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**Indonesian EFL Teachers' Perceptions of the Influence and
Role of Professional Development and Teacher Study Groups
on Teachers' Self-Efficacy: A Mixed Methods Study**

A thesis presented in partial fulfilment of the requirements for the degree of

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Education

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Dedication

To my late mom Hj. Nurung

who taught me the lessons of *understanding* long before I knew what questions to ask.

To my wife Nurnaningsih

Thank you for your prayers and constant words of encouragement throughout this journey to find answers to questions I had long-held.

To my children, both Qaila and Fikri

Your love is more than I shall ever deserve.

“Life is a journey not a destination”

Abstract

A growing body of research suggests that effective professional development (PD) can help teachers increase their knowledge, skills and understanding about teaching. Research evidence also indicates that good quality PD enhances teacher self-efficacy. However, there have been few studies that have investigated the relationship between teachers' participation in PD and changes in perceived levels of their self-efficacy. This study aims to investigate the characteristics of good quality PD from the perspective of junior secondary English as a Foreign Language (EFL) teachers in Indonesia. It also aims to find out the relationship between teachers' participation in PD and teacher study groups (TSGs) and changes in perceived levels of their self-efficacy.

A mixed methods research with a convergent parallel design involving four phases was used in this study. In the first and fourth phases, the initial and follow-up questionnaires were completed by 104 teachers in three districts. The questionnaires consisted of closed questions and open-ended questions. In the second phase, three observations were carried out in each of the three TSGs in the three districts. This focused on how teachers conducted TSG meetings. In the third phase, semi-structured interviews were conducted with 18 EFL teachers from three districts.

The findings from this study revealed that the participants' perceptions of good quality PD seemed to be influenced by the Indonesian cultural context, educational system and policies, and teacher resources. The EFL teachers perceived good quality PD facilitates: increased teachers' knowledge and teaching skills, encourages collaboration, and is based on teachers' classroom practical needs. The study also revealed that there is a relationship between teachers' participation in PD, and TSGs, and changes in perceived levels of their self-efficacy. Of the three aspects of instructional strategy, classroom management, and student engagement, the EFL teachers made the greatest change of their self-efficacy in instructional strategy. However, the participants also saw the importance of having a good understanding of classroom management and student engagement, in addition to instructional strategy.

The study suggests that good quality PD for junior secondary EFL teachers in Indonesia needs to give teachers time to talk and work collaboratively, and the content should be based on teachers' classroom practical needs. The study also suggests the need to involve teachers in the process of planning, designing, and implementing PD in order to maximize its benefits. Therefore PD, such as TSGs in Indonesia, should be expanded and encouraged by the Indonesian government.

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Abbreviations

| | |
|--------|---------------------------------|
| PD | Professional Development |
| PL | Professional Learning |
| TSGs | Teacher Study Groups |
| EFL | English as a Foreign Language |
| TSES | Teacher Sense of Efficacy Scale |
| The Q1 | The Initial Questionnaires |
| The Q2 | The Follow-up Questionnaires |
| VETs | Very Experienced Teachers |
| ETs | Experienced Teachers |
| NTs | Novice Teachers |
| MONE | Ministry of National Education |
| ANOVA | Analysis of Variance |

CHAPTER ONE

INTRODUCTION

1.1 Background

There is a growing consensus that professional development (PD) is an essential mechanism for increasing teaching quality (Boyle, While, & Boyle, 2004; Clarke & Hollingsworth, 2002; Darling-Hammond & McLaughlin, 1995; Guskey, 2003). Effective PD is seen to be the key to the success of any education reform initiative that helps teachers improve their teaching in the classroom. Clarke and Hollingsworth (2002) suggest PD should become a process to change teachers' knowledge, beliefs and attitudes. Change in these aspects should lead to changes in teachers' classroom practice and behaviour. In addition, effective PD is also seen to help teachers enhance their self-efficacy (Karimi, 2011; Ross & Bruce, 2007). Enhancing teacher self-efficacy is important because it is related to actions teachers take, and/or outcomes of actions they achieve (Tschannen-Moran, Hoy, & Hoy, 1998). Research indicates that teachers with high self-efficacy tend to plan their duties better than teachers with low self-efficacy (Bandura, 1993; Tschannen-Moran & Hoy, 2007).

This research is set in an Indonesian context and focuses on investigating English as a Foreign Language (EFL) teachers' perceptions of the importance of PD, self-efficacy and teacher study groups (TSGs) which are a form of PD. One of the objectives of the study is to find out the characteristics of good quality PD from the perspective of EFL teachers in Indonesia. This thesis also provides insights into the relationship between teachers' participation in TSGs and changes in perceived levels of their self-efficacy.

