 3 (ST3). ST3 (female, 20 years old), was placed in the same kindergarten as ST2. She was in the same cohort with ST1 and ST2, pursuing the Bachelor of Early Years Education Studies. When this research started, she was at Year one Semester two of her studies. ST3 was educated in a Chinese primary and secondary school before attending this college.

ST3 chose to pursue a career in early childhood because she loved to interact with children. She pursued the program to gain more understanding of children. She had six months of practicum experience in Kindergarten 2, and was placed with the three to four year old children.

On her personal philosophy or approach to early childhood teaching and learning, she believed that the early childhood teaching and learning environment should be clean and comfortable for the children, and equipped with appropriate props and learning materials. ST3 believed that children learn through play and through learning together with their peers. As a teacher, she felt that her role was to help children learn. Early childhood education should provide freedom for children to learn without stress. According to ST3, teachers were the children's friends. Teachers and parents should collaborate to facilitate children's learning, and teachers should communicate among colleagues so that their understanding about children could be shared, as expressed in the preliminary questionnaire (DOC/PRELIMQ/ST3:1-5).

Mentor (M3). M3 (female, 44 years old), was assigned as ST3's mentor and she was also the owner and the principal of the same kindergarten. She was working in accountancy before she set up this kindergarten five years ago. That was after she took a turn in her career, and took up a Montessori Diploma program as she always liked working with younger children. She had started t receive students for practicum at her center, and she had been a mentor for the past five years (INT/M3:1)

Opportunities that engaged ST3 in reflective thinking. The following section will discuss opportunities that engaged ST3 in reflective thinking during her practicum.

Reflection journal. ST3 wrote her reflection journal as part of the course. She would choose the special events and critical incidents that happened in the school. As that semester she was doing a course on transition. She had chosen to focus on transition, where her reflections were on observations of children and their behavior, children with special needs, positive guidance strategies, accidents that happened, teaching skills, teaching sessions of other teachers' and so forth. The lectures and assignments had also influenced what she would observe as she chose to observe and reflect on incidents related to transition as part of another course she was doing, a year long, continuous observation of children. (INT/ST3:L125).

ST3 wrote her reflections daily during the night after her practicum and lectures. Reflection had given her an opportunity to reflect and think through the events occurring at the placement center and sometimes plan future actions. However, ST3 found it difficult to recall what has happened after what had happened throughout the day. She also had difficulty expressing herself in English as she was educated in the Chinese medium although English was a subject in school. She had problems

constructing meaningful sentences in English that others would understand. She felt

that she might be able to write better if it was in Mandarin. When she faced difficulties

expressing her thoughts and descriptions in English, she would look up a dictionary or

used google translate (INT/ST3:L214).

Writing the reflective journal had an impact on her emotions and sense of

satisfaction (INT/ST3). The researcher engaged ST3 in the description of her feelings

which she had expressed briefly. For instance, she related an incident where she had

helped a special child who was five during his transition. He was still wearing diapers

in the first four months, but was later able to progress to going the toilet independently.

The following excerpt from the interview described her feelings:

```
1   P: Yah. I write the transition of him wearing diapers to no diapers. So, I am
2   quite happy to see…(pause)
3   I: The progress?
4   P: Ya. The progress.
5   I: I see. I see. What has happened in the class? Has he become more
6   independent or…
7   P: Yap. At least he can go to the toilet by himself because he scared the flush,
8   The sound of flush.
9   I: Really?
10  P: So, now he can go to the toilet by himself, Ya. Because during the transition
11  he also... he would pee on the floor… and...maybe the teachers will need to
12  be very observant…a little bit of actions he does means he …he needs to go
13  the toilet… so, teacher needs to bring him..
14  I: Quickly to the toilet. Ok.
15  P: But now, he can go by himself. Like very independent. (Continue)
    (INT/ST3:L222-236).
```

Similar to ST2, ST3 was also selective in what she would share from her

reflection journal as some of her expressions in the journal were private. The journal,

according to ST3, need not be shown to others if she does not wish to do so.

Two-way dialog and sharing with peers.   As part requirement of the course,

ST3 was required to have a two-way dialog with her mentor, and certain forms needed

to be filled in from time to time. Two-way dialog happens with her mentor, class teacher and other teachers. ST3 is mentored by the principal and not the class teacher. When there are issues with her class, she would usually discuss it with her class teacher. For instance, on matters related to children in the class, she would normally discuss with the class teacher. With her mentor, she would usually discuss what she needed to do for practicum, such as planning, lesson plan, and assignments. At times, she needed her approval to do certain projects or assignment related activities at the school, and she would discuss it with M3 (INT/ST3: Pages 8-10).

When there was any immediate issue, ST3 would first discuss with her class teacher and her mentor (INT/ST3: Page 9/273). Her mentor would spend fifteen minutes per week with ST3 on face to face discussion (INT/ST3- Page10/L287), or sometimes when there were issues, they would use mobile communication apps 'whatsapp' on their smartphones (INT/ST3: Page10/L290). M3 would make intentional request for lesson plans for various activities such as math or craft with a certain themes, and M3 would request for a sample for her work so that she could give her some feedback before the actual lesson. M3 would observe her during her lesson (INT-M2-Page2-38).

ST3 would also have dialogs with other teachers in the same kindergarten. She would be assessed by another teacher, and get another perspective from the work at the kindergarten. M3 also assigned ST3 routine activities other than teaching on the job, and allowed ST3 to create her own strategies and coping mechanism to the tasks assigned. This was illustrated in previous sections (INT/M3: Page3/48). During those sharing sessions, although ST3 did not really link theory to practice, M3 noticed that she did it in her assignments, not during sharing sessions (INT/M3: Page 5/94).

ST3 also shared with her supervisor on the problems she faced at the kindergarten. For instance, they would discuss transition, and share ideas on supporting children through transition (INT/ST3:Page11/314). The continuous dialogs with the people around had supported her in achieving her goals.

Peer sharing of what happened during practicum take place during conversations. Sharing of similar issue faced by peers during practicum helped student teachers to have more ideas for solutions during practicum. ST3 often shared her reflections with others in conversations whenever she and her peers faced similar problems and they shared some strategies for overcoming problems at the workplace (INT/ST3: Page 9/L255-260).

Three-way dialog. An observation visit was made on 6 November 2014, where ST2 had a three-way dialog with her supervisor and mentor at Kindergarten 2. A staff welcomed the researcher into the kindergarten, and ushered her upstairs where the dialog was to be conducted. The researcher entered through a purple door to the classroom that was used as the meeting space. There were no children in the class when the researcher entered the room as the activity was still on in the other rooms.

It was a classroom with cupboards and open shelves around the room. Montessori didactic materials and other educational materials were neatly displayed on the shelves. There was a child sized rectangular table with six chairs around it. The student teacher and mentor later entered the room to have the three-way dialog, followed by the principal who was earlier engaged with some school matters. When the dialog started, the student teacher, supervisor and mentor sat down at one of the children's activity tables in the class. The room was bright and air conditioned. Educational materials were neatly arranged on the shelves. No shoes were allowed in

the room with parquet flooring and there was no other children or personnel in the room. Occasionally, noises coming from children or people walking in the corridor outside the room could be heard.

They sat at a rectangular table with six chairs. Each of them sat at one side of the table, leaving an empty chair next to each of the participants. The supervisor conveniently placed her bag on the empty chair next to her. There was a portfolio file in front of the student teacher, and a reflective dialog form in front of the supervisor. The mentor was holding a pen. There was a box of tissues in the middle of the table (Refer Figure 4.7).
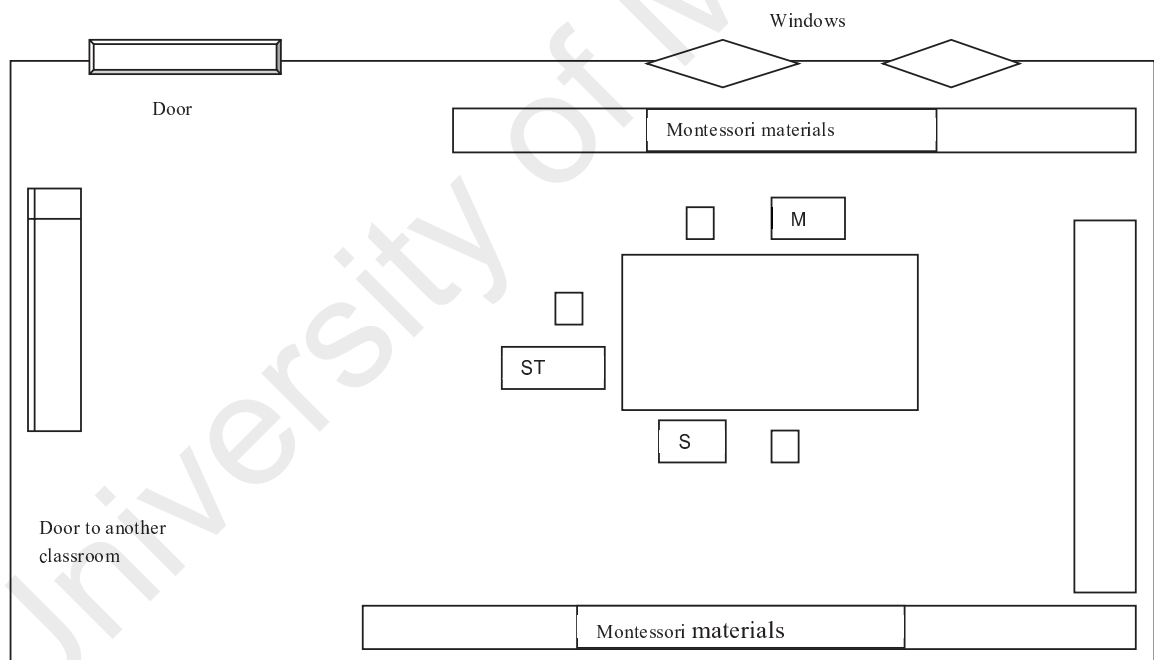
Figure 4.7 Classroom Layout for Three-way Dialog (ST3)

Information on contents of the research and the informed consent form were given to the school prior to this observation. A telephone conversation was also held with the principal when the researcher explained about the research. The participants were

aware of the objectives of the observation. The researcher sought permission to record the dialog and was given the consent at this meeting. Camera and audio aids were set up before the dialog had started. The researcher sat at one of the children's chairs at the corner of the room so that the dialog session would not be interrupted while the camera was on. As the researcher did not bring a tripod to the observation visit, it was rather inconvenient managing the camera while observing and taking notes (DOC/FN/OBS Report: Page 2,3).

The three-way dialog session was held for 1 hour 6 minutes 42 seconds between 9.30am to 10.45am and the breakdown of the duration in the dialog recorded, except for an occasion when a staff came in to seek M3's advice on school matters, and they discussed in another room next to the class. The word count per participant was as presented in Table 4.6 that follows:

Table 4.6

Word Count of Conversations in Three-way dialog (ST3)

Dialogue	Word Count	Percentage
Total Word Count:	7683	100
Student	549	7
Supervisor	2717	35
Mentor	4417	58

Table 4.6 showed that the student teacher spoke the least for 549 words which was only 7% of the total conversation, while the supervisor spoke 4417 words which was 35%. The mentor in this unit of analysis spoke the most time during the dialog, of 4417 words, or 58% of the total conversations made.

The researcher decided to use just the word count for the proportion of the dialog as in this case, the student teacher spoke very short sentences and spoke slowly with many pauses due to her lack of expressive proficiency in English.

The supervisor started the three-way dialog by asking about the progress of ST3 since she was posted there for a few months. M3 reflected that as compared to ST3's initial experience, ST3 was more confident at that point of the dialog as she was able to conduct activities with the children, as illustrated in the following excerpt:

> She can handle the whole class easily (pause) without much problem anymore….Fitting in very well lah. She is able to conduct a class, um…able to help the different needs of the children in the class, because you know lah, some like bad day, whiny, but she is able to tackle the issue and get the children to maybe finish the task, later on lah somehow. But at first she couldn't lah, she didn't understand what she needs to do, and couldn't accomplish… but now she is capable (OBS/ST3:L4-5).

SV2 took the opportunity to enquire if ST3 had a chance to teach during her practicum. The topic stimulated many spontaneous discussions on how opportunities cropped up to conduct activities in class. ST3 responded that she assisted in the class, and occasionally she had the opportunity to prepare lesson plans but most of the time she followed the kindergarten's curriculum. The mentor acknowledged the need to do so, and made suggestions on how ST3 could extend the activities done by the class teacher to gain more experiences in conducting activities for children. M3 also shared her experience on how she would usually start student teachers first on art and craft activities. SV2 went on to suggest activities that ST3 could be doing with the children. M3 reflected on how she would coach the student teachers on enhancing their teaching experiences; the subsequent interaction is given in the following excerpt:

1 M3: Coz initially I always start …the teaching practice students on art and

2 craft. If they are comfortable or able to conduct and get the children to finish.

3 Then they move on to the academic side. That's how I do it. But she is fine.

4 If she wants to actually now to do and improvise on the lesson plan and all

5 that it's also possible. Just say she use another method, say sing the song first.

6 On number 7 or numbers it's not a problem. She can conduct the whole thing.

7 (pause). Would you like to try?

8 ST3: Yeah…sure haha

9 SV2: Just I thought let's say, you can you know, prepare lesson plan, and then

10 show to M3 will be much better, so that you know, you can see if it tallies

11 with what is required by your school, then if let's say like if you see what is

12 lacking things you know…

13 M3: Mm…(in agreement)

14 SV2: You can advise her on how to improve further her lesson. Before she

15 conducts it, before things get you know into trouble, you know, before she

16 conducts it, at least, you know, go through first, then ok, certain areas you can

17 still work on, then I think it will work better for her… right?

18 ST3: I'll try next time. Huh huh (OBS/ST3: L36-41).

SV2 made further suggestions to expand her teaching experiences to other areas than art and craft activities and seek help from her mentor to review her lesson plans before the activities were conducted. This three-way dialog provided a platform for the student teacher to sit down with her mentor who worked with her at the placement center, and her supervisor who was her college lecturer, to discuss matters concerning her progress during practicum together. As M3 commented in the following excerpt:

I under Ms. SV2 here [ollege] and I under Ms. M3 there [placement centre]…this time is the time that we can, three of us can sit down and discuss. Quite good because, I no need to discuss here first, then another there at the same time. So, I think more convenient like if any issues. (INT/ST3:L38)

The student teacher found it useful to be able to hear from both college and kindergarten perspectives on her progress and if there are doubts or questions, response could be received promptly (INT-ST3-Page2-40). For instance, when the mentor found out from the dialog that as part requirement of the core skills standard for M3 to have experience communicating with parents, the mentor arranged a parent meeting (INT-ST3-Page2-41).

She also gained further insight from both perspectives and requirement (INT-ST3-Page3-74). For instance, one of the items used in the lesson was cinnamon for a smelling activity. The supervisor first thought that cinnamon was not an appropriate item to be introduced to the children. However, the mentor was quick to justify that cinnamon was commonly used in a Montessori classroom to allow children to be exposed to the spices around them through a smelling activity. Which otherwise the student teacher was unable to justify it herself. In a way, the school's perspective was introduced in this dialog, as shown in the next excerpt:

1　SV2: Today she did the lesson on sense of smell. Uh… one of the items that

2　she used was cinnamon. Children…hm, I think children I doubt if let's say

3　they are familiar with cinnamon. I think for us adults, some of us are not

4　familiar either, cinnamon.

5　M 3: Cinnamon… we do introduce. In Montessori. Yeah.

6　SV2: Cinnamon, you do introduce?

7　M3: Yeah, Cinnamon, I mean yeah they may not be familiar… in the sense,

8　because some children are familiar, the five and six uh, they can be familiar

9　with this one.

10 SV2: They are just four years old. My concern is only four.

11 ST3: But ...uh this… this material i have discussed with the class teacher.

12 Yeah. She knows that.

13 SV2: So she is okay.

14 M3: Sometimes we will also introduce things that they do not know. But

15 Whether they remember it doesn't matter. We are just introducing different

16 kinds of smells. Because some children actually don't get into contact with

17 all these things through smell, they don't, or they are not allowed to
   (OBS/ST3:L46-55).

Another issue raised during the dialog was in relation to time management when conducting a lesson. For instance, ST3 planned the lesson for 30 minutes but she finished the lesson within 15 minutes. While reflecting on the activity, it was discovered that ST3 had difficulty ending the lesson, which she had never mentioned to her mentor. Hence, SV2 was able to offer appropriate advice to improve herself.

1 ST3: Huh, I always don't know how to end up the class. How to do the

2 conclusion with the…. I get trouble with the conclusion.

3 SV2: Because sometimes you have to sit down with your mentor you know,

4 senior teachers you know. To get some kind of feedback on how you can

5 improvise in that area. Hm??

6 M3: You can ask questions that you feel that you are not able to complete, or

7 things that you are going through lah, problems, or issues.

8 SV2: You see right now you say I have a problem, you know, doing the

9 conclusion. But…

10 M3: But she doesn't tell me, and I don't know. (Laugh).

11 SV2: She doesn't ask for help. So this is the thing that you know, when you

12 Have problems, that's where you know when you have to ask mentor's help,

13 or other senior teacher's help. Or else you get stuck there, and forever you

14 will be stuck there and you cannot get out of that problem (OBS/ST3:L56-

   66)

Opportunities that facilitate deep reflection. The following section discusses how the individual and collective reflection strategies facilitated deep reflection in student teacher ST3.

Individual reflection. At the individual level, ST3's reflective thinking showed mainly the first four levels of reflective thinking from evaluation of experiences to integration. It was evident that many reflection-on-actions and critical incidents took place. Her tutor had given ST3 regular feedback on her reflection skills in the journal. For instance, when ST3 wrote her reflection on action and some critical incidents in the journal, the tutor would give some feedback on her reflection skills when she was just evaluating her experiences by describing the events, rather than going deeper in her reflection. Some of the comments were as follows:

How do you think you can support to help this child?

Your reflection rather than a description of this event? Please check tense.

Further thoughts on this? How do you view?

Do be more precise in your writing to show the key item(s) for your reflection.

Your understanding of this?

Read this up (underlined)

What about learning about pace & ability?

So, what do you suggest?

Check grammar (DOC/JN/ST3: 1-35)

These examples of feedback were evidence of the personal tutor's ongoing dialogs with ST3 giving her feedback, probing further, challenging further readings and improving her writing skills. Many of ST3's reflections were merely evaluations of her experience by describing the events. For example, describing what she observed about the new child during transition without making further reflections such as describing with emotions, association or integration of any experiences nor theories that she had learnt as follows:

> Today is my second day in kindergarten. I was arranged in J class which is four year old class. This class has a new student from Korea named A. Due to her still can't adapt to the new environment, her mother always stay in the school…When the lesson started, A also began to find her mother. Then, her mother tried to persuade A to go back to the class and leave the classroom when she focused on other things. This happened many times in one day (DOC/JN/ST3:2).

After a month, ST3's reflections have improved, adding emotions and association to her reflections. In the following excerpt, she was able to describe her observations on a four year old child B who had deficiency in his language development who could not express himself well, and attached her feelings about the incident as follows:

> B walked to me and pulled his shirt up. He said something but I didn't understand. Unfortunately, I am the only teacher in that class during that time. I felt so helpless that time and I tried to ask is he wants to poo poo or pee pee. He said no and still pointing to his stomach. Then, I asked another child, C whether she understood what B wanted. She also didn't know.
>
> Luckily, Ms. S came in. She saw it and she told me that B wanted to put on Ruyi oil. That time I only knew what he wanted. From this case, I felt that experiences are very important to handle with children with special needs. If a teacher and a child with special needs have built a good relationship, it is easy for the teacher to understand and handle the child. (DOC/JN/ST3:7)

Through this incident, ST3 felt that managing children with special needs required lots of experience and it was important to establish a good relationship between the teacher and the child so that the child's non-verbal communication could be understood.

At times, ST3 could have gone a little deeper in her reflection but unfortunately she would stop at just expressing her feeling over the incident and make some associations of the experience. For instance, after her experience in handling a child with challenging behaviors that almost ended with an accident during an art and craft session using a glue gun. She merely described her feelings of helplessness, and made an attempt to associate her experience with what she has learnt previously, as illustrated by the following excerpt taken from her journal:

> A…doesn't like other people to touch her and to stop her when she is doing something. When we were doing the craft, she walked near us and tried to touch the hot glue gun. During that time, Ms. was talking to another child, D. I pushed away A's hand before she reached the hot glue gun and I told her," A, can't touch. It is hot." Then, she started to show her unhappiness and she said: "No." I think it is maybe my action is a bit rude. After that, she hid herself in the corner in front of the whiteboard. We asked her to come out but she just said no. I saw Ms. S continue to work with other children, so I followed her. I turned my head to see A from time to time to make sure that she was safe. Although she was still in the corner there, but she was playing by herself. She lied on the floor, laughed, and touched the whiteboard and so on.

> …a teacher should let the children be like A to come out from the corner and make sure she is in our area of sight. But in reality, I tried to let her not to do something before. It took time and made me ignore other children….she is a child with special needs, we need to treat her differently but it is a hard job if there is only one teacher in the class. (DOC/JN/ST3:10)

Another example on association involved her supervisor whom she called a personal tutor. With her failed attempt to comfort a crying child, she had learnt from her supervisor who successfully calmed child A down. The description of her association now follows:

> My college personal tutor *[supervisor]* came to my kindergarten to observe me today. I had planned my lesson to start on 9am. About 8.50am, I let the children go back to the classroom to wash their hand and drink water. Before that, A was crying because her mother went home instead of stayed in the kindergarten. In the classroom, I asked the children to wash their hand and drink water. Then, I went to comfort A but she refused. I can't settle her down and I don't know what to do. My personal tutor helped me on that time. She told A that if you still crying then the giraffe on your shirt will get wet. Then, A stopped crying and took a tissue to wipe her tears.

The best way to settle a child is shift their attention to other things. I had comforted A for a long time and even took the tissue for her but she still rejected me. In contrast, my personal tutor said a bit then A stopped crying and wiped her tears with the tissue by herself. It was because my personal tutor had shifted her attention successfully (DOC/JN/ST3:13).

On 6th November 2014, which was eight months into her practicum, ST3 demonstrated evidence of integration in her reflective thinking, where she attempted to identifying any patterns and relationships observed during association, and drawing a conclusion on the new and previous experiences, hence forming new insights. For instance, she reflected on a lesson observed by her college supervisor during her observation visit, and analyzed the children's ability in the activity, which was identifying the smells of six types of the materials presented. She recognized the possibility of the color of the container that may have helped the children's judgement, and not the smells itself as in the following excerpt:

> I used six plastic bowls to place my different materials which are cocoa, pandan, coffee, rose, garlic and cinnamon. During the lesson, I passed the bowl around and let the children to smell the materials. Then, I told them the name of the materials. After that, I played a small game with the children. Children need to close their eyes and guess what is inside the bowl. I let the children to smell first with closing eyes. The children need to tell me what they smell after they open their eyes.
>
> Owing to these materials have a strong and different smells, children are able to answer correctly. When I asked children, "How do you know this is rose?" one of the answer was surprising me. A girl said, "Because rose is in the blue color bowl." (I was holding the bowl when they told me the answer.) Then I noticed that I was using different colors for the bowls.
>
> I was shocked for the observation skill of that girl. She is the only one who noticed the different color of bowl. I also feel upset to my carelessness. Although it is not a big problem in my lesson but it will affect my judgement of the children's smell because I can't know that they really can recognize the smell or they recognize from the bowl's color. I need to be more mindful next time especially double-checking the materials before the lesson (DOC/JN/ST3:30).

In the researcher's memos, ST3 had only one record of validation in her reflective thinking. She attempted to associate her previous observations with the new observation, make conclusion about the behavior patterns of Child A as follows:

During gym time A was scolded by teacher as she didn't behave herself. She cried and refused to do gym no matter how the teacher comforted her. When she sat beside D, D comforted her and helped her to wipe the tears by tissue.