The following section describes some background to the research context. This includes the Indonesian education system and PD, and teaching English as a foreign language in Indonesia. The specific local context of the study is also discussed. This is followed by a discussion of the rationale and significance of the study. The research questions that guided this study are also presented. Finally, the chapter concludes with an overview of the thesis.

1.2 Research Context

The research context is a crucial aspect in this study. Five parts are presented and discussed in this section. The first part presents the Indonesian context, followed by the education system in Indonesia in the second part. The third part provides information about teaching EFL in Indonesia. The discussion includes the necessity and challenges that usually face teachers of EFL. The fourth part discusses PD for teachers in schools in Indonesia, followed by a discussion of the collectivist nature of Indonesian culture in the last part of this section.

1.2.1 Contextual information

Indonesia is the fourth most populous country in the world with a population of about 250 million (Statistik, 2015). Located in Southeast Asia, Indonesia is an archipelagic island country which lies between two oceans (the Indian and the Pacific) and two continents (Asia and Australia). Indonesia consists of five big islands (see Figure 1.1) with approximately 17,508 small islands and more than 350 ethnic groups. The country has 34 provinces with the capital being Jakarta.



Figure 1.1 Map of Indonesia (Statistik, 2015)

According to United Nations Development Programs (UNDP), Indonesia was at the 108th position in the Human Development Index in 2010 with a gross national income

per person of almost USD4,000 (IDR35 million, GBP2,500) per year (UNDP, 2010). UNDP also records that 30 per cent of the Indonesian population live below the poverty line of USD1.25 per day, which means poverty is widespread.

There is one official language, Bahasa Indonesia, but over 580 local languages and dialects are currently in use throughout the country (Statistics, 2010). Most Indonesian people speak their mother tongue as their first language and start learning and using Bahasa when they begin schooling (Astuti, 2015), either at kindergarten or primary school.

1.2.2 The education system in Indonesia

The education system in Indonesia is based on Pancasila (Five Principles of National Ideology) and the 1945 Constitution of the Republic of Indonesia. The education system of Indonesia was stated in Law Number 20 of 2003 about the National Education System in Indonesia. The function of the National Education system is to develop the capability, character and civilization of the nation by enhancing its intellectual capacity. It is aimed at developing learners' potential to become citizens, embedded with human values, who are faithful and pious to the one and only God; who possess morals and noble character; who are healthy, knowledgeable, competent, creative, and independent; and as citizens, are democratic and responsible. The call to improve the quality of education is clearly stated in the government regulation in the following quote.

The quality of education must be constantly improved ... so that the future generations who will take the nation forward can be prepared well in advance such that [they] will be in a high ranking and competitive position in national life and globally (Depdiknas, 2010, p. 1).

The quote above also indicates that education has been considered by the government of Indonesia to be the keystone of Indonesia's future development. The government of Indonesia has attempted to address the nation's education goals through increasing expenditure on education and through legislation to raise the quality of education.

Schools in Indonesia are run either by the government (*negeri*) or the private sector (*swasta*). Some private schools refer to themselves as ‘national plus schools’ which means that they intend to go beyond the minimum government requirements, especially with the use of English as a medium of instruction or having an international-based curriculum instead of the national one. The medium of instruction in schools is Bahasa Indonesia (the national language). English is a compulsory subject throughout junior secondary and senior secondary schools (Coleman, 2011). Figure 1.2 summarizes the education system in Indonesia.