When A was just new in school, she didn't know to tolerate other children. So, other children didn't like her. A and D had fought many times before because didn't want to share the toys. I felt very warm when I saw the relationship of A with other children became so close. It may be because of the long-time A stay in the school and at the same time she learnt how to be tolerant and sharing with her friends.

Many parents always worried about their children's misbehavior. I suggest the parents to give more time to their children and let them play with other kids. They can improve their social-motional skills *(SV: How?)* when they contact with others. If I have children who don't reach the milestone of any skills, I will give them enough encouragement and time. I will not force them but let them like the skills and willing to learn that skills. (SV: What about learning about pace & ability?) (DOC/JN/ST3: 35)

In this example, the mentor had also made some comments to probe ST3 to reflect further on the conclusions made.

In summary, there were some evidences in ST3's attempt to reflect at more complex levels of reflective thinking, namely, association, integration and validation. There was little evidence of appropriation in her journal although in her final reflection she had recorded changes in her behaviors and actions such as communication and relationship with the children and kindergarten staff and her achievements in handling a class independently. She had more interactions with the class teacher and her mentor and she did not isolate herself anymore. As she elaborated in the next excerpt:

I do more discussion with my colleagues, join their conversation, ask for their help if necessary and build a good relationship with them. However, my mentor pointed out that I only interact with certain teachers. she said I should talk more with other colleagues as well due to a quality teacher must know the curriculum and children from each age group but not only in her own age group. Besides that, the teachers there also trust me to handle the whole class by myself. Along the nine months, I had three times opportunity to handle my class alone. This is a great encouragement for me because I can handle the class by myself means I have reached certain skills and quality (DOC/PF/ST3: page 107).

Collective reflection. Group dialogic reflection provided opportunities for ST3 to put into perspective what she had been doing in the class with what was required in the core skills standards for early year's professionals practised by the college. For instance, ST3 responded to a question on her ability to select recourses suitable to meet the needs and interest of the children in line 3 (one of the longest conversations she had made in this dialog) of the following excerpt.

1 SV2: Means when you prepare your teaching aid, you make sure that you
2 know, that they meet their needs and interest.
3 ST3: This is like improving their skill. I do the art and craft so they can
4 improve their skill, their fine motor skills, and of course their own interest in
5 art and craft. Children … (interrupt)
6 M3: I did prompt you one two times the things you use, that wasn't
7 appropriate right? Don't know what you did very first time… the art and craft,
8 can't remember now. But all along okay.
9 ST3: Oh it was the bus. Um… (long pause)
10 M3: You painted it, they painted it, but I think you assemble the wheels or
11 something right?
12 ST3: Oh…The wheels.
13 M3: The wheels, right? I told you, you must un-assemble with them. (clear
14 throat) But okay lah she has made good improvement by using different
15 materials. Keeping the child very interested in her lesson planned.
   (OBS/ST3:L178-184)

In many instances during the dialog, ST3 did not go further to connect her experience with new ideas that she had learnt as her responses were brief (line 9 and 12). Instead, her mentor took a more active role in reflecting on her experiences by providing examples of incidents.

In another section of the dialog, SV2 was asking about ST3's experience in supporting transition. She was able to describe her observations of two children who were new to the kindergarten validating the strategies to help new children during transition. One of the children was child A that she often wrote about in the journal. The supervisor tried to probe her for deeper thoughts into in line 7 by asking questions and providing the case scenario, she responded briefly (line 3-7) and tried to confirm

and validate her ideas. In line 17-24, M3 gave more examples of challenges in children's transition, as in the the following excerpt:

1 SV2: Skills that support transition. Do you know what transition is?
2 ST3: Yeah, they are like, they transfer… Like the new children…I know
3 because the new girl, she speak Mandarin, but the children in the class, the
4 other children is speaking English. So I am trying to make them play
5 together… and asking like who can speak Mandarin, can speak Mandarin
6 with the girl.
7 SV2: Okay, besides that girl, what about A? Are you trying to do something
8 for her? Because that girl is going through transition. I mean much longer,
9 new to the school, not to say very new either, I think, but this girl is from
10 another country, so I think it's difficult for her to adapt.
11 M3: She is going through transition plus another transition inside. For the
12 transition to separation to school she is fine in school. It is just that the teacher
13 in the school has to start using the word 'no'. Do you know about it? The dad
14 did say that we cannot say no to her?
15 ST3: I told you right?
16 SV2: Yeah… she just told me…
17 M3: Even add on the difficulty uh…to actually interact with her. We can use
18 the word Later…but we cannot use the word no. But we started to use the
19 word no is when she started to hit somebody. A, no! You can't do that, it's
20 not nice, we have to inform her, because another child is getting hurt, that's
21 another transition she is going to. She has actually settled down, fine, but
22 when we started this whole thing, she cannot accept other people telling her
23 no and not agreeing with her. That's another transition she is going through.
24 We are finding it difficult to deal with. I am sure you also find it hard
25 right? …We have to draw that line, and say you can't cross that line. (Turn to
26 Student) Do you tell her no?
27 ST3: Yeah, I tell her (OBS/ST3: L187-195).

Collective reflection working alongside individual reflection. ST3's recorded episodes and percentage of reflective thinking levels in both individual and collective are similar. From the following Table 4.7, the higher reflective thinking levels from four to six generated by individual reflection was a total of 21% but collective reflection generated a total of 18%. There was no Level Six recorded in both individual and collective reflection. Lower levels of reflection were recorded in both individual and collective reflection at approximately 80%.

Table 4.7

Episodes and Percentage of Reflective Thinking Levels (ST3)

	Reflection Journal		Three-way dialogue	
Refective Thinking Levels	Episodes (N)	Episodes (%)	Episodes (N)	Episodes (%)
R1	46	0.42	7	0.25
R2	22	0.20	7	0.25
R3	19	0.17	9	0.32
R4	21	0.19	4	0.14
R5	2	0.02	1	0.04
R6	-	0.00	-	0.00
Total episodes	**110**	**1.00**	**28**	**1.00**

The following section discusses how opportunities to reflect supported her reflective learning experiences as follows:

Continuous dialog and feedback. As evident from the preceding sections on the various opportunities to reflect, a series of continuous reflections involving focused and constant dialogs such as reflection journals, two-way dialogs, and three-way dialog had helped ST3 make progress during her practicum. It was not just any of these reflection activities alone that provided the opportunities to reflect. It was the continuous dialog and feedback that helped ST3 to develop her skills, leading to progress in her teaching experience, as evident in the changes shown by ST3 in the following excerpt:

1   I: So, the continuous feedback is important for her?
2   P: Yes.
3   I: Everything is open and she has to make the decision whether she wants to
4   make the change or not.
5   P: Yes.
6   I: And so far, you have seen positive change in her?
7   P: A very big change.
8   I: A very big change? In what sense?
9   P: From how she conduct herself with students to holding the lesson, getting
10 the class ready. It's a big change. At first I was worried about her with the
11 voice she talk. How you become teacher? You have to talk louder. (laugh).

12 Yes, a very big change. She is able to speak up, get the children to do things.
13 May be it's not in her nature to speak so loud. But when you work with the
14 kindergarten kids, they will always all talk at the same time. You have to
15 somehow find your magical way to control the kids. I think she has found her
16 way. I don't really fix her as to do this and this. You have to go and search
17 for yourself. Some teachers are quite fierce even with her presence all children
18 will be very quiet, even when they walk in they feel the aural.
19 I: But not ST3…
20 P: Everybody is different. She can then get the kids' attention. All the teachers
21 are different (INT/M3:L1291420).

Constant dialogs among the mentor and teachers with ST3 helped ST3 to understand what she did in the class. The experience of mentoring someone also helped the class teacher to learn how to train a novice teacher to take on the teaching responsibility, giving the more senior teachers an opportunity to be exposed to training and development. As M3 reflected on her observation on the interactions between ST3 and her class teacher:

> Well, it's good. It actually improve ST3 because… help her to really push herself, get the main teacher to drop everything and let her do it herself. It is also a good experience for teachers who has not mentored before. It is good to see and how you train ... and certain exposure to other things… it is a good experience (INT/M3:L46).

Through three-way dialogs, the feedback and expectations of both the mentor and the college were communicated.

> I find opinion from the supervisor and then from her and myself. So, it is very useful. In this way, we know what each other's expectation is. And ST3 she must know the expectation from me and I also must know the expectation from the supervisor... not necessarily that I am always right, yah. So, we can do it. In a way, it helps a lot (INT/M3: L44).

Apart from that, three-way dialogs also allowed the mentor to take a closer look at the student teacher's practice during her practicum at the kindergarten.

> You have to keep a closer look at the teaching practice because you also need to know what is happening right? …give her a closer understanding of their work… what they are actually doing... not coming in … clock and sign off… we do not know what they are doing, what they are observing. On top of it, this

three-way dialog would also understand the teaching practice of the students better and also vice versa they understand us better, understand the school better and how it works. (INT/M3: L52)

Practicum experience connects theory to practice. Practicum experience was an important milestone for ST3. She learnt through experience, real examples and concrete solutions. She found theories less relevant to her experience as she had not made a connection between theory and practice. To her, it was just a theory in the book that she had yet to identify with. She reflected on her preference for learning at this stage as shown in the following excerpt:

More on experience. I prefer experience because it really happen; the theory from the book is just a theory (INT/ST3: L344)

Linking of theory to practice happened more in the lecture hall when this process was initiated by the lecturer or through sharing of reflections on peers' experiences. However, when she was out of the lecture hall, theory was displaced. As she commented:

When she teach I mean the lecture … like she want us to share experience but if come to like…what to say? …like (pause), out of the class we didn't talk about theories here. No (INT/ST3:L336).

Therefore, she found her practicum experience useful as she internalized what she has observed and experienced at the kindergarten. It not only helped her to gradually make a connection between what was taught, but also what was expected of her, and how she should perform.

I get familiar with the school there. I also know what they want. Ya, not like, like first time I go in I don't know what to do (INT/ST3:L384).

She had learnt from observing others teaching at the workplace. Even though they did not teach her directly. Her observations of others offered a concrete example to follow, as she was not yet able to produce her own working mechanism on the job as how she reflected in the following excerpt:

> They didn't like really teach you but you can observe like see how the teachers…   (INT/ST3:L386).

Through actual involvement with children, she also learnt how to respond to their various needs by her spontaneous responses. She reflected in the following excerpt how she had made progress from the previous year when she had just started:

> At first, I didn't know how to respond to them coz sometimes the questions they ask question may be different from adults. I need to respond spontaneously. But now it's better than last year. Ya (INT/ST3:L395).

When she faced a workplace challenge, ST3 looked forward to receiving suggestions from her supervisor and mentor, some quick fixes to her problems. Sometimes they had long conversations discussing the problems. Suggestions that would be useful to her were welcomed, as she reflected:

> It is quite hard for me this year because there are so many children that are a bit slow, so Ms. SV3 will share her experience... like maybe sometimes we comment about the school she also will share how she did in her university ...Yah. But is like… I don't know, maybe she can give some more useful suggestions (INT/ST3: L311-320).

Facilitation process in group dialogic reflection that supported ST3's reflective thinking and practice. The preceding section presented the opportunities that would support ST3's reflective thinking during the nine- month practicum. There were some evidences in her attempt to reflect at more complex levels of reflective

thinking, namely, association, integration and validation in the journal and reflective dialog. There was some evidence of appropriation in her final reflection in the portfolio recorded. More evidence of this was expressed by her mentor on her performance evaluation instead. The following section relates how the group dialogic reflection facilitation process supported ST3's reflective thinking and practice.

The roles of the supervisor and mentor. The following section will discuss the key roles undertaken by SV2 during the three-way dialog with the student teacher and mentor.

Keep control with closed ended questions. During the three way dialog, SV2 was actively asking questions, seeking confirmation, clarification and information on ST3's progress, her teaching and lesson planning, as well as her core skills standards as early childhood professionals, as required by the course (OB/ST2-16). The following section presents the types of questions used:

Firstly, closed ended questions were phrased as opening questions in the dialog. They were easy to answer questions to acquire specific information that did not require in-depth responses.

So far she's been here for some months, how is her progress? (OB/ST3:L2)

Does she get a chance to teach every time she comes in, or more to just assisting?(OB/ST3:L6)

But do you plan lessons like what you do today? (OB/ST3:L12)

But did you show to anyone your . . . this lesson plan? (OB/ST3:L36)

Secondly, SV2 was concerned about the student's opportunities to plan lessons during her practicum so that she was able to develop her teaching skills. She was keen to achieve closure of a persuasion, as shown by the following three excerpts:

But is this possible say, for instance…fulfil the requirement of what you need in school, but can she at the same time, can she improvise, you know, still plan a lesson. (OB/ST3:L19)

Say for example, ok, if she needs to teach no 7, can she actually come out with a lesson plan on how she can teach the no 7? (OB/ST3: L23)

But did you show to anyone your this lesson plan? (OB/ST3: L42)

Thirdly, as ST2's responses were brief, SV2 also attempted to probe further for more information regarding her understanding of the children she worked with, or practices at the workplace. For instance,

She [*referring to a child*] still cannot concentrate? (OB/ST3:L70)

Yes, you are ok with them already yeah, not an issue at all? (OB/ST3:L108)

Okay … (pause, turning page), engagement with families. Is she allowed? (OB/ST3:L110)

What do you normally share with them? And for the children (OB/ST3:L142)

You mean after class, the child is left out and couldn't catch up, you will go through with the child the same subject. Do you change the way of teaching, teaching the child, or still using the same method? (OB/ST3:L159)

Fourthly, specific questions were asked to assess her understanding of the core skills standards for early years professionals as required by the course as follows:

The next- developing skill in helping and supporting children's health and well- being in a safe environment (OB/ST3:L165)

Okay able to select resources suitable to meet the needs and interest of the children? (OB/ST3: L176)

So you are okay there… skills that support transition. Do you know what transition is? (OB/ST3:L187)

Promote positive behavior… have you been doing that? (OB/ST3:L208)

Alright, on her competencies, is she working towards it? (OB/ST3:L223)

Follow up action plan? (Long pause) (OB/ST3:L225)

These examples appeared to have used closed ended questions where answers could be either a single word or a short phrase that would give essential information that were easy and quick to answer. Closed ended questions helped the supervisor to keep control of the conversation with the questioner. As ST3 had difficulty in expressing in English, coupled with the usage of closed ended questions, this might have led to ST3 answering in short phrases and she was rather passively waiting for the supervisor to ask for information during the dialog. The topic in question was not able to be explored in full.

Feedback and evaluation. Apart from that, SV2 also shared her feedback to ST3 and M3 based on her observation of ST3's interactions with the children in her class, and evaluated on her performance as follows:

On developing effective communication engagement with children, for me, I think she is there already. She is able to communicate well with children,

children like her as well, and they enjoy her class. I mean from my observation. What do you think? (OB/ST3:L92).

M3 also evaluated on her positive progress in ST3's relationship with the children in the class.

She has developed a relationship. Then, from the time we met till now, yeah, or else the children will not do the things that she ask. It was like that, right but now it's fine. I mean she took the effort to get to know them (OB/ST3:L93).

In response to this feedback, ST3 evaluated herself by de-constructing her experience on relationship with the children, whom she thought were now more familiar with her, compared to the first few days, as illustrated in this excerpt:

1   ST3: Uh, with my class children, I am more familiar with them
2   SV2: Um…
3   ST3: Yeah, more familiar with them from I first come.
4   SV2: So you are okay with them huh,
5   ST3: Yeah.
6   SV2: Not an issue. No problems.
7   ST3: (S*ilence*)
8   SV2: Because I notice that she is using bilingual: English, Mandarin, you
9   know.
10 ST3: But because the girl speak Mandarin is the new girl. She will join us
11 next year. She just come in this November (OB/ST3:L95-109).

Offer suggestions. In many instances, SV2 gave suggestions and showed how the student teacher could improve her skills in preparing the lesson plan by showing her lesson plans to her mentor to see if they are aligned with the school requirements. For instance, in order for ST3 to have more opportunities to communicate with parents, SV2 suggested that ST3 should take advantage of the events held at the kindergarten

to maximize her opportunities for learning, such as attending the parent teacher meeting held over the weekend, as shown in the following excerpt:

> Observe how the senior teacher or the principal talks to the parents so that they can pick up from there. Skills, before they do it themselves. But here you get so much of opportunity so at any time if let's say you ever encounter this kind of chance, be there, alright. So that you can pick up the skill (OB/ST3:L9).

Reflections in the journal were not brought up in the discussion (INT/SV2:L142). Instead, the dialog focused on solving immediate problems that the student teacher faced so that the objectives of practicum could be achieved.

Role model for reflection. In a case when the student teacher was unable to reflect in a deeper manner, the supervisor and mentor could also become the role model for reflection, demonstrating the skills to reflect further on reflection -on -action, reflection- for- action, or a critical incident. In the preceding paragraphs on collective reflection (section 4.5.4.2), the mentor had demonstrated how reflection-on -action could be reflected in a deeper manner by integrating many more critical incidents, and validating the event by testing various ideas to make a decision on what was most appropriate for the child on transition issues. In the excerpt in 4.5.4.2, the mentor validated her ideas based on numerous incidents on the child's behavior and made a conclusion on the most appropriate strategy to manage the child who had behavioral issues.

The role of the learner. The followings paragraphs will discuss how ST3 had made attempts to improve herself in reflection and practice.

Willingness to learn. Throughout the practicum experience, ST3 had made efforts in improving herself. For instance, she had made attempts to reflect as the means to an end, and not an end itself. (INT/ST3/L176). She used reflection as a process for thinking through, a series of evaluations, allowing her to think through

what was done daily (INT-ST3-Page6-179). As she observed the children and wrote about their behavior, responses and development, she learnt more about them each day (INT/ST3:L185).

ST3 also made attempts to learn as much as possible from the placement center. In her professional dialog form for discussions with the mentor, she reflected that she had learnt from her mentor and other teachers who had given her opportunities to participate in many teaching activities, and other events such as sports day, Halloween party, and parent teacher meeting at the kindergarten. She was open to corrections by them, and was eager to learn from their sharing of experiences with her (DOC/PF/ST3:L24).

M3 gave the following comments in the progress review form:

ST3 is a pleasant girl who is willing to learn. She needs to oversee the class as a whole rather than individuals. She is patient and attentive to the children (DOC/PF/ST3:69).

Her personal tutor had given her an evaluation score of 76 over 100. The areas assessed on and the criteria scores were:

- Initiative (very self- directed. Contributed significantly to task planning);
- Keeping to schedule (most deadlines are met, but at a lower scale),
- Attitude (show great interest and commitment all the time);
- Inquisitiveness (Asks relevant questions most of the time);
  Keeping records (well documented and organized. Essential information is kept in a well organized format. Strong evidence of individual insights and reflection)

(DOC/PF/ST1:26).

The following excerpts show the comments from her supervisor encouraging her to reflect more deeply:

> Some evidences seen in your work in attempting to reflect upon practice drawing on the skills and knowledge gained from the course. You can however work on being more reflective and analytical to show your understanding of the connection between theory and practice. Do continue to work on bring more theoretical support into your work to show how you can support the children's learning and development (DOC/PF/ST3:26).

ST3 gave very brief descriptions at every question. In the interview, she reflected on her limited ability to express herself in English as she was educated in the Chinese language before she took up this program. (INT/ST3:7) She reflected on her lack of effort in reading, except if she had to do her assignment when she would then read more often as in the following excerpt:

> I seldom read. I don't read often… Yah. Except I need to write … do my assignment ... Then I will read more (INT/ST3:L354-356).

Climate that supported reflective thinking. The sections below will discuss the climate that supported ST3's reflective thinking:

Openness. Openness was found to be important in any two-way or three-way dialog. M3 was uncomfortable at times when a negative comment has to be made before the student teacher and her supervisor, as what she reflected:

> It's hard! Because you are going to say something if they ask is there is any issue or what… It's hard to actually say something that is not so nice… like ya [about the student] put in more effort or what…and the person is sitting right in front of you. Other than that, it's not too bad. Sometimes I am quite straight forward. I tell them … it is not a very nice craft, it's an ugly craft… can you do something. I am quite straight forward to them. (INT/M3:L36)

However, with the purpose of growth and development of every participant in focus, keeping an open mind during the dialog would be the climate that would facilitate growth in the journey of continuous learning and development.

> Everyone have to be a bit more open minded, because it is easy to receive praises. When you want to have a three-way dialog… because at the end it is about the teaching practice of the students. So, if all of us keep an open mind. I think this is room for growth even as the mentor…or the… you will grow together (INT/M3:L54).

Relationship building. Openness was important to learning but for this to happen, a trusting relationship would have to take precedence. Respectful and responsible discussions would constitute a professional dialog that would be deemed as the appropriate platform for sharing and learning. As what M3 had reflected on openness in the following excerpt:

> When I said open, everyone must have to trust…That I am not hurting you, you know, with respect and room for growth for everybody. Because, if the student is not willing to, you know, open up, you know (whispering: this person is coming to see me, I am not good, I am not good)… you know, the person will shut down and not listen anymore. Then the three-way dialog will not work. Because, whatever I say is just that person will just bounce it off, not bother, I think I am ok. Yah (INT/M3:L58,60).

However, trust was not built over a dialog. It had to be developed over time through a relationship developed during the course of working together. To M3, it was an extra effort to talk to the mentee and to get to know her beyond just the official scope of work including knowing the mentee as a person.

> We build a relationship…I see them, I talk to them. Because during the informal meeting, as you say it is lunch or snack time … I not only talk to them about their assignment… what they do ... where they are from … I talk about other things, too… that outside maybe family, or home and get to know them more, observe them more. Can't help it, it's just our nature to observe, we also observe adults (laugh) (INT/M3:L98).

Constructive dialog. During the three-way dialog, M3 had learnt to be more constructive in her approach in the whole dialogic process, and became more engaged in thinking through the communication process so that the dialog was more constructive to the student teacher's development, as how M3 explained in the following excerpt:

> It has also made me learn how to be more constructive in what I want to talk to her, teach her or when I fill up evaluation... thinking about the three-way dialog…keep you on your toes, to actually, room for improvement for myself, and improve my planning, how to address issues to her….Think before I pose the question or statement... I really need to think about it. Because sometimes we are like talking, talking so much to her… so you just tell… and then we don't think so much whether we should ask or we should say or is it too direct... because they are learning as well. (INT/M3:L114)

Being constructive is about having a useful and beneficial dialog. The criticism, suggestions or advice given had to be purposeful. The awareness to be constructive during three-way dialogs was a deliberate action by the mentor. In order to be constructive, there was a deliberate action to help another person grow. As what M3 said in the following excerpt, we would be constructive in writing, but coming into face to face contact with another person we might not think about, or care about another person's feelings in our conversation.

> I guess is human! Sometimes when you talk to human...paper form we are constructive in the writing. But when you start talking your supervisor ask questions and you think about it… To fill up the form is just… forms! But when you meet with a lecturer or a supervisor, is actually live, and I think is good. (INT/M2:L118-120)

The form is dead, to speak is human. Communications between living being with feelings, involved individuals with different upbringing, ways of thinking, values and belief systems, as well as life and educational experiences. Respect and consideration for each other's perspective is an important characteristic of a

constructive dialog. This means imposing less of individual assumptions without clarifications as M3 had reflected upon in the following excerpt:

Navigate but not driving. M3's intentions to providing guidance without imposing her own way of working had impacted on the student teacher's development and growth. Group dialogic reflection had verified the stand of the mentor allowing the student teacher to learn and reflect on their actions:

> To keep the teaching practice on their toes… they can reflect back what has happened … or how their progress in school, the activities or lesson plan that they need to carry out….is it good. So at least, they can reflect and think about it, at least they know that somebody is going to look at it….But having this and talking… at least, they are also, oh ok, at least reflecting on what can be done better. (INT/M3:L24)

The continuous dialogic and feedback process had given the necessary input for the student teacher's decision making, and allowing the change in practice to happen gradually. This contributed to the critical process of becoming a teacher. However, M3 had provided the guidance all the way but was not rigid in what she was expecting from the mentee (INT/M2: L137-140). ST3 had also evaluated her practice and realized that she had made much progress compared to the previous year where she was feeling more confident in her practice. She did not feel compelled to any fixed instructions, but she managed to navigate her way during the practicum, as what she had expressed in the following excerpt:

1 I: You are making progress you think?
2 P: Better than last year. (laugh)
3 I: Better than last year. So, how confident you feel right now?
4 P: Pardon?
5 I: How confident you are, you feel right now?
6 P: If one to five maybe I got 4. (laugh)
7 I: Four! Wow, good. Compared to previously. Why? Why do you think?
8 P: Because I get familiar with the school there. I also know what they want.
9 Ya, not like, like first time I go in I don't know what to do (INT/ST3:L381-384).

From someone who was a novice, who had no confidence in the new job, and even thinking about switching major at the beginning, the change in her was noticed by the mentor. Her affirmation on the change was testament to the kind of responsibility that the mentor was shouldering without being too directive. This excerpt just summed up so beautifully about the mentoring process, I think she has found her way. I don't really fix her as to do this and this. You have to go and search for yourself. (Line 13-15)

Summary

In summary, the themes emerged from the findings of Unit of Analysis 1 in this study are as shown in Figure 4.8:

Broad Themes	• Themes
Reflection Strategies	• Reflection Journal • Two-way Dialog and Sharing with Peers • Three-way Dialog
Faciliatting Deep Reflection: Outcomes of Collective Reflection	• Continuous Dialog and Feedback • Practicum Experience Connects Theory to Practice
The Roles of the Supervisor	• Keep Control with Closed Ended Questions • Feedback and Evaluation • Offer Suggestions • Role Model for Reflection
The Learner's Role of in the Development of Reflective Thinking and Practice	• Willingness to learn
Climate that Supported the Student Teacher's Reflective Thinking and Practice	• Openness • Relationship Building • Constructive Dialog • Navigate but not driving

Figure 4.8 Display of Themes for Unit of Analysis 3.

Unit of Analysis 4: Kindergarten 3

The last unit of analysis was Kindergarten 3 that was located at a three-floor commercial building within a residential area at Putra Heights, Selangor. It is a new housing development with many young families. This kindergarten owner runs three early childhood centers around Subang Jaya adopting a franchised early childhood education program. Its vision was to nurture a love for lifelong learning and to build a firm foundation for young children. The kindergarten session started from 8.00am to 6.30pm from Monday to Friday. It had a library, music and dance area, smart board area, thematic corner, science lab and a computer lab.

The English medium program implemented here at the kindergarten was characterized by hands-on learning, relationship building, character molding, and fun. Upon completion of kindergarten, the children were expected to have developed a firm foundation in English, Bahasa Malaysia, Chinese, Math and Science; as well as a love for learning and an enthusiasm for school. This center runs a playgroup, pre-kindergarten and kindergarten classes. The toddlers attended playgroup with plenty of opportunity to learn through play experiences. Children were grouped in small groups. Sand play, water play, blocks play, songs and rhymes, movement and dance, physical games and outdoor play, fun with numbers and alphabets, vocabulary time, fine motor development, role play and stories were among the activities organized for the toddlers.

Pre-kindergarten children began their reading and writing journey – with the basic letter sounds and basic number concepts and so forth. Hands-on, fun and play were available, in addition to reading and writing books and minimal homework. Pre-kindergarten was available in both the English and Chinese medium. Its kindergarten program was geared toward preparing children for primary school, with a balanced

emphasis on hands-on, fun and academics. The kindergarten program was available in both the English and Chinese medium.

Apart from that, a variety of enhancement activities were offered to children aged four to six to develop living skills, communication and interaction skills, language skills, public speaking skills throughout the week. It was an after school program with lunch, followed by a daily reading time using age-appropriate leveled readers in English, Chinese or Bahasa Malaysia. Daycare was also provided after school hours for working parents. Most of the teachers in this kindergarten were experienced teachers who have taught in other branches of the same kindergarten group. Some of them had diploma and degree in early childhood education.

Student teacher 4 (ST4). ST4 (female, 19 years old), was the youngest student teacher in this study. She was pursuing the Bachelor of Early Childhood Studies at the research site. She was in year one semester two of her studies (INT/ST4:2). ST4 chose to pursue a career in early childhood because she liked children and she wanted to understand children's thinking. She had an earlier placement for practicum at another preschool working with the five year old children. ST4's mother was also trained in early childhood education although she did not pursue this career but chose to teach at a primary school. Her decision to pursue this program was partly influenced by her mother and they often discuss matters concerning her program of study.

Reflecting on her personal philosophy or approach to early childhood teaching and learning, she believed that a play- based environment would be most appropriate. In the early childhood teaching and learning environment, there should be routines in their daily program. To her, comfort was a very important characteristic for children

to grow and develop, where children felt relaxed and were comfortable in expressing their views. On her role as a teacher, she believed that she should be responsible for her own career. The kindergarten should understand the needs and thoughts of the families and likewise the families need to respect the views of the teachers (DOC/PRELIMQ: 1-5).

Mentor 4 (M4). M4, female, aged 32 years, was assigned to ST4 as her mentor during practicum. M4 was also the owner and general manager of this kindergarten where ST4 was posted. She had been running the center for 14 years. Having obtained a BSc in Computer Science and a Postgraduate Diploma in Education, she also has a Master in Education from the University of Southern Queensland, Australia. She graduated in 2013 specializing in Curriculum and Pedagogy. She worked for a while in the corporate field before making early childhood education a career. She had experience in mentoring students when the center started accepting practicum students.

As recorded in ST4's portfolio, M4 talked about her passion for early childhood education. She faced challenges when she established the early childhood centers, one of which was nurturing of young adults to become passionate teachers in terms of knowledge and their passion for their job, as well as motivating them to give their best. She felt that raising the bar of the preschool standards and meeting parental expectations were other challenges that she faced (DOC/PF/ST4:33).

Supervisor 3 (SV3). SV3, female, was the college supervisor assigned to ST4 during her practicum. SV3 held the position of the Head of the Early Childhood Department in this College where she worked for fifteen years. She was also acting as the local program leader for the Bachelor of Early Years Education program for the College. Her highest academic qualification was a Masters in arts, specializing in

linguistics. She also held a Diploma in Montessori Education for 2½ to 6 years and had some experience working with young children prior to joining the college. She started at this college as a lecturer in 2000. She had since been serving as a practicum supervisor for approximately thirteen years (INT/SV3:4).

Opportunities that engage ST4 in reflective thinking. The following section presents the findings on the opportunities that engaged ST4 in reflective thinking during practicum.

Reflective journal. ST4 wrote the reflective journal as part requirement for her practicum. She would write about what she remembered the most, the significant events during her practicum experience. During the interview, ST4 described how she would write about what had happened during her practicum, what she had learnt from that event, others' practices, interactions at the kindergarten, and child observations. In the journal, the types of reflections were focused on teaching and caring skills, child observations, other teachers' practices, children's safety issues and significant events such as her experience helping out during kindergarten concert, interactions with the parents during the concert, handling emergencies such as nose bleeding, and so forth. (FN/ST4 Categories: Page1) Writing the reflective journal had helped ST4 to reflect on what she knew, and what she needed to learn as she explained in the following excerpt:

> When I am writing the reflection I will think this is what I know already and this is what I need to learn…. For example there is any things that I don't know working with children, I need to go to library to find about some books that is related, to read more about, some articles (INT/ST4:L131).

ST4 usually wrote her journal daily during the night before she went to bed. Those events were written down immediately once she returned from the kindergarten as she had problems recalling the details of the event if she delayed writing. However,

sometimes she delayed it because of tiredness or feeling less motivated to do so, which she described as 'lazy', as she preferred to write in full rather than just the points, and that took some effort. Otherwise, she could have easily forgotten the details if only the points were written (INT/ST4: page 6).

Writing the journal made her feel excited to know more about children. She would make discoveries about children's behavior and that motivated her to find out more about children that she needed to learn about. When the next incident of a similar nature occurred, she would be able to apply her learning on the children (INT/ST4:7).

Peer reflection.   ST4 had opportunities to share her reflections with others during practicum. For instance, ST4 shared her reflections with her supervisor during the tutor's meeting held at the college. Sometimes the supervisor would ask what they did at the placement setting, and student teachers would share as the tutorial groups consisted of students from different cohorts. As SV3 shared:

> The personal tutorial groups could be students from different groups, different cohorts, so we had third year's advising the first year's you know, second year's you know saying that you know there are lots of peer discussion and is quite good in that sense. So ST4 would just kind of like listen, smile. "ST4, you ok?" "Ok" (softly, smile) (INT/SV3:L286)

However, during formal peer tutoring session when different batches of student teachers meet with the supervisor, she did not talk much during the discussion, but preferred to listen to what the seniors were sharing about their interactions with the children since she felt that they were more experienced. The supervisor would need to probe for questions from ST4. She felt more comfortable when sharing with her own peer groups.

She found sharing her reflections in the journal on what she had learnt during the practicum experiences helpful to learning. For instance, sharing with her course

mates who usually faced similar situations and problems, such as practices, experiences or observations about the children, and so forth. She would be able to remember what she had written in the journal, and when the topic came up, she would be able to talk about it. However, she found that not all sharing sessions were helpful to her as the experiences of her course mates may be different, and could not be applied in her situation or to the children she was teaching. With the various perspectives to the solution of the problems, she made the decision based on appropriateness in her situations. Even if some of the solutions were inappropriate, she learnt other ways of coping with the problems.

Heart to heart talk as a practice in the kindergarten.   Shared reflection, or as referred to as "heart to heart talk", was practised in Kindergarten 3 where ST4 was placed. The sharing took place daily for 15 minutes before classes began, or at least three times a week, or during a trip. ST4 did share during those informal sessions but very short ones. M4 felt that informal sharing sessions such as these helped participants to go to deeper levels of sharing and reflections as the formal work setting was somewhat stifling.

> I think during work time your level of communication always stays in the crèche level or just as much as reporting facts. You hardly go down on the level whereby you actually really express how you feel and the inner most parts. So I think sharing like this digs it up, uh… digs it up and then share (INT/M4:L121).

M4 reflected on the practice in her kindergarten where they would be given time to express something from the heart as follows:

```
1   P: If you go on a trip that will be two hours I call it heart-to-heart talk, so
2   we will sit in a circle, we probably have like the other day we went down
3   to Melaka, then we just say ok, you could share anything about your
4   year, how has 2015 been to you. It can be about your studies, about your
5   work, it can be your personal life, it can be anything… (continue)
6   P: Because we meet every morning, but it doesn't mean that everybody
```

7 gets to share, we takes turns, so you could share anything that is in your
8 heart. And sometimes it can be only just sharing an inspiring story that
9 you can pick up and you share it with everybody.
10 I: That's good practice. Uh, before class starts?
11 P: Yeah, before class starts. Like this morning, I'm busy with the concert
12 things, so I briefed. So it's briefing, its either we do briefing or we do a
13 song everybody could sing an inspiring song, that we could sing
14 together, or somebody would share an inspiring story. You could pick up
15 from the internet and if you feel that it has touched your heart share it,
16 and we read it together. And we sort out our little little work (INT/M4:L99-
   111).

Sometimes sharing sessions such as these did pose some risks as inappropriate behavior did get in the way. But as they did it more often, the understanding between the colleagues became stronger and stronger and she experienced less and less of those incidents.

ST4 shared her concerns with her class teacher, as her mentor was the center general manager and was not with her in the class. In fact, the placement center staff were an important resource to the student teacher, and helped to validate the ideas from the college perspectives, as explained by SV3 in the following excerpt:

1 P: They need to have people from the industry, yes, More experienced
2 practitioners, yeah, to help them try and see whether the ideas that
3 the college is presenting are viable in the context of this school yeah.
4 I: Right, right.
5 P: Yeah. Because every school is so different!
6 I: Right, right.
7 P: Yeah, so the placement will help and when they come in for this personal
8 tutorial sessions, then the sharing of practices of other placements also kind
9 of like shed light. So it is like a whole lot of people would clarify the Malaysia
10 scene and of course there are the books that are based on research
   (INT/SV3:L292-298)

Apart from that, two-way dialogs took place between M4 and ST4 where they shared ST4's progress. The sessions were recorded in a form on those discussions. M4 enjoyed those sessions, helping ST4 to improve. From which, M4 would then have discussions with her class teacher or colleagues that she worked with to identify areas

that she could improve within the next one or two months so that she could work on the action plan (INT/M4: L57-59).

Three-way dialog   Three-way dialog was conducted in Kindergarten 3 that was housed in a commercial shop lot occupying three levels. The center signboard could be recognized through its franchise name that was rather well known. A few staff in their pink pinafore were standing at the reception area to welcome any guests and parents. They opened the glass door politely with big smiles. The teachers brought the researcher into a resource room located at level 3 of the kindergarten. This room was brightly lit and was painted in yellow. It was surrounded by glass windows with blinds, and clear glass windows dividing the room and the outside areas. There were three open book shelves filled with story books, and some chairs stacked up in the right corner of the room. On the left, there were a few tables and shelves filled with manipulatives and other materials. There were also some early childhood resources stored in storage boxes on the floor, as shown in Figure 4.9.
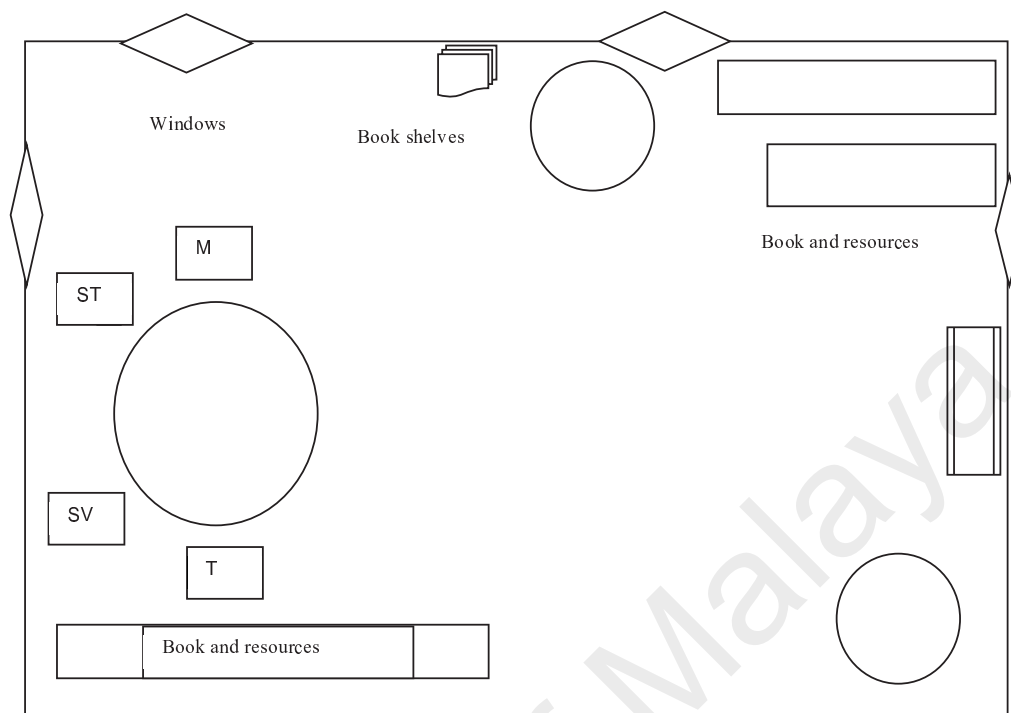
Figure 4.9 Classroom Layout for Three-way Dialog (ST4)

The dialog was conducted at a child activity table at the far left corner. This three-way dialog involved M4, SV3, ST4, as well as the class teacher (T) being seated at the children's activity table. ST4 and T were clad in their pink pinafore that looked like their uniform with the kindergarten logo. M4 was formally dressed in a black blouse and pants. SV3 was casually dressed with a red blouse and a skirt. Everyone was seated at the child sized chairs. The round table was just large enough for five people. The dialog session was recorded using a digital video recorder. The researcher had a notebook and started taking notes. There were some forms on the table, and ST4 placed a stationery case on the table in front of her. SV3 had a stack of documents and a notebook placed at the table in front of her. M4 brought along the informed consent form and placed it in front of her. The dialog started after everyone was ready. The three-way dialog session was held for one hour between 12.01pm to 1.00pm.

The three-way dialog started with light conversations about the student teacher's position at the workplace and in the college. The supervisor was keen to know what she was doing at the placement center and if she was in line with the school's needs. At that point, the kindergarten was in the process of employing ST4 as a full time staff and the mentor had been talking to her on the matter. She was of the opinion that there was a difference in process working the full week and just a few days.

Then the conversation turned to ST4's college work when SV3 asked if ST4 shared about her college learning at the placement center. As ST4 did not really share about what was learnt in the college, SV3 encouraged her to be more pro-active, and share about what she had learnt in the courses such as children as confident learners, understand young children, and so forth. From the dialog, they learnt that ST4 had dialogs with the mentor on a weekly basis, and dialogs with the supervisor three times a year.

Based on SV3's observation on the lesson conducted just before the dialog took place, ST4 was encouraged to reflect and evaluate on her progress and her practice more deeply, as shown in the following excerpt:

1 SV3: What do you think? Self-evaluation and practice.
2 ST4: I need to try more.
3 SV3: That's why it's good to have discussions like this. This is what I
4 thought… Story or songs- songs… after that, she cannot remain song for ever.
5 For year two, you have to do something. You want to share what you have
6 done before?
7 How did you feel after that?
8 ST4: I have lack of confidence.
9 SV3: Why? You have to dig deeper, and say why?
10 ST4: I don't have experience…I worry children don't listen to me, and the
11 voice is very soft (OBS/ST4: L19-28).

In these excerpts, both ST4 and her mentor responded to the questions giving more in-depth reflections to the experience. On her quiet demeanor or lack of confidence during lessons, ST4 then reflected and made an association of her behavior to children's responses, where she related that the children did not listen to her and her voice was too soft to be heard, while her mentor suggested that she had more eye contact with the children (see L1-3). ST4 was encouraged to reflect on her instructional strategies and share the difficulties she faced during lessons. The dialog participants gave their comments on her performance, and encouraged her to think further on the implications of her lack of fluency in her instructions, and encouraged her to speak up more (L10) as reflected in the following excerpt:

1 M4: Another advice I can give you is that you will be your eye contact how
2 you look at the children, what do you think of the way you give instructions?
3 As compared to what you observe with do with T?
4 ST4: Uh… because sometimes my sentence will build up… (finger making a
5 sentence line in the air) that's pretty … not fluent…
6 M4: So how does it affect children with your instructions if that is the case?
7 ST4: Um… the children will not listen to me…
8 SV3: Is that why you don't speak as much as Y?
9 T: … (nods)
10 M4: …Her English is okay actually. She just needs to open up more…
11 Personality wise… ST4 is actually on the quieter side.
12 SV3: To be in this profession yes, you need to talk (all laugh)
13 (SV3 bend her body forward and covers her forehead with her palm… and
14 laugh.)
15 ST4: (Nod, and big smile)
16 M4: Yes, it's a talking profession huh (laugh)
17 SV3: It's not just the presentation in the class. The little thing that you do with
18 the children… (OBS/ST4:L48-65)

As a result of the three-way dialog, there was a positive change in the way ST4 was mentored and how she was conducting her lesson. Taking small little steps, smaller groups of children were given to her to help develop her confidence, as a result of discussions during the three-way dialog, as shown in the following excerpt:

1 I: I worked with small group of children, I got a very small group of the
2 children then in the activity then I can interact with children. So, I think later,

3   later on I will, I can... I am able to work with… um… class of children, in the
4   whole class.
5   P: Oh I see because when she observe you it was a big class, so you don't
6   think you were confident to teach the whole class?
7   I:: Yeah.
8   P: So who decided that you should work with smaller group?
9   P: Um…
10   I: To build your confidence.
11   P: My…um…my Ms SV3, and Ms M4, they discussed.
12   I: Oh they both discussed during the three-way dialog.
13   P: During… yes.
14   I: Ok then. So you decided you should start with small group
15   P: Yes, then they give me the opportunity to work with a small group five or
16   six children.
17   I: Uh, I see I see, then from the five and six children you gained your
18   confidence
19   P: Yes (INT/ST4:L287-301).

Sign posts for tracking.   Another useful strategy used in the three-way dialog

was the core standards for early years professional. As how SV3 reflected on the use

of the sign posts in each of the core standards that the student teacher was assessed on

during the dialog as shown in the following excerpt:

1   P: We don't need to discuss so much on the core standards, because the core
2   standard is the discussion between the placement mentor and the student. Yes,
3   but it can also be used as information that could be brought up in the three-
4   way dialog. Because it's a tracking of evidence.
5   I: Oh right. So these are only sign post. (Umm!) These are only sign post for
6   discussion.
7   P: Yes.
8   I: Uh…ok, ok that's good. So you basically follow what was structured, given
9   to you.
10 P: And then we bear in mind what the students are learning at the college
11 level, yeah. But having said that because in the Malaysian context we know
12 that when they go into the classroom, they have to teach and all of that, yeah,
13 so they are introduced to lesson planning (INT/SV3:L137-141).

Clear ideas of the expectations on the competency required helped the student teacher

to progress. As M4 reflected on the purpose of the dialog:

We just look at the progress, and how they are doing at that point of time, and look at areas that are able to improve that. And I give them a timeline and you know within this time, or within the next two months, just try to improve on different areas. And basically also to give them enough help and also opportunities to be able to grow (INT/M4: L11).

Opportunities that facilitate deep reflection. The following section continues to discuss how the individual and collective reflection strategies facilitated deep reflection in student teacher ST4.

Individual reflection. Data collected from ST4 indicated that even though there were attempts to write in her journals reflections-on-action and critical incidents, ST4's reflections focused more on descriptions of the events. She had demonstrated mostly the initial three levels of reflective thinking from evaluation of experiences to association. Many of her journal entries described the events that took place involving evaluation of the experience. On the first week of her practicum in the earlier kindergarten prior to kindergarten 3 in March 2014, the tutor had given her remarks on her journal that asked for her reflection and learning, and commented that reflection was not just a log of what happened. The following examples from the excerpts illustrated this point:

Same as what I do on Wednesday. I am requested to give the children their reading. There is a girl which is 6 years old couldn't read the passage by her. I teach her patiently and she knows how to read it if she follow me. Other than that, I realized that 5-6 kids who are five years old can't read the word "train". But they will try to read to me and let me to correct the word.

Tutor's Comments: Your reflection? Where is your learning? Reflection is not a log of what happened (DOC/JN/ST4:1).

Five months later, ST4 was already placed in kindergarten 3 for just over a month. Her reflections did not move away very much from just describing the event

that took place for the day. For instance, the following excerpt showed how she

described her experience during a computer class without reflecting further by making

association or integration to knowledge:

> I made sure that every single one of them has their own group and they sit
> properly in front of their referred computer. Computer games are provided on
> the desktop of the computer so that the children may enter it and have fun with
> it. I was wondering if the class will be chaotic during the computer class but
> they all are well-behaved. I was walking around to make sure that they are
> using the computer in turns. After the computer lesson, they were asked to
> queue up before leaving the class.
>
> Tutor's comments: Reflection? (DOC/JN/ST4:16)

ST4 did make small attempts to re-evaluate her experience with expressions of

her emotions. In one incident during a concert rehearsal, she was nervous and worried

about the children's safety going down the staircase at the backstage without the

handrail, and recorded in the underlined phrase in the excerpt that follows:

> I lead those children back to the back stage. <u>I was nervous and worried</u> because
> the children need to go down by stairs in the hall where the concert held. There
> is no handrail for them so I have to make sure that they are in their queue
> without any pushing (DOC/JN/ST4: 18).

In another incident, ST4 realized that she had made a mistake in the message

book duty, a task assigned to her. She felt that she should not repeat the same mistake.

However, she did not go further and reflect on the incident or what were the procedures

she had learnt in the message book duty in relation to one of the core skills standards

of an early years professional, as what her tutor was expecting her to do in her journal

as follows:

> When I checked one of the children's form pasted in the message book, I couldn't
> find it. When I turned to the other side of the message book, I found the form. I
> realized that I had pasted wrongly. I have to take it out and paste it at the right page
> so that the children's parents can see the information. When I tear a little bit of the
> form, the paper behind will tear, I was scared that I will spoil the book because
> some of the parents don't like it. I have no idea so I just leave it there. Next time I
> will be aware and won't repeat the same mistake again.
>
> Tutor's comments: What else can you reflect? (DOC/JN/ST4:20).

In a few journal entries, ST4 demonstrated the attempt to move beyond just describing the event and feelings about the event to deeper reflections. She reflected further to associate experiences with some knowledge gained through her educational experience. For instance, when she was reflecting on a cutting activity conducted with the four year olds, she was able to connect new information to what was already known by linking ideas and feelings from the experience to existing knowledge, as illustrated in the next excerpt:

> I tell the children the rules of using scissors, for example not pointing their friend with the scissors, cannot play with the scissors. Then, I give them the scissors. My mentor told the children to cut from the line that they draw, then only the red, orange, blue balloons. She told me that I have to give clear instruction and be more confident while implementing a lesson. I had forgotten to tell the children which one to cut first before I distributed the scissors to them. Before implementing this lesson, I had written a lesson plan that followed the instruction given by my mentor. But, the steps of the lesson are not detailed enough. I think I should work more on writing more lesson plans to improve the procedures.
>
> Tutor's comments: More thoughts on what happened? (DOC/JN/ST4:26).

In her reflection, ST4 related how her lesson plans lacked clarity and adequacy of details on the procedures of the lessons, and recognized the need to write more lesson plans to improve her skills in writing lesson procedures.

Through continuous reflection exercises using the reflective journal, and feedback from her tutor on her reflection skills, ST4 had made small progress in her reflective skills. However, there was only one occasion when she showed integration in her reflection skills. It was about a two- year old child's reading ability, as in the following excerpt:

> The little girl likes to read. She always takes story book from the shelf and come to me. She opens the book and she will point to me. I read out the word and she will follow what I said then turn to the next page. She repeats the same actions to every page. She will put back the book after finish reading. Two-year olds enjoy having books read to them. I will tell her the story in the story

book…two-year old children also can understand and say hundred words. At the same time, I need to correct her pronunciation sometimes, but not forcing if I teach her some new words (DOC/JN/ST4:1).

In the last month of practicum, ST4 had shown an attempt to identify the patterns and relationships observed during the association level, and drawing a conclusion on the new and previous experiences forming new insights. ST4 had come a long way. Although it was a challenge writing the reflective journal on a daily basis, the journal could be a powerful tool in developing better awareness of one's performance, and what to do in the next phase of learning, as what SV3 summed up on reflective journals by her students in the following excerpt:

> If the students conscientiously completes the journal entries, and if the students [go] beyond just the description of the day to day, kind of activities. Then it becomes very powerful tool, you know because the students can identify um… what was good and what was not so good, yes, and gets to know where she is at and where she could be going? It is very powerful tool for monitoring learning uh… beginning with an awareness of where you are and where you want to go! (INT/SV3:L236).

Similarly, M4 had the same opinion that the journal's usefulness depended on the writer. The process of journaling helped a person to think but she noticed that many journals were just reporting facts, without reflection of what has happened, expressed in the following excerpt:

> They will just say this has happened and I have learned this but actually you can see through the ways it is written. There is no um… personal reflection in the sense (stressing, slowed down). It's just reporting the facts and reporting the incidents and events (INT/SV3: L59).

A good journal would go beyond descriptions of event and the person had to be reflective in thinking, and not journaling without critically thinking about events. The following section will discuss how collective reflection facilitated deeper reflection in ST4.

Collective reflection. The findings suggested that three-way dialogs done collectively provided opportunities for participants to reflect on the links made between what was learnt at the college and the actual practice at the placement center. As how SV3 reiterated her responsibility as a college supervisor help a student teacher make the connection between academics and the industry during the three-way dialog, as shown in the next excerpt:

> I suppose as the college supervisor, that is our job, to help the students to make the link, to help the placement as well to see where the students are coming from, yeah, but a lot of the discussion during the day is based on what we observe. (ok) Yeah, so if the opportunity were to arise, yes, to allow us to make that link, then it would be good (INT/SV3:L252).

Reflecting on the aspects of the lesson observed by SV3, both the supervisor and her mentor presented different perspectives to ST4's quiet demeanor, as shown in the following excerpt:

> 1 SV3: Yes, as I notice that you do not talk as much as the others. It's actually
> 2 quite simple, in fact, you just repeat what she says!
> 3 ST4: (*Nod in agreement, smile*)
> 4 SV3: You know, you are quite happy if you don't have to! It's like if you
> 5 really have to, okay (pretend pointing to the children), you circle the ark! You
> 6 really don't hear ST4's voice. You still hear Y on and off. It's like when ST4
> 7 comes in. Y is very comfortable (*stress, and with arm open up and made a*
> 8 *semi-circle*).
> 9 M4: Recently we just went for a trip not too long ago, and she has opened up
> 10 a little bit more too (student nods, smiles, and looks at both supervisor and
> 11 mentor). Initially she was like … she is seen but not heard. Ha ha ha- seen but
> 12 not heard her talk! But we are hearing a bit more of her right now (laugh)
> (OB/ST4: L64-76).

ST4 was able to reflect deeper when her supervisor probes her with questions, and encouraged her to go beyond mere descriptions of events or expressions of feelings. She was also able to make association from her reflections, as observed during group dialogic reflection (FN/OBS:1-4):

1   SV3: That's why it's good to have discussions like this. This is what I
2   thought…Story or songs- songs… after that, she cannot remain song for ever.
3   For year two, you have to do something. You want to share what you have
4   done before? How did you feel after that?
5   ST4: I have lack of confidence.
6   SV3: Why? You have to dig deeper, and say why?
7   ST4: I don't have experience…I worry children don't listen to me, and the
8   voice is very soft.
9   SV3: How do you gain confidence? Gain more confidence, talk to the mirror.
    (OBS/ST4:L22-29)

M4 reflected on her observations of ST4's progress and how she as a mentor had learnt from the academic perspective as a result of the three-way dialogue, as shown in the following excerpt:

> After mentioning that to her, she took quite a bit of effort, just been a little bit more proactive and we saw that…eh… she was more motivated too to that. I think different areas highlighted would be worked on. For me, myself, …having a three way dialog sometimes just gets me to think about certain strategies and policies…good to keep in touch with what, what people are doing in terms of the academics side how they are nurturing new generation of teachers and it's good to hear from your eh, yeah, and I think the way SV3 would mentor her, I think from there I also learn the different ways that she would do it. And I would just learn, and that's some food for thought for me, ya! (INT/M4:L43)

The three-way dialog had benefitted the mentor, getting her to think about the strategies and policies for improvement. However, collective reflection requires time to be set aside time for reflection, and time to deliberate on the matters raised on the student teacher, and trying to fit into everyone's busy schedule (INT/SV3: 316). The motivation to do this had to be more than the course requirement.

In summary, the data collected from ST4 indicated that the level of reflective thinking for both individual and collective reflection remained at lower levels of R1, R2 and R3. None of the higher levels of reflective thinking was recorded, as shown in Table 4.8:

Table 4.8

Episodes and Percentage of Reflective Thinking Levels (ST4)

Refective Thinking Levels		Reflection Journal		Three-way dialogue	
		Episodes (N)	Episodes (%)	Episodes (N)	Episodes (%)
R1		26	45	1	17
R2		22	38	2	33
R3		10	17	3	50
R4		-	0	-	0
R5		-	0	-	0
R6		-	0	-	0
Total episodes		**58**	100	**6**	100

Collective reflection, however, has supported the student teacher in a number of ways, making it a more meaningful exercise, as described in the following:

Sharing of multiple perspectives. During the three-way dialog, a space was provided for sharing information and suggestions, identifying problems and finding solutions for improvement in practice. It had allowed the participants to be brought together on the same page, as each one was looking at the issues from different perspectives. For example, SV3 explained its significance to be on the same page, as in the following excerpt:

> It is the expectations! It's like when we have the three-way dialog, then it becomes very clear, yes, what is expected of the student on placement… when the school takes them on, the school has its own ethos, and its own philosophy and they want certain things from the students .Yeah, and that's where when we meet, we will say that for the purpose of practicum, the students only needs to do this, so it depends on the students they are some students who underperform and do the less than the bare minimum , and then they are some students who are very enthusiastic and will do way, way beyond what is expected of them (INT/SV3: L153).

When the participants meet, and as each perspective was shared, immediate feedback and validation could be provided on the practice. Upon reflection, each participant could go away with a fresh perspective on the issue, and sometimes,

integrate the old and new ideas, or validate those ideas. For instance, SV3 received feedback on her student teacher's practice, and she also shared it with her class at college, and her perception toward the industry had changed, as she had learnt from the three-way dialog to start looking at things from different perspectives. Hence, even the supervisor had a perspective change as result of the dialog, as shown in the following excerpt:

> We get immediate feedback from the industry, yes, unlike when it's just… um… student and the college mentor. You go in and then you look at how things are being done, and if you are not happy over certain things, you get the student's perspective. But when it is in three-way dialog, issues that are of concern are actually being addressed there and there. You know you don't have to like go through the students to find the things all of that, everything is clarified. And the school kind of knows oh… maybe people see it differently. It is an immediately awareness all around. And I think that it is good, yeah, personally, yes, it has helped me to remind students, to look at things from different perspectives, yeah (INT/SV3: L154).

Three-way dialogs not only help the student teacher to evaluate her own practice and to know where she is going. It also helped the mentor to evaluate her own practice and how she could actually share her experiences and help someone. In addition, as the owner of the center, she could also evaluate some of its policies and strategies, as how M4 reflected on her role in mentoring ST4:

> It helps the students to evaluate her own practice and to know where she is going. But surprisingly, sometimes it also helps the teacher that is mentoring, uh…that, that student to even to evaluate her own practice and how she could actually share her experiences and help someone. For me, it's quite fulfilling at the same time, because, um, ya I think mentoring someone else I would also be able to evaluate some of the policies and strategies that we have in school, are they workable, uh…are they nurturing enough… (INT/M4:L15).

The link connecting theory and practice. The three-way dialog had given a unique platform to the learning experience. Instead of having just the college telling you what to do, and the student teacher doing it during practicum. Reflective dialogs

act as the link connecting the college and kindergarten. The supervisor and mentor observe, evaluate, coach and validate ideas that the student teacher was trying to implement at the placement center, as SV3 reflected on the dual roles in the following excerpt:

> We always tell the students that what we are doing in the college is only the academic or at the theoretical level. Yes, whether all these ideas can be put into practice, whether all these ideas are allowed to be carried out or not, it depends on what happens in YOUR placement …First we already know that ST4 isn't at the level where she would be more assertive to say let me try, she is just WAITING for somebody to like really push and pull her in that direction, yes. (Mm) So that's why maybe in the discussion, yes, there was a lot of telling ST4 you have got to speak up more, you got to ask for more opportunities, to be able to do all these things, otherwise when you come to year two or year three, you are gonna find it very, very difficult, yeah. (Mm) So in that sense, yes, we have three-way dialog, then we GET to say she needs to be able to do this especially in the case like ST4 where she IS NOT saying all those things! (INT/SV3:L163). (Letters in capitals are stresses).

During practicum, student teachers are exposed to the theoretical component received from the College, and the practical components practiced at the placement center. There is an expectation from the College that the kindergarten would be able to support their practice, and help them to put theory into practice, and vice versa.

These expectations raise a very fundamental question. Would the theory and practice divide converge at some point? Can the gap be narrowed for the good of the student teacher? This scenario is like an acrobat learning to walk the tight rope from the academy, not on the circus ground. When he performs live, he is putting the theories to a test. If it works, it works! In the circus, it all depends on the circus leader and practice. Teaching is an art that student teachers need to craft by themselves! Therefore, the contextual factors such as the supervisor and the climate become critical.

Facilitation process in group dialogic reflection that supported ST4's reflective thinking and practice. The following section will discuss the categories of data that would include the roles of the supervisor and mentor, the role of the student teacher as a learner, as well as the climate that would support ST4's reflective thinking and practice.

The roles of supervisor and mentor. During the three-way dialog, it was found that SV3 played certain roles to facilitate the session. There were a few roles of the supervisor and mentor in supporting student teacher's reflective thinking and practice.

Asking questions and probing. As ST4 was quiet by nature, SV3 was seen to be asking questions, and probing her for deeper responses to give clarity, rationale or reasons for her practice. Her questions were open ended questions, with the purpose of soliciting more information from the student teacher or the mentor so that her intentions and actions will be better understood. For instance, the following questions were raised to facilitate the three-way dialog session as in the following excerpts:

What do you think? Why do you think you need to follow the rules? (OB/ST4: Page 1/L10)

Why? You have to dig deeper, and say why? (OBS/ST4: L 27)

Well you have implement lessons, okay, what else? (OBS/ST4: L47)

Do you think you could be more involved? How? (OBS/ST4: L81)

So how does it affect children with your instructions if that is the case? (OBS/ST4: L52)

In these excerpts, as those mentioned earlier in section 4.6.4.3 on three-way dialog, both ST4 and her mentor responded to the questions giving more in-depth reflections to the experience. For instance, on her quiet demeanor during lessons, she reflected and made an association of her behavior to children's responses, where she described that they did not listen to her and her voice was too soft to be heard, while her mentor suggested that she made more eye contact with the children.

Evaluation During the three-way dialog, evaluation takes place when the supervisor and mentor evaluated ST4's performance based on their observations on her work and practice. For instance, the mentor commented that her English proficiency was at acceptable level, but she needed to speak up, and open up more so that she can be a more effective teacher (OBS/ST4:L58).

Albeit the many areas for improvement required for ST4 to become more skillful in her communications and teaching, both M4 and SV3 had evaluated on ST4's progress in her work and her increased level of confidence in the kindergarten life, as shown in the next excerpt:

1   M4: Yes, she has grown…
2   SV3: Yes, and I saw her in her previous placement. You seem more comfortable here…
3   M4: Recently we just went for a trip not too long ago, and she has opened up a little bit more too. (ST4 nods, smile, and look at both supervisor and mentor). Initially she was like … she is seen but not heard. Ha ha ha- seen but not heard her talk! But we are hearing a bit more of her right now (laugh). Because when she first came we hardly hear her talk.
4   SV3: Ya okay!
5   ST4: (Nod and smile in agreement) (OBS/ST4: L74-80)

Motivation and encouragement. In order to help ST4 improve her teaching skills, SV3 gave her a lot of encouragement and motivation so that she could conduct

lessons confidently. For instance, starting with a small group, practice in the mirror, keep trying (L1, 3-8, 10), as shown in the following excerpt:

1 SV3: So you could start with smaller group, yeah, you could talk to the mirror,
2 you, you observe, you learn, you have to try.
3 ST4: (Nod, and look at mentor and supervisor)
4 SV3: And the first time will always be tough. There is no guarantee that the
5 second time is going to be better. Some people one time ok, some people ten
6 times, some people more. Well…the thing is you have to try. And they are
7 willing to let you try. [In other] words they won't take you on as a
8 ….practicum student… if you don't... You have to…try…
9 ST4: (Smile…nod)
10 SV3: Uh (look scared) Uh- every day you look into the mirror and say I can!
    (OBS/ST4:L38-46)

SV3 recognized that the kindergarten mentor and staff had put in effort in getting her where she was at that point in time, getting her to be part of the kindergarten, and were aware of her progress. It was felt that the student teacher had to take responsibility for her own growth as well, pushing herself a little more to achieve more progress. As what SV3 reflected on her observation of ST4's experience at the kindergarten in the following excerpt:

1 P: I think they are aware, they couldn't have done more for ST4 to get her to
2 a level where she participates more in the life of the school
3 I: Just to push her a bit more beyond the limits.
4 P: Because she is not pushing herself! And she is quite comfortable… yeah.
5 I: Ok, ok, ok
6 That's ST4! (INT/SV3:L166-169).

M4 had also given her affirmation that ST4 could perform better, and she expressed confidence that she could, based on her recent progress when she opened up a bit more.

She improves a lot… hahaha. She needs to improve some more. So I just give a tick? It will take a while, as you are generally quiet by nature…We know

actually she can. We went on a trip and we know she can. She is quiet lah (OBS/ST4:L90).

The skillful coach: bridging industry and academia. In order to facilitate a fruitful three-way dialog, the supervisor had to think on her feet and provide spontaneous responses during the three-way dialog, where SV3 had to think and respond quickly. After SV3 made observations of the student teacher's lesson, she found herself in a situation where she had to trouble shoot and think of possible solutions to any problems identified during the dialog. This required a lot of knowledge, skills and experience, as well as confidence on the part of the supervisor, as she reflected on her learning experience:

1   P: Even though you are kind of like… have certain ideas of what you want to
2   pick out on when you go in for the observation, yes, it's…the discussion that
3   we have very often has to be limited to what we actually see during that day,
4   and you have to…to think very quickly.
5   I: (laugh)
6   P: Yeah because in the three-way dialog, you are working with a student
7   coming from particular background, and you are working with the industry,
8   and you've got to like KNOW where everyone is coming from, yeah, so you
9   have got to think very quickly, and you must be very much aware of what you
10 say! Because in the college, yes, you can just deal with the student face to
11 face, and you can say, "you know in the industry they will say bla bla…" but
12 you can't do that in front of the industry!
13 I: Ok (laugh)
14 P: Yeah, or when you talk to the industry, you say, "you know the students
15 bla bla". Now you have got both parties in front of you, yes, so what you want
16 to say, you have to… to some extent, you have to be, you have to know your
17 stuff!
18 I: Hmm
19 P: You have to be able to think it very quickly, because sometime they ask
20 you so how now, you have to be in that position actually to guide the
21 discussion, yeah!
22 I: Right so you have learnt that too.
23 P: To guide the discussion, to be able answer the questions, so you have to be
24 prepared. You have to know your program, you have to know the students
25 you have to, basically you have to know the program and expectations.
26 I: Hmm so that is not easy job (INT/SV3: L300-310).

Apart from being knowledgeable and skillful as a coach, the coming together had also put all the participants to the test, not just the student teacher. Eventually, wisdom shall prevail. In fact, everything said was under scrutiny for validity. SV3 believed that she was expected to know her work well, and people looked to you for an answer, or to direct the discussion. She was expected to know how the industry functioned and its perspectives. She had to recognize that there could be divergent views and different perspectives on the issues discussed. Some ideas could be relatively different or been developed in different directions. As how SV3 reflected on the occurrence of multiple perspectives during the dialog as expressed in the following excerpt:

> It is good, yeah, because it is like really… you are looking at things from MULTIPLE perspectives, not just your own, or the student's, is like ALL THREE together at one time, ok, it is very interesting experience! (INT/SV3:L312)

Preparation before the dialog session was also critical to the success of the session. She had to know the student teacher through her visits and personal tutorial meetings where the student teacher shared her experience in the kindergarten. She had an idea of what she was after during the three-way dialog, and she made some notes for the points to be picked up during the dialog. During the dialog, this information would tie in and help her in the decision making process in coaching her, as SV3 reflected:

> When we go in, we kind of like know what we might want to talk about and then we have that observation and then you make notes, and you are supported by the fact these are the things that you need to be discussing on. Ya, kind of like tie that all together. … So we knew there was [an] area she needed to improve in! So when I went in to see ST4 at the point in time, there were certain elements, that, certain aspects of her placement performance that I wanted to do pay attention to, because we kind of like told to her that you need to improve in all these areas (INT/SV3: L175,181)

Climate that supported ST4's reflective thinking and practice. The following section discusses the climate that supported ST4's reflective thinking and practice in the fourth unit of analysis as follows.

Openness. The critical success factor of a three-way dialog, according to M4, was openness that included being transparent and open minded, where no ideas should be rejected. Participants need to be accepting and have open discussions on the issues brought up, as expressed in the following excerpt:

> Very transparent, been able to talk about anything there should be no concealing of information. The same time to be very open mind, to be able to accept and discuss… everybody is just able to brainstorm and nobody's ideas should be… um … should be strike out, and you know just discuss in a very open manner…There is no fear or no reservation in, in opinion, in expressing opinion, and in experiencing whatever struggles and challenges that the student is facing. Not in criticizing manner, but to be able to more open minded, because some students are so defensive, so hard to actually evaluate but em I don't have student like this with us. Now you can say one line then many of the excuse and all the reasons would come out, and I think that is not… em you know the idea that the dialog has to be a bit more open minded to actually see from the other point of view and all that (INT/M4: 45).

A defensive and judgmental climate is not conducive to dialog. The window of communication needs to be open. If a window is shut, you would not see the other point of view, and you would miss an opportunity to learn new perspectives. A relationship that was developed between the mentor and student teachers over the months would also help in open discussions. The mentor made an effort to talk to the student teachers at her kindergarten about work as well as their personal lives, such as their studies and families as she believed that in order for people to be open to you, you need to first know them better as a person.

Focus on student teacher. During three-way dialogs, there was a mutual agreement that the student teacher was the focus of the conversations, on ST4 becoming a teacher.

We all can agree upon that the main content is about the student herself and how to help to be a better teacher…I don't think we actually say who decide, but we kind of have a mutual agreement to know this is the thing that should be discussed, that's how I feel I would say (INT/M4:L13).

Many ideas and suggestions were put forward for future practice. For instance, ST4 felt very lost at the beginning of practicum, as she was unfamiliar with the apparatus available for the children. During work time, everyone was busy at the kindergarten, and sometimes there was no time for discussions when the questions arise. Hence, three way dialog provided the space for the questions from the student teacher to be surfaced, a space that was about her as a student teacher at the kindergarten, as what ST4 explained in the following excerpt:

1   I: You were very lost?
2   P: I don't know what to do because they have their apparatus.
3   I: Uh ha…
4   P: And they did not tell me where to take the apparatus and where to put
5   I: Uh ha…
6   P: Back.
7   I: Ok. (laugh) so you really don't know where to start but you did not ask
8   people there, everyone is busy?
9   P: Every one, yes they are busy
10 I: So it was this dialog that you actually have chance to talk about yourself, is
11 it?
12 P: Hmmm
13 I: About you, as a student here
14 P: Yes
15 I: So you so you actually find this session is quite useful for you, you think?
16 P: Hmmm (INT/ST4: L362-375).

Commitment to mentoring: raising up. SV3 recognized that while it was part of her job to supervise the student teacher at the placement as a course requirement, for the placement mentors, however, it was an additional task for them and a voluntary commitment as in this case, there was no remuneration for the work done. SV3 recognized that this commitment is not to be taken for granted as not all mentors saw

the value of mentoring the student teacher (L4). As what was reflected by SV3 as follows:

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1   P: It is something extra and they have to do this on a voluntary basis, because
2   we don't pay. Ah so I think that might also affect that, and the Malaysian
3   industry at this point in time, the mentors still don't see the value, the
4   placement mentors,  DON'T SEE THE VALUE of mentoring...the people.
5   I: They don't see the values of mentoring the people… ok.
6   P: Yes, you know that when the students come in, yeah um, they… like when
7   we have three-way dialog, they are some who really prepared for it, and they
8   are some who just go through the formality yeah, it is like when they take in
9   practicum student, in some cases, some cases, yes, it is extra pair of hands
10  and extra body. But in some cases, the mentors really look at it as an
11  opportunity to GROW the staff for the benefit of  industry. Okay lah few
12  cases!
13  I: So in the case of ST4 and M4, so how would you then describe this um as
14  Being the school that really mentors students or you think they are supportive
15  in this?
16  P: Um base on what was discussed, yes, the principal yeah the principal seem
17  pretty much aware of where ST4 is coming from, but based on the
18  observation, yes, a lot more could be done, yes, maybe to support ST4…
19  because if we look at what is… still developing in ST4 (INT/ST4:L159-163).
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For instance, M4 felt that one of the biggest tasks in her job was to develop the people that she led. Some of them she nurtured from scratch as they were novices who could not even handle a class. The most challenging part of the job, to her, was to be a friend and a facilitator, encourager and the motivator at the same time and where to draw the line. As she reflected her mentoring experience in the following excerpt:

> My biggest challenge in my job scope is how to raise up people, how to nurture and how to mentor and raise up, I would use the word "raise up" people to be able to do what they need to do in their position. So I think looking at students I think a quite number of them I think over the years, I found myself raising up them from zero, no confidence, cannot take a class until, until, uh…now being a very well favorite teacher by many parents. And I think I have learnt the way you know, to be a friend the same time and to be a facilitator at the same time and the encourager and the motivator. Uh… but I have got some struggles, on where to draw the line. Because sometimes you are the boss you need to instill certain disciplines, and at the same time if you're overly strict, and especially for new teacher overly strict and over...it can be very demotivating for them. And sometimes I have to evaluate how much support, how much support am I

going to give to that student to be able to complete and how not to give support… in an appropriate time so that the student can grow. That would be what I have learnt over the years (INT/M4: L148).

This is an example of a mentor who look at the opportunities to develop the student teacher to becoming a better teacher. It requires a mutual commitment to the common good, a selfless act with a bigger goal in mind, and interests of mankind . The notion of the common good asserted that people can work cooperatively as a member of the society and who are deeply engaged in the social relationships..

The role of the learner. The following paragraphs will discuss the role of ST4 in reflection and practice.

Open to ideas and suggestions. ST4 was seen to be someone who was willing to learn, and was open to ideas and suggestions. For instance, when asked if she felt discouraged during the three-way dialog because both the mentor and supervisor commented on her quiet demeanor and it was even suggested to her that in the teaching profession, she had to talk. When the problem was related to her, and she was nervous about it, but she was not defensive and only agreed that she needed to improve on her communication skills and her relationship with her colleagues, as follows:

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1   I: So do you see her um helping you along the way
2   P: Yes
3   I: To become more communicative or more open to others?
4   P: More open to others (smile)
5   I: Hmm So she does coach you and guide you on the part where the
6   relationship with others in the school in the school
7   P: Yes
8   I: So you how do you feel now …on this particular issue? Do you think
9   you know…when you go back to the school now, you are more…?
10  P: Closer. I am closer to my colleagues
11  I: Yes. closer with the colleagues, so you are now talking more than before
12  P: Yeah …
13  P: I feel i have to improve that part
14  I: So it did not discourage you
15  P: No
16  I: No because you know they were joking (laugh)?
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17 P: They were telling the truth
18 I: Sorry?
19 P: Is the truth
20 I: Is the truth they were telling you the truth and you really appreciate it
21 P: Yes (INT/ST4: L276-403).

In the dialog assessment form evaluated by SV4, ST4 scored 57 over 100. The areas assessed on and the criteria scores were:

- Initiative (Tutor must sometimes remind students to keep on task);
- Keeping to schedule (most deadlines are met),
- Attitude (show great interest and commitment most of the time);
- Inquisitiveness (asks questions occasionally);
- Keeping records (fairly well documented and organized. Essential information is kept at a fairly easy to follow format. Some evidence of individual insights and reflection).

Tutor's comments: Is more confident in the workplace and does open up for personal tutorial sharing, but only upon questioning (DOC/PF/ST4: 22)

In the portfolio assessment score sheet, the tutor had given ST4 a score of 41 over 100. The comments given on her portfolio submitted were as follows:

Do continue to work on providing a more in-depth and personal reflection based on your practice drawing further on the academic knowledge and new skills gained. Much more confidence can still be shown in the ability to analyze theories and applying them to practice. Do think about how an early years professional can possibly contribute /promote children's learning and development and provide evidence for this as you reflect. You will need to put in much more work into reflecting more insightfully (to go beyond describing what happened) (DOC/PF/ST4: 1)

Critical thinking skills.   While English proficiency was cited as the one of the reasons for the difficulty faced in writing a reflective journal in the preceding units of analysis, M4 was of the opinion that it was both the thinking skills and the ability to express that were the root cause of the problem (L10-11). As she reflected on her experience with many of the student teachers at her kindergarten as in the following excerpt:

1	P: It's not just the proficiency in the English language... When I do dialog
2	with some of my students. I don't speak in English. Because I know that their
3	English is not so good.
4	I: Oh! Yeah?
5	P: So we speak in Mandarin!
6	I: Oh! Mandarin. Ok!
7	P: So we do dialog with Mandarin. Because at the end of the day, I just
8	want to know what's the problem, and how can I help you! So if the
9	English is a struggle speaking Mandarin. Speak in Mandarin, not a
10	problem. But I still find that they cannot be very reflective. And the
11	thinking skill and the ability to express is still at the lower level. That's
12	how I observed lah (INT/M4:77-81).

As a result, M4 lamented that the reflections were often not very deep, but shallow. There was also a general lack of ability to express in a logical manner and make appropriate conclusions based on the information and facts presented which to M4, was a worrying phenomenon.

4.8 Summary In summary, the themes emerged from the findings of Unit of Analysis 1 in this study are as shown in Figure 4.10:

Broad Themes	• Themes
Reflection Strategies	• Reflective Journal • Peer Reflection • Heart to Heart Talk as a Practice in the Kindergarten • Three-way Dialog • Sign Posts for Tracking
Faciliatting Deep Reflection: Outcomes of Collective Reflection	• Sharing of Perspectives Multiple Perspectives • The Link that Connects Theory and Practice
The Roles of the Supervisor	• Asking Questions and Probing • Evaluation • Motivation and Encouragement • The Skillful Coach: Bridging Industry and Academia
The Learner's Role of in the Development of Reflective Thinking and Practice	• Open to Ideas and Suggestions • Critical Thinking Skills
Climate that Supported the Student Teacher's Reflective Thinking and Practice	• Openness • Focus on Student Teacher • Commitment to Mentoring: Raising up

Figure 4.10 Display of Themes for Unit of Analysis 4

Cross Case Pattern Analysis

The following section discusses the findings from a cross-case pattern analysis from the four units of analysis. The purpose of a cross case analysis is to increase the generalizability of the findings, and transferability to other contexts ensuring that the events and processes are not idiosyncratic to the setting chosen. The events and processes analyzed across the 4 units of analysis also helped the researcher to understand how they qualify by local conditions and to further develop more sophisticated descriptions and more convincing explanations to the study (Miles et al., 2014; Patton, 2002).

From the categories emerging after data analysis, the researcher used an explanatory effects matrix to find out why certain outcomes were achieved across the units of analysis and what caused them, either generally or specifically in relation to student teachers' participation in Group Dialogic Reflection during their practicum. From a close examination of the categories among the four units of analysis, the researcher identified similar and different variables across cases to be extracted and thematically interpreted. An explanatory effects matrix helped to clarify the emerging trends of causation through the causal mechanism that may be involved so that an inclusive and explanatory analysis could be made, as shown in the following Table 4.9.

Table 4.9

Explanatory Effects Matrix

Categories/ Unit of Analysis	Unit of Analysis 1: Kindergarten 1	Unit of Analysis 2: Kindergarten 2	Unit of Analysis 3 Kindergarten 2 with ST3	Unit of Analysis 4: Kindergarten 3	Researcher Explanation
Participants	N=3 SV1	N=3 SV2	N=3 SV2	N=4 SV3	Unit 2 & 3 had the same SV
Reflection Strategies	Reflective Journal: Progress in Re-evaluation of Practicum Experience	Motivation to Deeper Reflection through Journalling	Reflection Journal	Reflection Journal	Same strategy- course requirement N=4
	Written Feedback on Reflective Journal				N=1 Extended the skill application in other strategy
	Shared Reflection	Peer Reflection	Two-way Dialogue and Sharing with Peers	Peer Reflection Heart to Heart Talk as a Practice in the Kindergarten	N=4 Shared Reflection/Two-way Dialogue
	Three-way Dialogue	Three- Way Dialogue	Three-way Dialogue	Three-way Dialogue	N=4 Course requirement and extended application
		Self-Assessment Form as a Guide for Reflection		Sign Posts for Tracking	N=4 Course requirement
	Reflection during Lecture				Reflection is required in the course, been planned carefully into the structure. Continuous dialogue is required.

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Table 4.9, continued

Individual Reflection: Reflective Thinking Levels					Strategies not consistently practiced, needs educative process for ST, M & SV.
Level 1: Returning to experience	R1-R3 =79% R4-R6 =21%	R1-R3= 72% R4-R6= 28%	R1-R3= 79% R4-R6 =21%	R1-R3 =100% R4-R6= 0%	R1-N=4 R2-N=4 R3-N=4 R4-N=3 R5-N=3 R6-N=2 R1-R3 = 80% R4-R6 = 20% High Why? Learner is passionate and takes initiative Tutor feedback Low-Learner's role- lack initiative and ineffective, need help
Level 2: Responding to emotions					
Level 3: Association					
Level 4: Integration					
Level 5: Validation					
Level 6: Appropriation:					

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Table 4.9, continued

Collective Reflection: Reflective thinking Level					R1-N=4 R2-N=4 R3-N=4
Level 1: Returning to experience	R1-R3 =31% R4-R6 =69%	R1-R3 =50% R4-R6=50%	R1-R3 =82% R4-R6 =18%	R1-R3 =100% R4-R6 = 0%	R4-N=3 R5-N=3 R6-N=2 R1-R3 =57% R4-R6 =43%
Level 2: Responding to emotions					High- Facilitation style Conducive Climate Collective efficacy – the power to produce an effect
Level 3: Association					Learner's Openness, responsiveness & inquisitiveness
Level 4: Integration					
Level 5: Validation					
Level 6: Appropriation					
The Roles of the Supervisor	Socratic Questioning	Probing Questions	Keep Control with Closed Ended Questions	Asking Questions and Probing	N=3 Socratic questions
					N=1 Keep control, Closed questions

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Table 4.9, continued

					N
	Role model for Reflection		Role Model for Reflection		N=2
		Offer Suggestions	Offer Suggestions		N=2 Instructive
		Recognize Stages of Development of Student Teacher			N=1 Observe Stages of Teacher development
	Affirmation			Motivation and Encouragement	N=2 Affirm, motivate, encourage
			Feedback and Evaluation	Evaluation	N=2 Instructions based / Feedback, evaluation
		Offer Guidance		The Skillful Coach: Bridging Industry and Academia	N=2 Guide and coach
The Learner's Role of in the Development of Reflective Thinking and Practice	Leaning Skills			Critical Thinking Skills	N=2 Learner ability/ language difficulty but not a barrier.
		Self-Initiative			N=1 Learner attitude
	Learning Attitude	Receptive to Learning	Willingness to learn	Open to Ideas and Suggestions	N=4 Learner attitude

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Table 4.9, continued

Dialogue Assessment Score	78.8	86	76	57	N=1 Learner skills ST1 had more productive dialogue than ST2 even though ST2 had stronger academic score and language proficiency. ST1 also had higher grade and reflection skills than ST3 who had similar academic standing.
Climate that Supported the Student Teacher's Reflective Thinking and Practice	Openness Being There	Openness Humility Commitment Follow Through Open to Learning	and Openness to Constructive Dialogue Relationship Building Navigate but not driving	Openness Focus on Student Teacher Commitment to Raising Mentoring: up	N=4 Openness includes trust N=3 Commitment to responsibility, Student feeling individual attention (combine with being there) N=1 Open to learning N=1 Constructive N=2 Relationship building, mentoring
Outcomes of Collective Reflection		Problem Solution			N=1 Navigate, guide Situated, Improve practice, children's progress; Student inquisitive and capitalize on the collective reflection, or SV keen to provide solutions

Table 4.9, continued

	Sharing of Different Perspectives	Learning from Multiple Perspectives	Sharing of Perspectives Multiple Perspectives	Sharing of Perspectives Multiple Perspectives	N=3 Multiple perspective through sharing-unique space
	Continuous Follow Through and Dialogues on Core Skills	Connected Strategies for Reflection	Practicum Experience Connects Theory to Practice	The Link that Connects Theory and Practice	N=2 Link theory and practice ST who lack ability to express gets the extra support
	Dialogic Reflection		Continuous Dialogue and Feedback		Seamless dialogues and strategies coming together to help
	Compliments				
	Written Reflection				
	Validating Ideas through Collective Reflection				Validation in collective reflection (chart shows validation strongest)
Categories	Socratic, evaluates, affirming, and role model facilitation	Learner attitude – high initiative- self directed	Learner attitude- Learner Lack Proficiency in English, critical thinking skills	Learner attitude- Learner lack critical thinking skills and introverted	Conclusion
	Climate: Openness & Being there	Climate- Openness and Humility	Willingness to Learn	Needs help Facilitation	Collective reflection pedagogy as new platform for learning new vison for reflective teacher education
	Seamless strategies and monitoring	Commitment to Follow Through	Facilitation-Keep Control & instructive, follow through and navigate	Instructive; coaching, motivate	Deep and surface reflective thinkers
	Proactive student	Facilitation:	Climate Openness	Climate: Openness	Facilitation roles – a continuum
		Closed ended Probing Questions		Commitment to	Social climate for deep learning
		Evaluation		Mentoring: Raising up	A Paradigm Shift in reflective teacher education
		Offer Suggestions		Focus on Student Teacher	

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Discussion of Findings

The remaining part of this chapter will present the major findings from a systematic cross case analysis of the similarity and differences on the four cases, as mapped out by the Explanatory Effects Matrix table presented earlier.

Reflection strategies. The main findings on the opportunities that engage student teachers in reflective thinking will be discussed in this section. It was found that the four cases used multiple reflection strategies, which included both individual and collective strategies.

All four student teachers wrote individual reflection journals. The types of reflections recorded in these journals were mostly about observations of children; teaching and learning; problems at the workplace; and Kindergarten policies.

Only SV1 cited reflection as a strategy during lecture to reflect on various incidents that helped linked the experiences and theories during lectures. This reflection strategy involved student teachers and the lecturer in class. As SV1 was the program coordinator, and she taught the introductory courses for year one students, she was more familiar with how reflection was introduced in class and student teachers were encouraged to share their reflections in class in relation to the lecture topic.

All 11 participants cited their involvements during shared reflection or two way dialog, held either between the student teacher and the mentor, or the student teacher with the supervisor. The dialog mainly focused on issues faced by student teachers during practicum, or any difficulties about the courses undertaken. This forms part of a continuous dialog strategy used, with forms to be filled in for the dialog sessions conducted and were kept in the portfolio. As how the program leader had explained, the rationale of the dialogs was summarized in the following excerpt:

> Dialog is not always the three-way, but actually in a two-way as well… all the way through, when they're reflecting on their practice, they meet with their tutor, their personal tutor who is supporting them in that course to actually discuss elements and to have a dialog so they are given the opportunity to actually sit down and talk through their work, rather than it just being marked on the academic side (DOC/INT/PL: 3).

All four cases used the professional standard forms based on the core skills standard for early years professionals such as meeting the needs of development of young children, working with parents, inclusive practices, communication skills, and so forth. This form functioned as a signpost for reflecting on student teachers' performance to see how they could meet the core skills standards as required by the course, as opposed to tracking the performance. The following excerpt shows how the program leader explained how the professional standard reflection form was a useful tool.

> Our students have to do it as part of their early years professional stages. That actually is a really good tool to start a dialog in the setting because they reflect on what evidence they got of practice in certain core areas. And then they have to think about how their action plan, how are they going to do it and that causes a dialogue with the mentor to actually think about how they can support the development. Sometimes they can work on the action plan even before they haven't gotten any evidence because they haven't got any experience. So it can work in either way, it's a two-way tool really, it can work either way around (DOC/INT/PL: 3-4).

All the 11 participants were directly involved in the three- way dialog carried out in the practicum placements as part of the course requirement. The three-way dialog usually began with discussions on the observation made by the supervisor right before the session took place. The dialog focused on student teachers' progress; issues and concerns; problems, areas of improvement and discussion on the core skills standard for early year professionals in the student teacher's practice. As the program leader further suggested in the following excerpt:

> If the practice is being looked at, the theory is being looked at, the person is being looked at; those three things need to come together. We need to be able to reflect with the student, not on the student. So it's not just us giving them our feedback of what we think but actually them being able to say 'This is what I was doing and why I was doing it (DOC/INT/PL:2-3).

As what the program leader suggested, and how the evidence from the three units of analysis point to, all the reflection strategies had helped student teachers to deeper reflection as they connected the learning experience for the students. Journals, two-way dialog, lectures, three-way dialog and practicum came together as a series of seamless and continuous dialogs and reflections that support the student teachers' reflective thinking and practice. In this study, there are different ways dialogs are built into the program all the way through and practice is built in as an essential part of it (INT/PL: 2-3).

These findings supports the research on the use of non-conventional methods of reflection strategies in teacher education. The use of multiple reflection strategies such as reflective journal, reflective dialogs, collective reflection, and peer reflection have to be carefully planned into the program structure. These forms of ongoing dialogs enhance reflection skills, and make contributions to teaching knowledge and practice, as opposed to merely using the knowledge sources such as assignments and lectures (Bolton, 2014; Etscheidt et al., 2012; LaBoskey, 1994; Rahman & Scaife, 2012).

The shift in paradigm on the concept of reflection in teacher education is influenced by the constructivist approach to reflection. It has created the need for a reform in the educative process on "meta - reflection" (Johnston & Milne, 2012) for placement mentors, supervisors and student teachers. This is the perceived gap in this study. There is a need for training sessions on reflection strategies, how student teachers can be facilitated to enhance their reflective thinking; and the social and

emotional environment that facilitates open dialogs and encourage double looped reflective learning (This aspect on paradigm shift will be covered in more detail in the later sections). The awareness about the importance of understanding the connection between deep reflection and teaching and learning.is equally important for student teachers, mentors and supervisors alike. The following paragraphs discusses how collective reflection creates opportunities for new levels of reflective thinking.

How individual and collective reflection facilitate deep reflective thinking.
This section discusses how individual and collective reflection opportunities facilitate deep reflection in student teachers. The findings suggest that collective reflection provides more opportunities for higher levels of reflective thinking than individual reflection for the student teachers. As shown in the summary of the levels of reflective thinking for both individual and collective reflection in Table 4.10, it was found that ST1 and ST2 were the only two student teachers with all six levels of reflective thinking evident. ST4 only showed the initial three levels of reflective thinking, and ST3's responses were within the first four levels of reflective thinking.

Individual reflection has recorded a higher percentage of entries for reflective thinking at levels one to three, and a lower percentage of entries at the higher levels of four to six. Level 1, 2 and 3 recorded 39%, 20% and 21% of entries respectively, Level 4 recorded 13%, Level 5 recorded 5% and Level 6 records only 2% of entries.

However, the level of reflective thinking recorded during Group Dialogic Reflection shows a reversed trend. It is lower at levels one to three and higher at levels four to six compared with reflective journal. The percentage of the entries for Group Dialogic Reflection as compared with individual reflection at Level 1 drops from 39% to 18%. It further decreases from 20% to 18% at Level two, and 21% to 20% for Level

three respectively. Conversely, the entries at Level 4 increased from 13% for individual reflection to 15% for Group Dialogic Reflection; from 5% to 25% for Level 5, and from 2% to 4% for Level 6.

Table 4.10

Summary of Individual and Group Dialogic Reflection

Reflective Levels/ Types of Reflection	Individual Reflection (Nos)	Level Entry (%)	Group Dialogic Reflection (Nos)	Level Entry (%)
Level 1: Returning to experience	4 (ST1–ST4)	39	4 (ST1–ST4)	18
Level 2: Returning to experience-responding to emotions	4 (ST1–ST4)	20	4 (ST1–ST4)	18
Level 3: Re-evaluating experience-association	4 (ST1–ST4)	21	4 (ST1–ST4)	20
Level 4: Re-evaluating experience-integration	3 (ST1-ST3)	13	3 (ST1-ST3)	15
Level 5: Re-evaluating experience-validation	3 (ST1–ST3)	5	3 (ST1–ST3)	25
Level 6: Re-evaluating-appropriation (Action/affective/perspective outcomes)	2 (ST1, ST2)	2	2 (ST1, ST2)	4

From Level 1 where student teachers merely describe the experience that happened without passing a judgment, to Level 6 (appropriation), the highest level of reflective thinking is what many scholars regarded as crucial feature in the reflective learning process that could bring transformative outcomes (Boud et al., 1985; Mezirow, 2003; Nolan & Sim, 2011; Toom et al., 2014). For new information to be

meaningful to one's practice, it has to be appropriated in a personal way to own it, although some experiences may be more significant than others, such as the change of perspective due to an unpleasant experience with a parent or a child. Not all integrated and validated information became appropriated. Some were just left as they were, especially those done in individual reflection.

The shift to higher reflective thinking level: collective reflection. The shift in the number of entries between individual and collective reflection was evident in all the four student teachers, as shown in Figure 4.11. The level of reflective thinking was higher for individual reflection for levels one to three. However, the level of reflective thinking during Group Dialogic Reflection are higher from Levels four to six, compared with individual reflection.

For individual reflection, Level 1 entries were the highest, and Level 6 was the lowest. For collective reflection, Level 5 was the highest entry, and Level 6 was the lowest. It was the Validation level that shows the most significant increase in the entries for collective reflection providing opportunities for a deeper level of reflective thinking.

As shown in Figure 4.11, the shift to deeper reflective thinking levels was evident in collective reflection among the four student teacher participants, where a higher percentage of reflective thinking from levels four to six were cited.
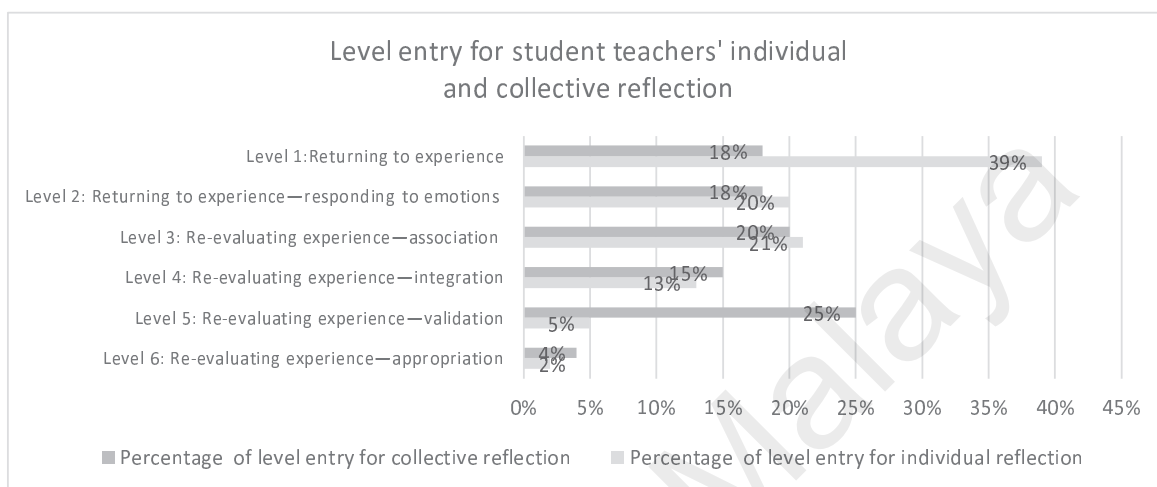
Figure 4.11 Level Entry of Student Teachers' Individual and Collective Reflection.

These findings support studies on guided reflection and collective reflection that provide additional support to enhancing student teacher's reflection besides yielding positive learning outcomes (Boud, 2010; Boud et al., 1985; Husu et al., 2006; Nolan, 2008b; Toom et al., 2014). It contradicts earlier research suggesting student teachers lack the ability to operate at higher levels of reflective thinking (Gibson & Purdy, 2012; Husu, Toom & Patrikainen, 2006; Nolan & Sim, 2011).

As each participant comes with knowledge derived from past experiences in education, readings, personal beliefs and values (Nolan, 2008; Raban et al., 2007, 2012), which Mezirow (1990) called it the ex post facto reflection. It influences one's ideas of teaching and learning, organization of the physical environment, curriculum design, as well as interactions with children, other colleagues, parents and the community (Kilderry, 2012; Raban, 2007; Saracho & Spodek, 1993). Collective reflection is thus useful in providing opportunities for pre-service teachers to express

themselves; to explain why they are doing certain things, how they are doing it, and how their actions affect the children they teach (Boud et al., 1985). It gives a different platform for deeper reflection by allowing pre-service teachers to voice their rationale, thoughts and concerns, which otherwise are silenced ((Ohlsson, 2013; Rantatalo & Karp, 2016; Reynolds & Vince, 2004).

The advantage of collective reflection is explained very well by the program leader in the following excerpt:

> When you sit down and have a dialog with someone, we think about that in a different way. .. it becomes much real and valid, it becomes valid and it becomes real... And it becomes worthwhile. It's an actual serious occupation in a way and actually doing that. Sometimes in life, we may reflect, we move on and we do things quickly. But actually, when it's formalized, you have (stress) to take it seriously. So you have to (stress) take time out to do it. …Sometimes that comment you get from somebody you don't want to hear it, but it enables you to think about something in a deeper way. And just sometimes for people to play devil's advocate with you, it is actually…It's not the only way that is going to change practice, it's certainly going to make an influence in a bit, I would think actually (INT/PL1:7-8).

Early literature by Dewey and Schön had a heavy focus on individual reflection. Bringing the social perspective to reflection is a recognition of the importance of the social context. People exist within a social context and reflection is not only a personal matter, but involves the community within which individuals operates (Thompson & Pascal, 2012).

From an organizational learning perspective, participants who only reflect and describe the *tacit knowing implicit in practice* arrive at only single loop learning (Schön, 1987, p. 25). Participants at collective reflection, however, need to go further in shared inquiry, dialogs that arrive at deep reflection (Brockbank & McGill, 2007). They begin to explore the assumptions and theories-in-use embedded in those actions

that significantly contribute to double loop learning (Argyris, 1977). This process requires higher cognitive challenges for student teachers, and facilitation is necessary to help them arrive at a more critical stance. Apart from that, it also requires a social climate that is open to communication and sharing of ideas, and a trusting relationship for people to talk about their problems in a safe, secure and risk free environment without fearing negative consequences as mentioned earlier. Otherwise, people tend to do the right things by following the usual procedure and objectives, just to avoid uncomfortable negative feelings. But deep learning may involve changing the objectives themselves and doing the right things by creating a work environment where people can freely exchange valid information, and discuss sensitive and private matters in shared inquiry (Argyris & Schön, 1974; Mezirow, 1990 & 2003; Osterman, 2004; Schön, 1983).

In summary, Group Dialogic Reflection provides the social cultural context of early childhood practicum for enhancing reflection. Student teachers in this new platform could voice their rationale, thoughts and concerns which otherwise are silenced due to the lack of proficiency in the English language, avoidance of negative feelings, inability to use higher order thinking skills or constraints caused by their personality, to be discussed in the next section (Allen & Wright, 2014; Ortlipp, 2003; Sumsion, 2003; Valli, 1997).

Facilitation process in Group Dialogic Reflection The next section discusses how the facilitation process in group dialogic reflection support student teacher' reflective thinking and practice. Every individual student teacher arrived at different outcomes as a result of the combinations of factors that took place during the student teachers' practicum experiences. This includes learners' attributes, facilitation styles and social climate during Group Dialogic Reflection.

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Learners' attributes. Student teachers are individuals with unique differences in the make- up of personality, upbringing and life experiences, academic, language skills, values and belief system, and so forth. As shown in in Table 4.11, ST2 performed very well academically with the highest academic score (71) for the overall portfolio assessment score in the course involving practicum that was named Introduction to Children's Workforce while ST1 performed relatively lower in terms of her academic score (52). Unfortunately, the reflective journal, assessments from the observation by the supervisor and mentor, as well as the assessment during the three-way dialog were not graded, but were only submitted as part of the evidence required for the course; the total academic score for the course was not reflective of the student teachers' ability in the areas researched in this study. Those were the formative assessment criteria that might have contributed to the final scores but not directly. In a way, student teachers who completed the portfolio and journals were not required to do so for getting the grades. It was a formative process of reflection through the reflective activities required by the course.

Table 4.11

Academic Scores of Student Teacher Participants

Academic Scores (%)	ST1	ST2	ST3	ST4
Dialog Assessment Score	78.8	86	76	57
Portfolio Assessment (overall scores)	52	71	48	41

However, from the analysis reflection levels, it is found that ST2 has the highest overall academic score for her portfolio assessment (71%), her dialog assessment score was 86%, and at proficient level of reflective thinking. ST2 is also

stronger in her English language proficiency. In comparison, ST1 has a lower overall academic score for her portfolio assessment (52%), but her dialog assessment score was rather high at 78.8%, and her reflective thinking was at the proficient level. ST1 has shown a greater improvement in her reflective thinking level and in her dialog assessment. Compared with ST3, ST1 also had higher reflective thinking level than ST3 who had similar academic standing with her. This has prompted the researcher to dip further into the data for explanations.

Further analysis into the student teachers' academic records in the portfolio has indicated all four student teachers displayed willingness to learn, took initiatives for task planning, and demonstrated self-directed learning most of the times in the portfolio rubrics. All of them were also open to learning, receptive to ideas and suggestions. The difference in performance level could well be the individual learning style and personality that would have influenced the outcomes for reflection. ST1 and ST2 scored well in the personal tutor evaluation form for their attributes such as taking initiative, keeping to schedule; ST1, in particular, was found to be very passionate about her work, showing a lot of interest in teaching and in the children's development. Although ST4 had no language proficiency issues, her quiet and introverted personality might have been a hurdle for her progress.

Apart from that, the student teachers' exposure to the kindergarten setting might have been a factor contributing to the reflective thinking level. For instance, ST1 was working at the kindergarten she was placed. Therefore, her experience would have given her much more room for reflective thinking, practice and improvement, compared to the others. There were also many thoughtful insights about her work with the children. Even though she had limited written language proficiency, she was able to articulate her thoughts well, and asked questions whenever she needed help.

Understanding student teachers' learning styles and intentions may help provide a basis for understanding each another in the supervisory relationship so that more can be done to facilitate learning according to the student needs (Palomo et al., 2010; Pehrson, Panos, Larson, & Cox, 2009).

Student teachers being self- directed learners also meant taking ownership of their learning, being passionate, and having an awareness of where they were at in the experience, and setting personal targets to achieve their goals (LaBoskey, 1994; Thorsen & DeVore, 2013). Each student teacher can be guided by individualized targets set by their mentor and supervisor during the two-way and three -way dialogs. Although the time frame for achieving those targets might differ for different people, the onus was on them to achieve it, as the program leader suggested in the following excerpt:

> They need to be taking ownership of that because they know where they are at…The only way is to have those targets and how to be moving forward towards them and for some people, that may take a long time while for some people very short and they move on to the next target. So it has to be owned by them about where they're going and what next they're doing, but those targets and those expectations are still there for practice (DOC/INT/PL:4).

Dewey (1997) asserts that personal attitudes and dispositions make a difference to reflective thinking, as reflection involves both cognitive and attitudinal dimensions. Open-mindedness, curiosity, self-awareness, and actively seeking feedback and alternative perspectives are some of the attitudes that contribute to meaningful reflection. Since student teachers' learning styles and intentions play a role in the supervisory relationship, awareness and promotion of double loop learning will be necessary to enhance reflective thinking. This following section will describe key findings on the facilitation styles of three college supervisors and four placement mentors involved in facilitating the three-way dialog.

Typologies for Practicum Supervisors' Facilitation Styles. In order to make sense of the findings of this study, the researcher analyzed the types of key phrases, themes, and terms found in relation to the style of facilitation by the mentors and supervisors. The idea was to understand the roles studied and present them visually for clarity to readers. Patton (2002) suggests typologies as a useful classification system made up of categories that divide certain aspects of the phenomena into parts along a continuum. Typologies are built on illustrative end points attributed with specific characteristics, rather than a discrete set of categories. Using logical analysis, the researcher has developed a cross-classification matrix from crossing two dimensions of typology of facilitation style and climate, and working back and forth to build a logical constructive to fill in the matrix from meaningful patterns (Patton, 2002). The following section discusses the two typologies developed from data found in this study: collaborative and instructive.

Collaborative. Data from the study suggests that a collaborative facilitator sees the relationship between the supervisor and the student teacher as a reciprocal one. As they involve themselves in what Schön (1987) refers to as a reciprocally reflective dialog (p. 40). Collaborative dialog is inquiry- oriented, the key to preparing student teachers who have an inquiry stance (Nelson & Sadler, 2013; Pultorak & Educators, 2010). They perceive practicum as 'we are all in the same boat, let's work it out'.

A collaborative facilitator asks questions to solicit information, promotes deeper reflective thinking, and generates ideas without necessarily imposing a certain way of doing things. The focus is on listening, and opening the minds to think, to brainstorm solutions to problems, not necessarily offering any solutions in particular. Active listening involves a keen understanding of what the person had to say, and not just making the assumptions by repeating statements made by others (INT/PL2:2). All

the supervisors (N = 3) use questioning method such as the Socratic questions, probing questions and closed ended questions to facilitate dialog.

Freire (1970, in Freire, 2005) best illustrates this style of facilitation, when he describes the relationship in "authentic education" as one that is not "carried on by A for B or by A about B, but rather by A with B, mediated by the world-a world which impresses and challenges both parties, giving rise to views or opinions about it" (p. 93).

Group Dialogic Reflection provides an opportunity for the facilitator to tap into the expressions of teaching that are explicit and personal in terms of knowledge, and skills implicit from the teacher, but observable by other people. Therefore, a good facilitation process could bring these expressions out to be co-constructed to inform practice. As Larrivee (2006) argues, "reflection, especially critical reflection and self-reflection, are complex constructs requiring strategically constructed mediation or facilitation" (p. 24).

Collaborator. A collaborator works collaboratively with the student teacher, listening to the needs, and providing appropriate access and support within the context of the learning experience. A collaborator asks open ended Socratic questions to advance student teachers' reflective thinking process, and generate new ideas without necessarily imposing his or her ways. Active listening skills help the supervisor to understand and open the minds to think, to brainstorm solutions to problems, not making assumptions nor offering any solutions in particular (Johnston & Milne, 2012; Lord et al., 2008; Masson et al., 2012; Pfeiffer & Jones, 1998). For instance, the facilitator may already know about the underlying issues and possible solutions, but chooses to 'relearn' what is known in the context of the student teacher's effort to

interpret the experiences during reflections. It is about respecting student teachers' ideas, and allowing them to show what they know, and developing their confidence and capacity along the way (Mezirow, 1990). The facilitator is not quick to offer his or her own solutions, interpretations or analysis as an expert but to find out more about the problem.

Knowing that each situation is uniquely different in different contexts, the collaborator is willing to listen and patiently asks for others' ideas and perspectives. This type of engagement and openness in a dialog invites more ideas and divergent thinking. Having one's voice heard is an important criterion for deeper reflection, engagement and empowerment. The collaborator does not force his or her own view on the participants, but explores and shares understanding on the issues and problems raised, allowing deep investigation through reflective dialogs (Freire, 2005).

Studies by Gladding (2012) and Masson et al. (2012) also found similar characteristics of collaborative facilitators that attends to verbal and nonverbal communication without passing a judgment or evaluation; and encourage students to open up during the dialog. The study by Johnston and Milne (2012) also found that skillful use of Socratic dialogue has a guiding or eliciting tone. However, Socratic dialogs are collaborative in later stages of the relationship, allowing the facilitator to respond according to student needs (Bolton, 2014; Johnston & Milne, 2012).

However, the supervisor has to be observant to the needs of the students when applying the Socratic questions. Students who are introvert, not inquisitive, or lack the capability to articulate their ideas well may find it difficult to respond to open ended questions. Students who lack critical thinking skills will also find the dialog too

overwhelming; instead, and may require more time to deliberate on the problems posed.

In summary, collaborative reflective dialog is a form of scaffolding that helps learners to construct a deeper understanding and process information gathered during practicum (Johnston & Milne, 2012). Through reciprocal reflection between the supervisor and student teachers, they become engaged and motivated to learn more within their individualized Zone of Proximal Development (Johnston & Milne, 2012; Vygotsky, 1978). The potential of development can also be further enhanced through situated experiences where problems are inherently more relevant and meaningful to their growing professional needs.

Coach. Another type of collaborative facilitator is a coach that links, affirms, encourages, and sets goals for the student teachers during group dialogic reflection. A coach helps bridge the industry and academia gap as the whole purpose of the dialog was to provide a link between the placement and the college, practice and theory. More importantly was to be able to help in establishing common ground and further reflection to tease out the theoretical implications of the practice as what the program leader suggested in the following excerpt:

> Having that dialog really gets them to think about what they're going to do. (pause) And it brings learning and practice together. So it's actually making those connections in between the theoretical things (pause) and the practice because they are often in isolation (pause) (DOC/INT/PL:1-2).

A coach sets a target, and when the trainee achieves the set target, the coach affirms the work and gives suggestions for improvement during reflective dialogs. Affirmation, motivation and encouragement are useful strategies to affirm and celebrate successes of student teachers. The lack of feedback makes the student teacher feels anxious, while support and encouragement reduces anxiety and discomfort of

being amongst more senior members such as mentor and supervisor in a group (Gladding, 2012; Masson et al., 2012).

Affirmation of a coach co-exists in a climate that encourages members to continue desired behavior, offer help when needed, and most importantly, trust. As such, affirmation is more likely to draw acceptance for suggestions that they would otherwise view as intimidating or threatening. Trainees would be more open and willing to accept ideas and suggestion, and even change their beliefs and behavior to achieve the target set. Confrontation, on the other hand, leads to defensiveness that might result in conflicts and resistance to change, as evident by some of the differences expressed by mentor and supervisor due to eagerness to put one's idea and perspective forward.

A facilitator who acts as a coach focuses on training the trainee, and ensuring that tasks are well performed. Coaching focuses on improving specific areas of job performance and outcomes (Lord et al., 2008). Having a skillful coach is important to show the way, for instance, precisely providing a link between the placement and the college, between practice and theory. For students who are not there yet, to tease out the assumptions and the theoretical implications of the practice. Student teachers at the initial stage of describing the experience, the coach can help the learner to describe objectively what has happened in the experience, and ask for a detailed account of the event, drawing out episodes that may have gone unnoticed or misinterpretations of observations. Learners can also be encouraged to be aware of their own feelings and emotions over the event (Boud et al., 1985; Lord et al., 2008).

Having someone to point out issues about practice brings about awareness of the unconscious habits and behaviors, there is possibility of bringing it to fuller

consciousness and changes in perspectives (Gornall & Burn, 2013). However, people often come with different ideas and perceptions on how they wish to fulfil the targets, or have different priorities. Having a target set for them and not with them invite defensive feelings. It is worth finding out those are the targets that are mutually agreeable.

This finding supports Boud et al (1985)'s notion that the most significant contribution of a facilitator is to give what Rogers (1961, in Boud et al, 1985, p. 37) refers to as *'unconditional positive regard'*. That is, to give *'free and undivided attention'* to the learner, drawing their attention to their behavior, or provide access to other resources that could help them, looking up the website, visit the school resource room, or refer them to other senior teachers. As how Gornall and Burn (2013) link coaching to learning, where a coachee is accompanied through darkness in the forest to the light of learning, and helping them draw on their inner resources to set forth their own journey in the future. The word 'accompany' has painted such a wonderful picture of the coaching role.

Instructive. Data from this study suggests that reflective thinking can also be nurtured through scaffolding opportunities for students through an embedded dialog and feedback with mentor and supervisor. Student teachers who are not innately capable of reflection require close supervision and guidance of their supervisors (Brockbank & McGill, 2007; Jones & Jones, 2013; Lloyd & LaFramboise, 2005; Stegman, 2007; Wells, 1991).

The instructive style of facilitation characterizes giving of instructions and conveying information to recipients. Instructive facilitators use closed ended questions to keep control of the dialog, and follow the sign post that guided the conversations

towards certain fixed instructional targets. During Group Dialogic Reflection sessions, the facilitator asks closed ended questions to keep control of the dialog (N=2).

However, with instructive types of facilitation, students are what Freire (1970, 2005) referred to as the depositories in the banking system of education, and the teacher the depositor. Interactions are teachers issuing "communiques and makes deposits which the students patiently receive, memorize, and repeat…in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits" (p. 72). The teacher in the banking concept of education is in a position of power, and holds the key to all knowledge. Students are quiet recipients of knowledge. In this relationship, learning is often perceived as one way, not otherwise.

An instructive facilitator focuses the dialog on instructions and keeping a close monitoring system to ensure that the learning outcomes are achieved by the student teachers. Continuous feedback and evaluation are given as required by the course either in self-evaluation or in performance appraisal.

Navigator. A navigator has an exact direction in mind, and give precise instruction to get to the destination in the shortest time and most fuel efficient way. A navigator asks closed ended questions to keep control of the dialog, formulates the goals and outcomes, identifies a variety of solutions to the problems, and leaves the student teacher to choose the options to pursue the set goals. Like a WAZE app on the smart phone for traffic and navigation, it helps in an efficient and time saving way to achieve certain targets set. Based on the navigator's knowledge and experience, suggestions are offered to advise and give information and directions, as well as ideas for new behavior. Sign posts along the way are to be followed faithfully. If a target is missed, you need to make a U-turn to get back to where you get lost. Along the way,

keeping on track was very important for the navigator. Very specific questions will be asked about the experience so that a detailed account of the analysis and interpretations will be done for the student teacher, or have the student teacher's ideas and interpretations validated.

It is a good strategy that offers an alternative course of thinking and action but closed ended questions and tight navigation are less useful for advancing reflective thinking and exploring new ideas. Although constant feedback and evaluations are important indicators for student teacher's progress towards the set goal, autonomy and independent decision making skills are also necessary for novice teachers. They will need to exercise their reflective thinking and problem solving skills.

Master. A facilitator who acts as a master to the apprentice keeps the progress of the apprentice rigorously. An apprentice usually learns the skills on the job by following a master who is an expert in the field. The master breaks up the tasks into smaller and identifiable units of reflection-in-action, and the student teacher just follows what is instructed step by step. The master would set a target and the time frame for achieving it and the apprentice would have to follow.

An instructive facilitator is also someone who focuses on close supervision using sign posts, feedback and evaluation, like a master to an apprentice. Each step of the way has to be guided or closely monitored and supervised so that the apprentice could learn to replicate the work done by his or her master. As Schön (1987) reasons, professionals, in the case of teachers to be, will require direct instruction and opportunities to reflection for learning. Problems generated at the placement provide for immediate scaffolding relevant to student teachers, where feedback, evaluation and modeling of the reflective process or practice can occur (Jones & Jones, 2013).

Rigorous feedback and evaluation are given to the apprentice to ensure quality of the work produced. As the saying goes, practice makes perfect. Each step of the way has to be guided or closely monitored so that the apprentice could learn to replicate the work done by his or her master. As the skill has to be emulated to an almost perfection whole, there are not many questions asked. There is not much opportunity to think about practice. An apprentice just needs to follow the instructions closely and not deviate from them. Hence, thinking otherwise is not encouraged.

Apprenticeship may be useful for training towards mastery of certain knowledge and skills. The problem is, teaching itself is a complex process, particularly so in this postmodern society. By student teachers doing things habitually according to set instructions or technical prescription without feeling, thinking, validating, and adjusting to the practice, they do not do any justice to the children and parents (Hatton & Smith, 1995; LaBoskey, 1994; Thompson & Pascal, 2012; Yelland & Kilderry, 2005). It is no wonder that Schön refers to teaching as a professional artistry. In the early childhood classroom, the practitioner's ability to think about, and to have a space for co-construction of practice is critical, although the researcher is not disputing the importance of theory and technique in skillful practice (Scaife, 2010; Schon, 1987).

To conclude, reflective outcomes can be influenced by the types of facilitation such as those with more collaborative or instructive characteristics. Moving from long established instructive to collaborative approaches for facilitating reflection signifies a paradigm shift. The findings have opened up a new perspective in the researcher's understanding about reflection and the social constructivist aspect of supervision, unlike the focus on the individual and cognitive aspect of reflection in the past.

Climate conducive to deep reflection. The next section discusses the climate that supported the student teacher's reflective thinking and practice during group dialogic reflection.

Openness. All participants in the four units of analysis talked about openness being the climate conducive for Group Dialogic Reflection. During the interview, participants expressed openness as the tendencies to accept ideas, suggestions or changes; being honest and transparent; as well as having humility and respect for others. The findings from the observations also shows evidence of varying degrees of openness with different participants, when participants listen to each other's perspective before a mutual agreement was made, or sometimes a decision was not necessary. Sometimes, receptiveness to ideas and suggestion, are reciprocal between the student teacher and supervisor or mentor, not imposing a fixed way of working. Knowing the various perspectives was learning in its own right. This meant that each participant has the rights to a voice and it was not necessary that those in authority must be right (Freire, 2005).

Openness and willingness allow opportunities for expressions of ideas, voicing issues that concern practice, and discussing practice that needs to be reviewed or changed. Teaching is a complex vocation layered with uncertainties, as pointed out by Dewey (1997). The ends and means to each problem are therefore reciprocally determined as well.

Similarly, Johnston and Milne (2012)'s findings on supervisees' perception on the clinical supervision also supported this belief that a deeper level of supervision can be achieved when participants are honest and open in their reflections about their clinical practice. Otherwise, the supervisee perceives the climate in the supervisory

alliance to be weak. Supervisees also feel unsafe when their supervisors are overly critical and inflexible about their practice. Poor communication skills coupled with an inflexible supervision style were all construed as factors which could damage the relationship.

However, the inherent power distance is found to have affected the climate of the dialog (Johnston & Milne, 2012). When a participant accepts authority uncritically, silence is observed. It can be a student teacher, mentor or even the supervisor, when they display signs of hesitancy or reluctance to speak up in the presence of a perceived higher or more knowledgeable authority during the dialog. It may be due to the fear of being judged for their views. In such instances, the dialog became shallow and less fruitful.

Hence, it is important for supervisors to recognize the need to co-construct new ideas that work (Schön, 2001). Ideas involving change could also encourage further reflection and opportunities for strengthening the group relationships (Bleach, 2013; Hayes, Siraj-Blatchford, & Keegan, 2013). Collaborative relationship is a much needed ethos in the early childhood centers that reflects openness and inclusiveness, which arguably will be the key condition for creating sustainable change in the ECCE services (Van Keulen, 2010).

Trusting relationship. Secondly, data in this study also suggests that a trusting relationship is critical to the climate for Group Dialogic Reflection. As practicum placement duration spans a minimum of one semester to two semesters, opportunities were aplenty to build trust in the relationship. It is found that a trusting relationship takes precedence before the participants could have collaborative dialogs. This required efforts and initiatives from each other, including spending time to get to know

each other beyond work affairs, or doing something together. The four student teachers were in placements that were inviting to the life in kindergartens. Through school events, celebrations, sharing sessions and staff trips, student teachers got to know the other staff better and in turn, they gradually opened up to the other colleagues. It was evident that trust must exist before one could open up for deep conversations, where there is certain assurance that "I" do not get intimidated.

Forming relationships that co-construct shared meanings in practice at the workplace is crucial, as Brockbank and McGill (2007) suggest:

> For reflective dialogue to take place, a particular kind of relationship is required between the teacher and learner… where learner and teacher engage and work together so that they can jointly construct meaning and knowledge with the material. The material and how it is worked on is a product of that relation between those in dialogue. The material is not out there, detached and unconnected. (p.5)

The importance of developing trust in the supervisory relationship is also supported by Johnston and Milne (2012) and Beinart (2004)'s studies on qualities of effective supervisory relationship. Trust was found to be one of the critical relationship factors for the educational, collaborative, and evaluative processes of supervision to become effective.

Commitment. Thirdly, all the units of analysis mentioned commitment as the critical success factor for Group Dialogic Reflection. The notion of being there for the student teacher, even if time was a constraint for some of them due to busy schedules was important. Each session took approximately one hour with a focus on the student teacher. There was a commitment from the mentors to follow through the sign post for professional standards to be achieved; mentoring with or without physical meetings, solving problems; as well as guide and monitor their progress. This involves responsibility over student teacher's growth and career development. Placement

mentors were not paid for the mentoring work. It was a voluntary effort from part of the kindergarten that accepted the student teachers. Obviously all student teachers concerned felt the support being given, and the attention received during the dialog. Dewey (1997) has long suggested that purposeful reflection involves the disposition of openness as well as a wholehearted commitment to student success.

The sense of joint responsibility towards the student teachers is important in creating a climate for mutual understanding, with shared goals and responsibilities in a supervisory relationship (Beinart, 2004; Palomo et al., 2010). Johnston and Milne (2012) refer to this quality as the "professional credibility" as human qualities that are professionally and personally credible. Without which, it takes more effort and time on the part of the learner to achieve the goals set, and creating more anxiety along the way. Certainly, building a community of learners requires time, trust, commitment and shared purpose (Lave & Wenger, 1991; Lloyd & LaFramboise, 2005).

Similar findings have also been reported in the Palomo et al. (2010) quantitative study on supervisory relationship with 284 British trainee clinical psychologists. Out of the six components in the supervisory relationship, three of them are about 'facilitative' relationship: safe base, commitment and structure. Trainees need to feel safe as they open up their thinking and emotions to scrutiny by others. Providing a safe base and commitment are powerful facilitative conditions for the supervisor-supervisee relationship that helps to enhance learning through reflections, formative feedback and action plans (Palomo et al., 2010).

Therefore, it is important for practicum supervisors to be aware of the climate that is conducive for deeper reflection and learning. Supervision is a process that

enables learning, development and growth in its own right (Scaife, 2010). These indicate that they may require separate sets of skills.

Outcomes of new platform for learning. Finally, the findings in this study suggest that Group Dialogic Reflection as a collective pedagogical approach creates a new platform for learning. Student teachers reflecting on the experiences with the placement mentor and college supervisor at the workplace is a form of situated learning (Boud, 2010; Brockbank & McGill, 2007; Cressey & Boud, 2006; Lave & Wenger, 1991; Malthouse et al., 2014). Malthouse et al. (2014) conceptualized situated learning as the outcome of a dynamic interaction between the professional settings (context); the social activities; and the individuals' styles, perception and appreciation of the situation. The outcome from the interaction between these elements brings additional perspectives and positive outcomes beyond individual reflections. Situated learning result in a new form of engagement and relationships that otherwise does not happen in conventional practicum practices. The following section presents the three dimensions found in this new platform:

Problem solution. Problem solving is one of the themes emerging from Group Dialogic Reflection that takes place at the kindergartens that addresses the problems faced by the student teachers, solutions to the problem are identified. Dialogs were facilitated by supervisors who played a role in encouraging reflection, particularly open-ended questioning during the three-way dialog, allowing student teachers and mentors to explore solutions to the problems (Hayden, Moore-Russo, & Marino, 2013). Otherwise, the student teacher had to meet both of them separately, and messages had to be carried back and forth.

Data in this study shows that the discussions revolve around the interactions between people and the class activities during practicum. The word frequency query from NVIVO Version 11 indicated that the top ten words in the data were as shown in Table 4.12:

Table 4.12

NVIVO Word Frequency Query Table: (Top 10 Most Frequent Words)

Word	Count	Weighted Percentage (%)
Children	3428	2.99
Think	2024	1.77
Reflection	1704	1.49
Teacher	1342	1.17
Mentor	1237	1.08
Class	1166	1.02
Supervisor	1136	0.99
Student	1134	0.99
Child	1093	0.95

Apart from the participants themselves such as mentor, supervisor and student, and the subject of research which was on reflection, the most frequent words used were children, think, teacher, class, and child. There was a heavy focus on the children they work with, on observations about them and how they could help the children in their development. The other issues most discussed are about other teachers and how they could emulate them for improved practice, children's progress, and how new ideas could be generated to make the lessons more interesting and more developmentally appropriate, and about the individual child's progress. Generally, these reflections were about improving practice and generating new ideas and solutions at the work place.

Findings from the Jones and Jones (2013) study on teaching reflective practice also show that scaffolding opportunities for effective ways for student teacher to

generate and critique solutions to a problem, and test emerging hypotheses in novel settings. These opportunities for reflection are embedded in the course, involving dialogs with others.

Having a community of learners generate solutions to authentic problems promotes reflective practice that examines and validates each other's ideas, attitudes, beliefs and values (Zeichner & Liston, 1996). Generation of multiple and thoughtful solutions to a problem in the classroom develop high levels of reflective thoughts that are cognitively challenging (Dewey, 1997; Lloyd, 2005). This can be achieved by the scaffolding that facilitates a shift in the zone of proximal development from the actual development from individual problem solving to higher potential development through collective reflection (Vygotsky, 1978).

Connects theory to practice. Group Dialogic Reflection among student teachers, placement mentors and college supervisors is found to useful in connecting theory and practice, which otherwise is isolated in terms of physical location where lectures and practicum are conducted, as well as its ideology, philosophy and the inherent practice. All the triads (N = 4) had responded during interview and observation that the three-way dialog had the advantage of gathering people together to think carefully about practice, and thereafter connecting theory and practice. The link is significant to both organizations and participants as the reflections on experiences involved using theory to inform experience, and vice versa. The evidence of the linkage between theory and practice was also demonstrated through the student teachers' portfolios, professional standard assessment forms and assignments. As the program leader commented in one of her interviews, collective reflection allows the participants to connect theory to what is being practiced at the workplace, which otherwise remains a gap between the two:

Having that dialog really gets them to think about what they're going to do (pause). And it brings learning and practice together. So it's actually making those connections in between the theoretical things (pause) and the practice because they are often in isolation (pause) (INT/PL: 1-2).

Engagement opportunities between the College and Placements through participant involvement during collective reflection have become a form of support provided to the student teachers, helping them to link theory to practice (Allen & Wright, 2014; Stenberg et al., 2016). The outcomes of collective reflection involve collective action which directly benefits both the organizations and the individuals. For instance, new project that benefits the kindergarten and generate evidential trails of practice that would be materials for lectures in the college so other students may learn from this experience. A positive productive cycle appears as a result. In some cases, collective reflection also provides a common ground, or reconciles the potentially conflicting demands from the workplace and the college on the student teachers during practicum (Boud, 2010; Cressey & Boud, 2006).

Multiple perspectives. All the participants were able to share different perspectives during collective reflection because of what each would bring to the dialog. As the process of three-way dialog involves people from different settings and positions, each participant comes with different orientations, educational systems, expectations, priorities and their own learning interests. As what the program leader explained in the following excerpts:

> Because they may have a completely different rationale for doing what they did and an understanding of the children that we don't see. Their mentor may be coming from a different perspective because they may be seeing what should be done in their view or their practices and setting and their ideology and their philosophy. So bringing all of those together is really quite important (DOC/INT/PL:2-3).

Collective reflection allows various perspectives to be presented, with each participant considering other perspectives towards achieving a commonly agreed upon interpretation. Having different perspectives could also validate ideas and assumptions and opens up the perspectives of others (Boud, 2010; Scaife, 2010; Ward & McCotter, 2004). Thus, collective reflection gradually invites sharing of different perspectives and enhances divergent thinking in an unobtrusive manner (DuFour & Eaker, 1998). Contrasting ideas result in 'productive tension' with the original idea through which transcendent learning takes place, where the original concept used to interpret a situation can be modified and expanded (Mezirow, 1990, p. 369). This process enables participants to benefit from a deep learning cycle in this collective learning experience (DuFour & Eaker, 1998), or a collective reflection loop that is double loop in nature (Ohlsson, 2013).

Hence, the inclusion of multiple perspectives during collective reflection has added a new level of depth and complexity to the reflective thinking process (Rantatalo & Karp, 2016). Dewey (1997) called it the reflective open mindedness, with an "active desire to listen to more sides than one; to give heed to facts from whatever source they come; to give full attention to alternative possibilities; to recognise the possibility of error even in the beliefs that are dearest to us" (p. 29).

Summary: growth and development of teachers to be.

The findings from various aspects of the case study were discussed at length covering individual and collective reflection strategies, facilitation processes of Group Dialogic Reflection including student teachers' learning styles, the supervisor's facilitation styles, and climates conducive that supported student teachers' reflective thinking and practice. The findings have given a strong indication that mentors who were sensitive to student teachers' needs and interests, and recognize the stages of

development as teachers to be, were those who had noble intentions in pursuing their mentee or supervisee's growth and development (Johnston & Milne, 2012; Palomo et al., 2010; Scaife, 2010).

The outcomes of collective reflection have an impact on the children, teachers, and the class in those settings. Its impact could potentially go beyond an individual self, affecting common interests of the early childhood community and beyond. The teaching profession itself is a noble profession. Growing stronger teachers by any means would make any impact beyond anyone's imagination.

CHAPTER 5: CONCLUSIONS AND IMPLICATIONS OF STUDY

This chapter presents a conclusion to findings of the case study through the themes emerged from the cross-case analysis of the units of analysis. The findings of this study contribute to the current body of knowledge by describing Group Dialogic Reflection as a pedagogical approach for early childhood practicum. Four keys findings will be discussed through the lens of the theoretical framework, namely, collective reflection as catalyst for capacity building and teacher empowerment; deep and surface learners and reflective thinkers: intentions and choice; a continuum for facilitation of group dialogic reflection; and social climate for deep learning. The implications for future research and practice will be discussed.

Collective Reflection as a New Vision for Reflective Teacher Education

Collective reflection offers a much needed platform for shared learning as a catalyst for capacity building and empowerment among practitioners, student teachers and academics. Since early childhood education is a relatively new field of study compared to the other established disciplines, there is a new scope for learning and development across the academic institutions and industry.

When participants from the placement setting and academic institution gather for collective reflection, the learning derived from situated reflection offered opportunities for association, integration, validation and triangulation of ideas. Transformative learning occurs when there are changes in perspective, affective and action outcomes (Boud, 2010; Boud et al., 1985; Cressey & Boud, 2006). An action outcome of reflection could be new way of doing things, a resolution of a problem or an action plan. An affective outcome could be a change in the emotional state, feelings toward people or events, attitudes or value systems. There could be a motivation

toward learning of new skills or knowledge (Boud et al., 1985). Any changes in behavior, action, and emotions are notably the most difficult and complex task in any organizations. It requires a sustainable pedagogical structure that prepares student teachers to arrive at appropriation, and the cycle is continuous (Argyris, 1977; Argyris & Schon, 1974; Boud et al., 1985).

Individual reflection processes such as journal writing may be inadequate to prepare reflective teachers as opposed to collective reflection, where debriefing and journal writing could be facilitated, drawing from a wider knowledge base for a meaningful perspective change (Noble, 2007; Husu et al., 2006; Toom et al., 2014). Collaborative dialogs expose participants to multiple perspectives, and open up a wide range of issues that are usually silenced (Sumsion, 2003, p. 83). In some ways, collective reflection provides an avenue for reconciling the needs of the learner, the employer and the academic institution. Once a common ground is established, the learner could be developed, the effectiveness of the organization improved, and the requirements of academic institution fulfilled (Walsh, 2009).

Walsh (2009) suggested the use of dual- mode reflection, using both individual and collective reflection to reconcile the three-party knowledge interests in workplace learning. The notion of productive reflection at work as a collective approach to reflection has moved away from the individual focus which has been dominant in the discourse relating to reflection. It places emphasis on organizational learning, and changes in work practice that enhance productivity, personal engagement and meaning in work (Boud, 2010; Cressey & Boud, 2006).

Clearly, collective reflection offers a new vision for a reflective teacher education. It is evident from this study that supervisors and mentors have supported student teacher development, which has indirectly impacted the community at large.

Their noble intention, or its impact, has gone beyond an individual self. It has become a force for capacity building and teacher development. Having everyone's voices heard has liberated the power distance between the *'guru'* and the student, the master and the learner. It is a space where people could speak in different perspectives, and make a choice between voice and silence that may produce different effects during practicum assessment. Having a say in the decision making process on practice is a good form of empowerment to the participants (Ortlipp, 2003; Sumsion, 2003).

A collaborative social relationship also expands the participant's capacity for learning through building social capital, bonding, trust, collaboration, and participation in professional learning community (Mulford, 2007). It allows co-construction of a learning culture, deep learning, dialog and reflection on theory and practice, empowerment of adult learners and enhanced professional development (Murray, 2009). Reflective dialogs held collectively at the workplace practices results in internally constructed counter-discourse to improve on practices.

In conclusion, a collective, rather than an individual orientation brings more meanings to a dynamic and volatile early childhood work environment (Cressey & Boud, 2006, Mezirow, 1990; Walsh, 2009). Given that individual reflection has been the dominant discourse in reflective practice, the collective approach to reflection needs to be reconceptualized in the context of a pedagogical approach in teacher education (Collin & Karsenti, 2011).

Deep and Surface Learners and Reflective Thinkers: Intentions and Choice

Secondly, this study also suggests that learners' responses are uniquely different. Learners need to be engaging the social context, "acquiring knowledge and skills through experience; then coming back, reflecting and makings sense of it; then

carrying this new understanding out into the world again" (Gornall & Burn, 2013, p. 16). The depth of this learning could vary depending on the student teachers' pro-activeness, assertiveness and expressive skills. The response of each student teacher is influenced by personality and past experiences which have contributed to how the learner views the experience. Positive or negative experiences could become enablers or barriers to learning, thus impacting on the depth of their understanding of their workplace. Intentions of the learners have an impact on the learners' reflective thinking. The behaviors or the outcomes of the reflective dialogs are influenced by the choices they make. For instance, self- directed learners takes ownership of their learning, have self- awareness of where they are at in the experience and set personal targets to achieving their goals. Hence, they develop deeper reflective thoughts. From Argyris (1977, 1993)'s stand point on double loop learning, the extent to which the learner takes control of his or her learning correlates with reflective outcomes (Boud et al., 1985). For instance, a 'deep' learner seeks to understand the meanings and significance of their experience, actively associating it to theoretical perspectives, and validating the ideas (Dewey, 1997). Similar trend is seen in reflective thinking, where validation and appropriation can be observed(Boud et al., 1985). In contrast, a single loop 'surface' learner tends to just do enough to get through their assignments, treating each experience as unrelated episodes in life, and seeing oneself as a follower of the norms rather than a change agent. A similar trend could be observed in reflective

thinking, where the levels of reflective thinking remains at evaluating the experience or non-reflective as illustrated in Figure 5.1.
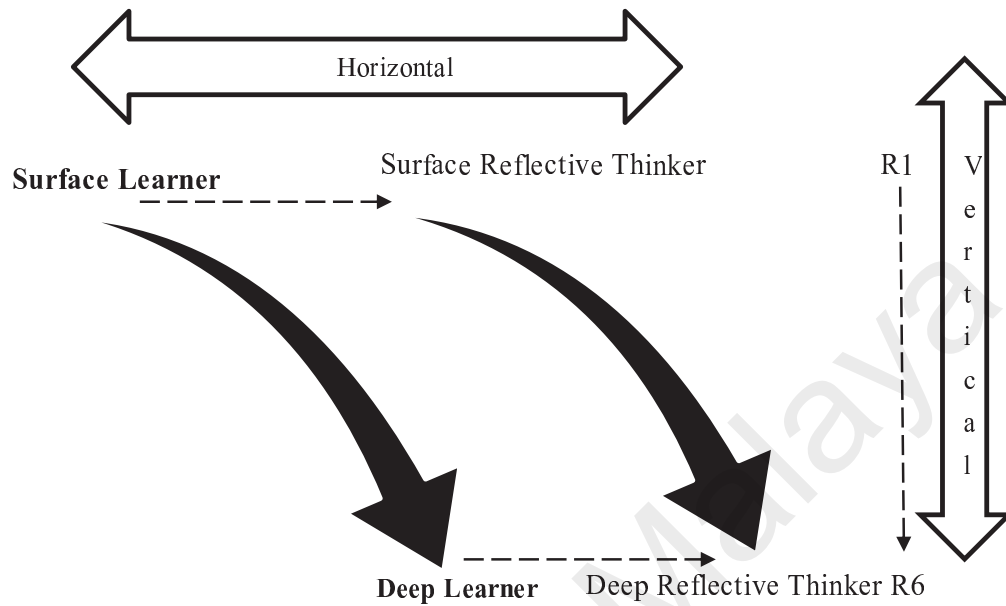

Figure 5.1 Typology of Learner and Reflective Thinker

This illustration gives rise to a typology of deep and surface reflective thinkers and its relationship with learning attributes which is surface and deep learner. The student teacher makes the choice, to either adopt a surface learning or a deep learning approach in his or her practicum experience. Hence, the researcher argues that the depth of the thinking and learning process is a connecting and reciprocal one. There are vertical and horizontal dimensions to the process. As shown in Figure 5.1, the vertical process from the surface to the bottom of the arrow shows the depth and the reflective thinking process from R1 (Reflective Thinking level 1) to R6 (Reflective Thinking Level 6); and a horizontal dimension which shows transferability of the learning skills from reflection to reflective thinking. This explains how attitudes that lead to intentions and choice can affect the extent to which reflections can turn experiences into surface or deep learning.

However, it is recognized in this study that there could be limits in which the learners could transfer reflections into meaningful learning by themselves without help (Boud et al., 1985; Toom et al., 2014). This is where a new pedagogical approach is so significant in scaffolding student teachers' reflection (Vygotsky, 1978). The extent to which the facilitator plays the role in scaffolding the learning experience has an impact on the depth and transferability of both reflective thinking and learning (Bean & Stevens, 2002; Johnston & Milne, 2012; Ryan & Ryan, 2013).

A Continuum of Facilitation Roles

Thirdly, and one of the most significant findings from this study, is the facilitation role as a continuum that offers an insight into supervisory roles during Group Dialogic Reflection during early childhood practicum. Schön (1987) had very early on predicted the need for academic support required to enhance reflective skills in order to develop a generation of reflective educators. For reflective practicum to take place, he argued that there must be 'first class faculty' involved, and the facilitator he named as 'coach, advisor, consultant, tutor,' and so forth (Schön, 1987, p. 171). Boud et al. (1985) also indicated that support, encouragement and intervention by others were necessary to help student teachers to learn reflection. This implies that the supervisor plays a very critical role if the pedagogical approach is to be successful. An awareness of the types of facilitation style and its characteristics will be useful in selecting and training practicum supervisors. The behavior of the facilitator will influence the level of reflective thinking and social climate during the dialog.

Description of the facilitator's roles as a continuum is a meaningful exercise that allows readers to identify the behavior and attitudes associated with the typologies. It signifies a paradigm shift in the practicum approach from a traditionally instructive style to a collaborative one that promotes reflective thinking and collaborative

learning. The continuum can also be used for professional development to learn about the different types of facilitators, and how different types of student teachers could also be provided appropriate scaffolding.

Social Climate for Deep Learning

Lastly, social climate is also an important element in Group Dialogic Reflection. Although the individual learner and facilitator play an active role during collective reflection, careful attention to a supportive and democratic social climate helps to nurture deep learning. A social climate, or the right attributes for Group Dialogic Reflection is openness, trust and commitment to remain in the relationship. Openness is about being honest and transparent; as well as humility and respect for others. A dominating dialog takes place when there is an absence of humility, and recognition that people could contribute to co-construction and co-creation of knowledge. As Freire (2007) argued:

> Dialogue cannot exist without humility. The naming of the world, through which people constantly re-create that world, cannot be an act of arrogance. Dialogue, as the encounter of those addressed to the common task of learning and acting, is broken if the parties (or one of them) lack humility. How can I dialogue if I always project ignorance onto others and never perceive my own? How can I dialogue if I regard myself as a case apart from others-mere "its" in whom I cannot recognize other "I"s? (p. 90)

An open and collaborative dialog invites participants to listen to each other's perspective before a mutual agreement was made, or sometimes a decision is not even necessary. Trust can be developed when people understand one's perspective about the world (Gornall & Burn, 2013). It also takes humility to be receptive to ideas and suggestions, not imposing a fixed way of working. A conducive social climate can unlock communication barriers, build good rapport due to enhanced understanding and trust among participants.

In what Freire (1970, in Freire, 2005) has envisioned, of a humanist and revolutionary teacher, who works with the students to engage in critical thinking to pursue what he refers to as mutual humanization, as how he has beautifully illustrated this teacher:

> His efforts must be imbued with a profound trust in people and their creative power. To achieve this, they must be partners of the students in their relations with them. The banking concept does not admit to such partnership—and necessarily so. To resolve the teacher-student contradiction, to exchange the role of depositor, prescriber, domesticator, for the role of student among students would be to undermine the power of oppression and serve the cause of liberation (p. 75).

Openness and a trusting relationship go hand in hand to release creative energies. There must exist a commitment to remain partners in this relationship for a common goal. Otherwise the door for a communicative dialog is closed. Just as there is oppression and liberation, there is another continuum that is 'open' and 'closed' climate in group dialogic reflection as found in this study.

Implication to Knowledge Generation

The paragraphs that follow discuss the implications of this study towards knowledge generation, particularly in the area of early childhood teacher education.

Towards group dialogic reflection as a pedagogical approach. The findings on the styles of the practicum facilitators and the social climate during Group Dialogic Reflection makes a difference in student teachers' reflective thinking and practice. The researcher has further developed a matrix that illustrates the interactivity between the facilitation styles and the climate for Group Dialogic Reflection using the typologies drawn up earlier, as demonstrated in Figure 5.2 as follows:
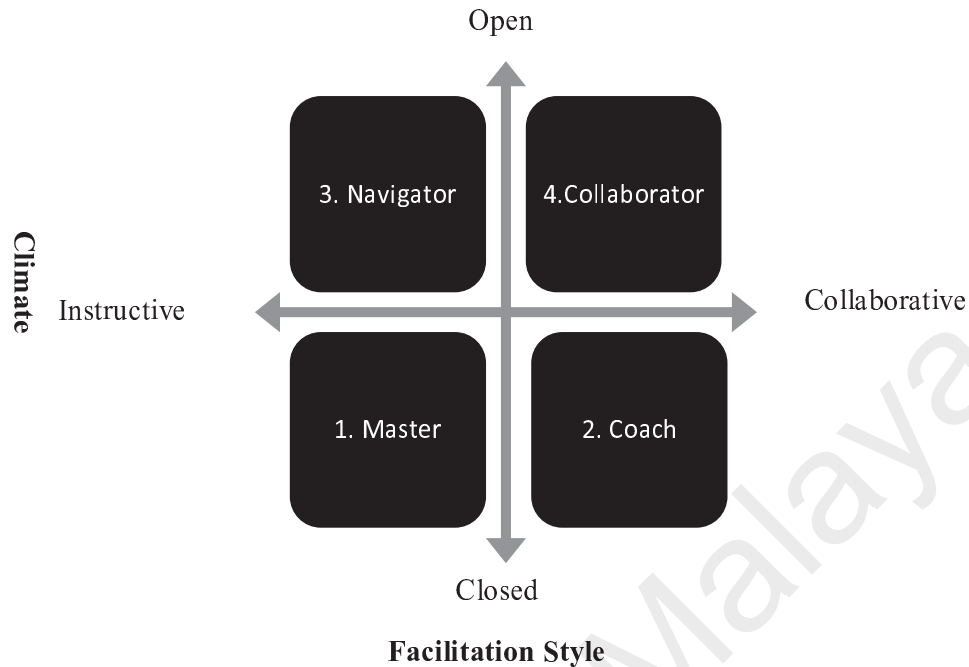
Figure 5.2 Matrix for Group Dialogic Reflection: Facilitation and Climate.

The four quadrants illustrated in Figure 5.2 represent movement across the facilitation styles in accordance to the complex interplay between the facilitation style and social climate with characteristics described in the preceding sections. Quadrants one and four are easy to differentiate because they are at opposing ends of the two typologies: open/closed and collaborative/instructive resulting in either a collaborator or a master. Quadrants two and three are more difficult to differentiate, between a navigator and a coach. Different facilitators in the dialog possess uniquely different personality and facilitation styles resulting in different quadrants in the matrix.

For instance, a more collaborative facilitation style operating in a more open social climate results in group dialogic reflection that is collaborative and open, while a more instructive facilitation style operating in a closed social climate results in an instructive and closed dialog. There may be distinct outcomes in accordance to the various types of facilitation in the continuum offered, such as those that are

collaborator, the navigator, the coach and the master. There are certainly advantages and disadvantages of each type as described earlier.

This implies that an awareness of the supervisor facilitation style could help the individuals and administration to provide appropriate support for professional development. For instance, programs on effective facilitation and questioning skills that elicit assumptions rather than mere information, and fostering an open and democratic group climate that require specific training and professional development.

Johnston and Milne (2012)'s study yields similar findings on the developmental progress of the receipt of clinical supervision conceptualized across two typologies representing a relatively 'more conscious awareness' and 'less conscious awareness' position, and 'more competency' and 'less competency'. The four quadrants consist of i. Motivating, doing, digesting; ii. Goal directed attempted to do it right; uncomfortable recognition of relative incompetent; and blissful ignorance. There is a movement across these developmental stages and the process is represented by the central spiral of movement through the trainees' Zone of Proximal Development. However, the four key constructs that enhance the quality of supervision are supervisory alliance, scaffolding, Socratic information Exchange and reflection. This model helped to explain the interplay of the two dimensions. As Johnston and Milne (2012) argue, the two continuums identified are also collaborative and didactic. In the collaborative quadrant, the scaffolding required is less as the trainee is capable of generalizing knowledge from the supervision, and the reflection is more complex where there is joint discovery via Socratic questions. In contrast, in the didactic quadrant, when supervision is led by the supervisor, it was found that the trainee lacks the ability to self- reflect without scaffolding, and reflections are procedural, less complex, and task focused.

The interplay between the various dimensions in Group Dialogic Reflection are as illustrated in the following Figure 5.3., which can be conceptualized as a three dimensional group dialogical space that operates between facilitation styles; an open climate that encompasses openness, humility and trust; and the development of reflective thinking. The interplay between facilitation style and climate results in distinctive quadrants in the matrix. The depth of the student teacher's reflection is also another dimension impacting the volume of the pedagogical approach afforded by scaffolding and climate of the individualized zone of proximal development. For instance, within the group dialogic space, a student teacher with a higher degree of open social climate, coupled with higher collaborative facilitation style, and a deep level of reflective thinking, results in 'deep collaborative learnings' as an outcome. It could be applied in the intended activity; or more reflective activities in the related context in the next cycle of double loop learning (Grundy, 1982, in Boud, 1985).
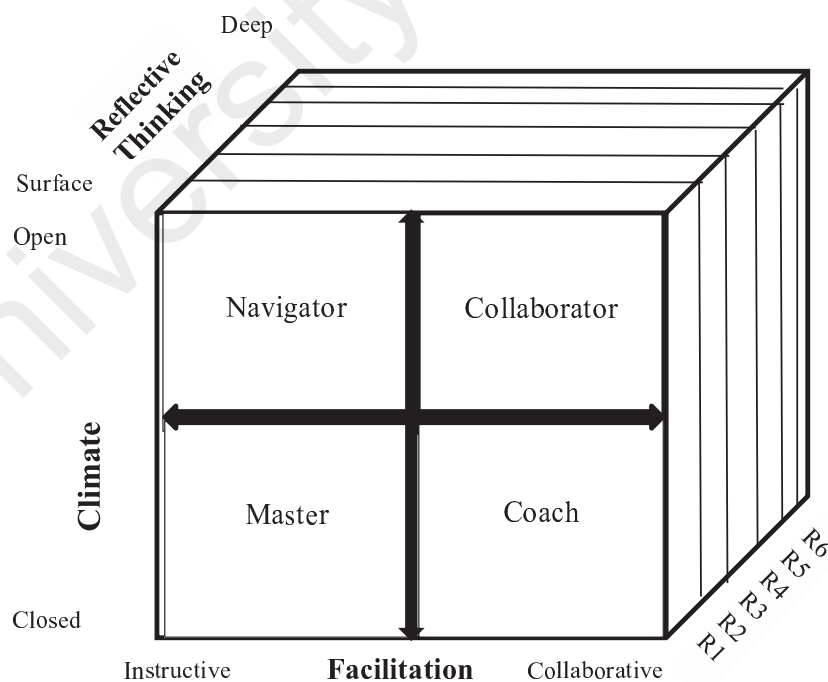

Figure 5.3 Three Dimensional Group Dialogic Reflection Space: Climate, Facilitation and Reflective Thinking

Group dialogic reflection: key theoretical principles. The following section will conclude the key theoretical principles of Group Dialogic Reflection as a pedagogical approach during early childhood practicum: Firstly, Group Dialogical Reflection is a collaborative reflective dialog that goes beyond reflection conducted in isolation to an intentional discourse, where questions and problems generated by reflection are discussed in a collegial manner. In collaborative dialogs, the teacher's thinking can be "confirmed, modified, or stimulated to deeper levels of understanding" (Boud, 2010; Johnston & Milne, 2012; Larrivee, 2006, p. 24; Mezirow, 1998) to avoid biases. Group support can also surface the stress from teaching and provide a cushion against low feelings such as dissatisfaction and uncertainty (Brookfield, 1995). As evident in this study, Socratic dialogs become a valuable exercise when involving 'intellectual conflict' (Fullan, 1999, in Osterman & Kottkamp, 2004, p. 20) that could result in further clarity, insights and plans of action such as revising lesson plans incorporating more creativity or changing classroom management strategies. This is a form check and balance by other colleagues' perspectives to help novice teachers validate their thinking in a safe environment (Bolton, 2014). As Habermas (1974) rightly said, reflection without dialog is "limited to the insights of the individual…detachment on the part of self, to look at another part of self, and in this there is a danger of self-deception" (in Brockbank & McGill, 2007, p. 66).

As Freire (1970) has suggested, a pedagogy of a new relationship between teacher, student and the community is required. It will be a collaborative dialog approach to education that leads to critical investigation which generates and expands on new themes and solutions that emerged. In contrast, the anti-dialogical and non-communicative approaches are likened to the banking method of education where ideas are just deposited into the minds of the students. The responsibility of the

dialogical teacher working on those themes merely investigates to find out where the problems are, and not to lecture on them (Freire, 2007, p. 109).

Group Dialogic Reflection engages with participants in communications, co-construction and co-creation of knowledge, rather than reproduction of knowledge. In the process, difference in opinions could be addressed, and assumptions validated (Brockbank & McGill, 2007). As Freire (1970, in Freire, 2005) reasons:

Without dialogue there is no communication, and without communication there can be no true education. Education which is able to resolve the contradiction between teacher and student takes place in a situation in which both address their act of cognition to the object by which they are mediated. (pp. 92-93)

Secondly, Group Dialogic Reflection recognizes the collectiveness of the social setting in which people operate, and the need for active communication that produces authentic reflection on who they are and how they operate, and not mere transmission of knowledge without critical thinking. True education, according to Freire (2005),

denies that man is abstract, isolated, independent, and unattached to the world; it also denies that the world exists as a reality apart from people. Authentic reflection considers neither abstract man nor the world without people, but people in their relations with the world (p. 81).

In the same vein, Mezirow (1990) asserts that "transformative learning is not a private affair involving information processing; it is interactive intersubjective from start to finish" (p. 364). Changes in perspectives require participation in critical dialogs with other people, and exposure to alternative perspectives resulting in some resolutions.

Thirdly, multiple reflection strategies need to be embedded systematically during teacher training practicum, and the process should be made known to all involved. There should be an educative process for student teachers involving appreciation of reflection. A seamless process of dialogs connecting all the elements of teacher education and practicum to reflection are, but not limited to journaling, shared reflection, peer reflection, collective reflection, lecturers, continuous dialog, feedback and self-assessment, evaluation, standards checklist, and so forth. Those means could form triangulation of ideas that support decisions made about changes in practice and implementation (Noble, 2007). Continuous dialogs with the use of the core skills standards for meeting the development needs of young children, working with parents, inclusive practices, communication skills, and so forth, are useful sign posts in the reflective journey with specific outcomes. These strategies all come together as a series of seamless and continuous dialogs and reflections that support double looped reflective learning. Student teachers not only write up the reflective journal, they could share reflection in action, on action and for action and critical incidents making reflection an active part of practice (Brockbank & McGill, 2007; Noble, 2007; Nolan, 2008; Raban et al., 2004).

Mann et al. (2009) have similar findings, when they suggest that developing a reflective practice requires "a supportive environment, both intellectually and emotionally; an authentic context; accommodation for individual differences in learning style; mentoring; group discussion; support; and, free expression of opinions" (Mann et al., 2009, p. 608). They also suggest other enabling factors including organizational climate such as respect between professionals, behaviors of mentors and supervisors, and time for reflection. Collective reflection could be developed into a disposition toward reflection, which can be nurtured into long-term habit so that

teachers could become more critical in evaluating themselves and their schools (Brockbank & McGill, 2007; Lloyd & LaFramboise, 2005; Moran & Dallat, 1995; Smagorinsky & Lee, 2000; Stegman, 2007; Wells, 1991).

Finally, the pedagogical approach has to be a situated, socially constructed approach, connecting the academic institution and the placement center. Learning should not be, and cannot be, isolated from the workplace context. Teacher education institutions need to effectively "support, sustain, and 'tune' the visions, understandings, performances, motivations, and reflections of all its members" (Shulman & Shulman, 2004, p. 6). They need to enhance readiness of student teachers into the teaching world. Experiences of student teachers are to be "enhanced, differentiated, and deepened", as they reflect on these experiences individually and collectively (p. 3).

Zeichner (2011) stressed the importance of having the connection between what student teachers learn and the opportunities to observe, practice, and obtain feedback on what they practice. Very often, "research-based and ambitious" teaching skills are not translated into practice (p. 2). Similar findings have been found in studies that show how the gap is real between theory and practice because learning take places at two different settings. We need to have a pedagogical platform that bridges theory and practice, and defines clarity of roles for placement mentors and college supervisors (Allen & Wright, 2014; Cohen et al., 2013). As Freire (2007) asserted:

We must not negate practice for the sake of theory. To do so would reduce theory to a pure verbalism or intellectualism. By the same token, to negate theory for the sake of practice, as in the use of dialogue as conversation, is to run the risk of losing oneself in the disconnectedness of practice. It is for this reason that I never advocate either a

theoretic elitism or a practice ungrounded in theory, but the unity between theory and practice. In order to achieve this unity, one must have an epistemological curiosity- a curiosity that is often missing in dialogue as conversation (p. 17).

Reflection situated in context is grounded in constructivist and social learning theories. This is where authentic and generative dialogs could flourish if given the right conditions and climate. Zeichner (2011) also reminds teacher educators that an improved version of teacher preparation programs should be more "clinically based, and context focused", and integrate the expertise between the schools and the teacher training institution (p. 13).

In the same vein, Cressey and Boud (2006) suggest that collective reflection "connects work and learning and operates in the space between the two. It provides a link between knowing and producing and is a part of change processes" (Cressey & Boud, 2006, p. 16). It is a connection that needs to be nurtured and treasured. It is the meeting space for multiple perspectives, problems and issues and consensus drawn. The focus is not on individual interests, but those of the purpose of the entity of which the practitioner is part. It is the shared interests of the group or wider entity (Cressey & Boud, 2006; Lave & Wenger, 1991; Malthouse et al., 2014).

To sustain Group Dialogic Reflection as a process of learning about early childhood education involves an epistemological curiosity about the very elements of the dialog. The community of people need to stay curious about the subject together, as dialog can go on, in the process of lifelong learning. An inquisitive mind takes people deeper and further in the quest for knowledge (Freire, 2007, p. 18). When curiosity and lifelong learning attitude are absent, it is difficult to create conditions that would enhance practice and professionalism in the field. Without the commitment

to learn, they will never be able to participate rigorously in a dialog as a process of learning and knowing. Importantly, this inquiry stance needs to be clearly articulated in the program for a clear vision for practice (Zeichner, 2011).

__Implications for Practice.__   This study implies that institutions need to be more responsive to learners' needs. To transform the industry, institutions have to equip learners to be in control of their experiences, and not be controlled by them. Teacher education should adopt Group Dialogic Reflection as part of a seamless and continuous dialog that enhances reflective thinking of student teachers. As Mezirow (1990) advocated, "learning is grounded in the very nature of human communication. Becoming reflective of the content, process, and especially the premises of one's prior learning is central to cognition for survival in modern societies" (p. 375).

Meta-reflection is a necessary skill to develop the quality of student teachers' reflection as highlighted by recent scholars (Cornish & Jenkins, 2012; Etscheidt et al., 2012; Johnston & Milne, 2012; Kaminski, 2003; Shulman & Shulman, 2004). Hence, studies on the educative process are a significant gap to be addressed by most teacher training institutions.

Findings on the relationship between reflective thinking and the perceived facilitation styles suggests that it may be important to explicitly train and support placement mentors, supervisors and student teachers in developing and maintaining a positive climate and relationship. The researcher argues that these are fundamental elements to achieving the aspirations detailed in the Malaysia Education Blueprint (2013-2025). Wave 2 (2016 to 2020) of the shift 4 initiative on transforming teaching into the profession of choice focuses on raising standards by improving the quality of pre-service training programs required to deliver the 21st century skills desired of

Malaysian children, which include collaborative learning, problem solving and teamwork. Wave 3 (2021 to 2025) of the Blueprint has aspired to create a peer-led culture of professional excellence where school leaders and mentors would train one another, develop, and disseminate best practices and hold their peers accountable for meeting professional standards (Ministry of Education Malaysia, 2015). Hence, more research and development on teacher training programs are needed to enhance the quality of the practicum experiences of early childhood student teachers. School leaders, mentors and college supervisors need professional development programs on facilitation skills so that they are aware of the communication skills, facilitation styles, as well as the climate conducive for quality reflection.

The findings also support the call for capacity building and training for student teachers, mentors and supervisors in preparation for a more connected practicum and more effective supervision (Zeichner, 2011). Schön (1987) has long suggested that reflection is a complex and challenging exercise which requires specific knowledge and skills. Practicum is recognized as an essential integrated part of a practice placement, and an extension of reflective learning. Hence, teacher educators must consider how the skills of reflection can be purposefully and intentionally nurtured (Pultorak & Educators, 2010). Facilitating student teachers' reflection requires a sophisticated pedagogy (Walsh, 2009) and metacognitive awareness and analysis of the learning processes supported by a learning community will be absolutely vital (Shulman & Shulman, 2004).

Attention should also be given to training placement mentors and College supervisors for more effective supervision. A personal and professional commitment toward growth and development is an important driving force for this community of learning as they stay connected in collective dialogs. They are dialogs on me, us, and

the children. Essentially, these dialogs are on people, their growth and development. It should be the fundamental duty of a professional to pass on the baton. The duty and responsibility of educators or care providers for young children need to be handed over to the next generation of early childhood educators and providers. It is not a short distance run, but a marathon. That was the reason the researcher was conducting this research from the outset.

Limitations

This study has a number of limitations. The case study was conducted in a college and units of analysis consisted of a small group of early childhood student teachers, placement mentors and supervisors in a single teacher training setting in the Asian context. Extending this study to other populations will be recommended to determine if similar findings emerge.

The use of a longitudinal design would allow claims about the impact of Group Dialogic Reflection. To provide further verification of the elements in the dimensions of the pedagogical approach, a separate qualitative study could be done to further establish the salient conditions of Group Dialogic Reflection.

Because of the limitations in the duration of the PhD study, and page requirements as part of the Ph.D program, the researcher has to scope the parameter of the study. Hence, the researcher is unable to present all the data collected in the findings, and only the most significant parts of the findings are presented in this thesis. Given further opportunities, the researcher could expand the use of the data collected in this study in the future.

Implications for Future Research

As this study was a qualitative research with a small sample, the same study can be replicated in different research sites that offer collective reflection along with individual reflection during practicum and the complexity and relationships between individual and collective reflection. Following the facilitation styles, a study on the various characteristics of the facilitation styles during group dialogic reflection could be conducted so that the constructs could be validated through a larger sample size using quantitative measures. Similarly, a follow up study on a larger sample using quantitative measures could be done on the group climate that is conducive for supporting student teachers' reflective thinking, as well as the learning styles of the student teachers so that learners could become aware of their preferred learning styles.

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LIST OF PUBLICATIONS AND PAPERS PRESENTED

Published works as well as papers presented at conferences, seminars, symposiums etc

pertaining to the research topic of the research report/ dissertation/ thesis are as

follows:

Foong, L., & Mohd Nor, M. (2013) Group dialogic reflection as a pedagogical approach for professional learning in early childhood practicum. Conference Proceeding, 7th International Qualitative Research Convention held from 21-23 November 2013, Shah Alam, Selangor.

Foong, L., & Mohd Nor, M. (2014). Group dialogic reflection as a pedagogical approach in early childhood student practicum: Shared perspectives for harmony. Conference Proceedings, *Living in Harmony Through Early Childhood Education and Care.* Pacific Early Childhood Education Research Association, 15th Annual Conference held from 8 -10 August, 2014, Bali, Indonesia.

Foong, L., Mohd Nor, M., & Nolan, A. (2016) Facilitating early childhood student teachers' reflective thinking during group dialogic reflection, Conference Proceedings, International Conference in Teacher Learning and Development, held from 28-30 November 2016, Penang, Malaysia.

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Foong, L., Md Nor, M., Nolan, A. (2018) The Influence of Practicum Supervisors' Facilitation Styles on Student Teachers' Reflective Thinking during Collective Reflection. Reflective Practice. 19(2). 225-242.

Group Dialogic Reflection as a Pedagogical Approach for Professional Learning in Early Childhood Practicum

Conference Proceeding, 7th International Qualitative Research Convention held from 21-23 November 2013, Shah Alam, Selangor.

Abstract

This is a conceptual paper on a research study that explores the use of Group Dialogic Reflection in the Malaysian early childhood teacher training programme as a Pedagogical Approach during practicum. Student teachers' reflective level has a close association with professionalism. Spaces where students, practitioners and academics collectively generate new epistemological understandings to inform practice are critical as an innovative pedagogical strategy to enhancing professional learning. This will be a qualitative, phenomenological inquiry that will deepen the understanding of the phenomena in Group Dialogic Reflection, through case study with a multi-case design. Three student teachers will be selected from a university using purposeful sampling method. Sources of evidence from interviews, direct observations, documents, and physical artifacts will be used. Raw data collected will be developed into logical, meaningful categories pertaining to the fundamental issues within the research scope; examined holistically; and interpreted using appropriate coding systems and data analysis software.

Pacific Early Childhood Education Research Association

15th Annual Conference

"Living in Harmony Through Early Childhood Education and Care"

8th August – 10th August 2014, Indonesia

Abstract

This research study intends to explore and understand the processes in Group Dialogic Reflection, as a pedagogical Approach in supporting early childhood pre-service practicum students in a Malaysian setting. Reflective thinking has a close association with professionalism in teaching. Student teachers as novices often have limited teaching experience and they face difficulties with the complex issues around children and their families at the placement centres. Reflective journal is a requirement for practicum, but reflection is usually conducted in isolation. Involvement of the student teacher, mentor and supervisor in group reflection is not commonly practised. Research evidence begin to suggest that reflection alone, no matter how much realization takes place, has its limits in bringing about change in action. In order to bring about harmony in the early childhood workplace, a space is needed for collective reflective dialogues, voices by multiple perspectives, and generation of new epistemological understandings to inform practice. This is a qualitative research using the case study method with a multiple-case design. With the purposive sampling technique, four cases are selected from an undergraduate early childhood progamme in a Malaysian private college, where student teachers are involved in reflective journal writing and Group Reflective Dialogues through which new meanings to the interactions between the student teachers, placement mentors and supervisors during Dialogic Reflection sessions will be constructed. Conclusions will be drawn from the individual or group reflections in that specific context. Sources of evidence will be from interviews, direct observations, documents, and physical artifacts. These will then be analyzed and developed into logical and meaningful categories pertaining to the fundamental issues within the research scope; examined holistically; and interpreted using appropriate coding systems and data analysis software.

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Facilitating Early Childhood Student Teachers' Reflective Thinking during Group Dialogic Reflection

Abstract

This study aims at exploring and understanding the facilitation process in Group Dialogic Reflection as a pedagogical approach during pre-service early childhood practicum. Student teachers' reflective thinking is closely associated with learning and improving practice. Group Dialogic Reflection is conceptualised as a space created for student teachers, placement mentors and supervisors to reflect collectively during practicum. A supervisor's role as a facilitator during Group Dialogic Reflection influences the level of student teacher's reflective thinking. This is a qualitative research study using the case study method with a single case embedded design. Purposeful sampling technique was used to seek information-rich cases that were studied in greater depth. A teacher training institution in Malaysia was selected as the Case. Four units of analysis involving eleven student teachers, their placement mentors and college supervisors participated in this study. Sources of evidence were interviews, direct observations and documents. Data collected were analysed using both inductive and deductive methods. The results show that collective reflection offers a new form of engagement and relationships between student teachers, placement mentors and college supervisors which otherwise does not happen in a conventional practicum. It was found that facilitation styles influence the depth of student teachers' reflective thinking during Group Dialogic Reflection. A continuum of facilitation styles from collaborative to instructive typologies was constructed. Implications related to supporting student teachers' reflection during practicum will be discussed.

The influence of practicum supervisors' facilitation styles on student teachers' reflective thinking during collective reflection

Abstract

Student teachers' reflective thinking is closely associated with learning and improving practice. Novice student teachers require adequate support to reflect more deeply. The role of 'others' in collective reflection and knowledge generation as an outcome creates a platform for deep reflection, addressing both the processes and premises of reflective thinking. Facilitation styles of practicum supervisors could influence the level of student teachers' reflective thinking during collective reflection. This is a case study using purposeful sampling involving a Malaysian teacher training institution that conducted an undergraduate early childhood programme in collaboration with a UK university. Sources of evidence were interviews, direct observations and documents. Data collected were analysed using both inductive and deductive methods. It was found that facilitation styles influence the depth of student teachers' reflective thinking during group dialogic reflection. A continuum of facilitation styles from collaborative to instructive typologies was constructed. The implications of these findings are discussed.

Exploring individual and collective reflection of ear y chi dhood student teachers for deeper reflective thinking during practicum

Australasian Journal of Early Childhood

Abstract

This study aims at exploring and understanding the processes involved in individual and collective reflection as a pedagogical approach during pre-service early childhood practicum. The current trend shows a shift from individual reflection to collective reflection with an emphasis on the Social Constructivist perspective. This is a qualitative case study with a single case embedded design. A Malaysian teacher training institution that conducted an undergraduate early years programme from the UK was selected as the Case. Sources of evidence came from interviews, direct observations and documents. The results show that collective reflection strategies support deeper reflection during practicum where student teachers engage in higher reflective thinking at the integration, validation and appropriation levels of reflection, as compared to individual reflection. Collective reflection provides a platform for problem solving, connects theory to practice, as well as sharing of multiple perspectives resulting in a deeper understanding of their practice.

Keywords: collective reflection, reflective dialogues, early childhood pre-service teacher training, practicum