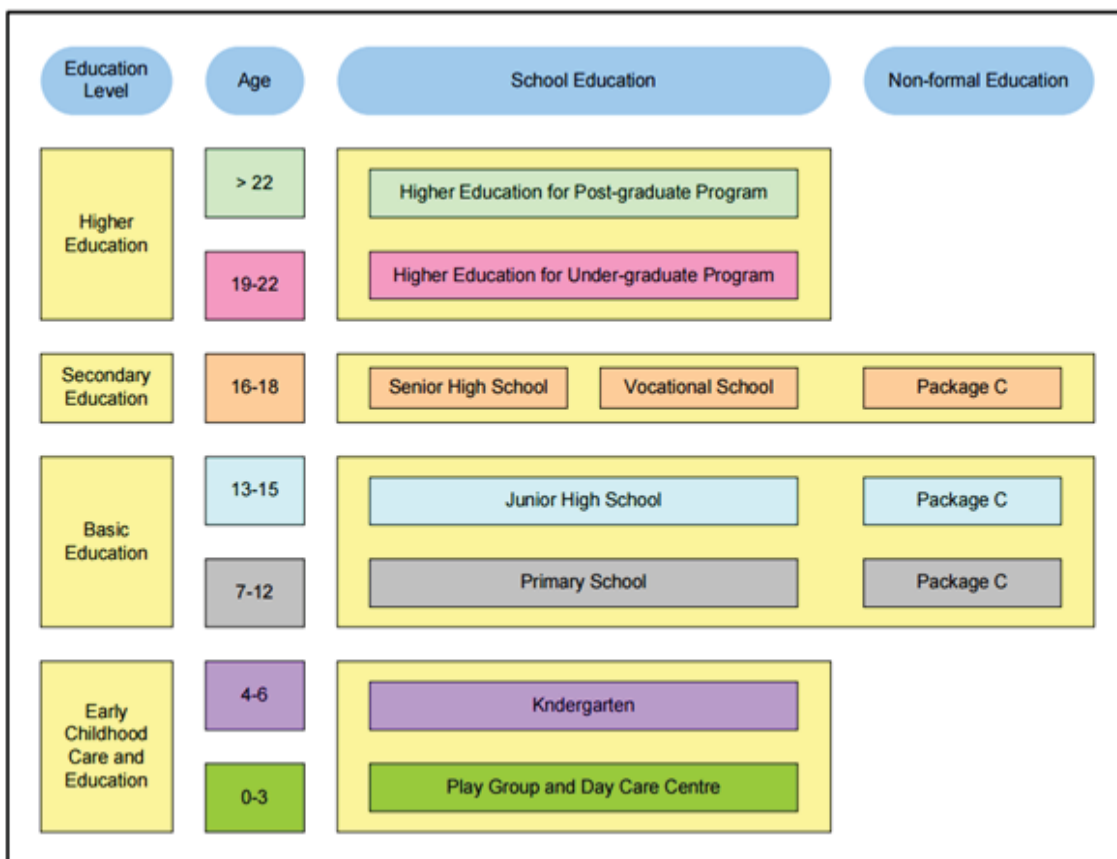


Figure 1.2 Education system in Indonesia (Secretariat, 2007)

By 1984, the government of Indonesia had fully implemented the six years compulsory education for primary school age children (7-12 years). The result of this new policy was a significant increase in the level of participation in primary schools which reached 92 percent in 1993 compared to 79 percent just 10 years earlier.

Ten years after the compulsory primary education program came fully into effect, Indonesian legislation required all children to attend nine years of compulsory schooling, comprising six years in primary school and three years in junior secondary school (Coleman, 2011; Kemdiknas, 2009). The compulsory nine-year basic education affords opportunities for Indonesian citizens to get an education. Again, that compulsory nine-year education has significantly increased the level of participation in education. The data shows that for a net enrolment in education in 2008, there were 96 percent in primary schools, 89 percent in junior secondary schools, and 68 percent in all secondary schools (Kristiansen, 2006, UNESCO, 2010).

In 2001, the government of Indonesia implemented Law no. 22/1999 for regional government and Law no. 25/1999 for the fiscal balance. These regulations were implemented to share power between the central government and the regional government. Previously, the Indonesian system of government relied heavily on central authorities. The new regulation decreed all sectors of government to be decentralised, including the educational sector. Within the decentralisation system, the strategic plan of the national education policy put priority on the implementation of new practices in school based management (Bjork, 2006; Firman & Tola, 2008; Kristiansen, 2006). Through school based management, teachers are expected to actively design school level curriculum and experiment with instructional strategies. The decentralisation system is hoped to help promote teachers' autonomy and support them to be more active agents of change in the community.

1.2.3 English as a Foreign Language in Indonesia

English is the first foreign language that was introduced and learned by students in Indonesia. Different to other foreign languages, English is a compulsory subject in high schools. Students learn English for three years in junior high school (Years 7 through 9) and three years in senior high school (Years 10 through 12). In the present decade, English has been formally allowed to be introduced in elementary schools in Indonesia. Most elementary schools in Indonesia start this foreign language instruction in the fourth grade (Raja, 2009).

The fact that English is taught and learned as a foreign language (EFL), rather than as a second language in Indonesia, has resulted in a lack of use of English in students' daily lives outside the classroom (Liando, Moni, & Baldauf, 2005). Moreover, English language teaching in Indonesia usually emphasises grammar skills rather than communication or speaking skills (Kassing, 2011). This perhaps is one of the reasons why students' English achievement is still low, especially in isolated rural areas and schools which lack resources (Yuwono, 2005).

English language has high status and there is a widespread perception that speaking English confers prestige on individuals and opens doors to academic, professional and business success (Jin & Cortazzi, 2002). So, many Asian countries, including Indonesia, have paid huge attention to finding more appropriate ways of teaching English (Wati, 2011). Some changes have also occurred in teaching English in Indonesia recently by moving partially from language focused practices to more communicative approaches (Madya, 2010) which fit in with government policy and laws introduced in 2001.

In the Indonesian context, there are two main reasons why English is important in relation to accelerating the development of the country. First, the development should be supported by the mastery of science and technology, and most of the books for science and technology are written in English. In the same way scientific information available on electronic media is also presented in English. Second, English is the international language used for various international communication purposes, i.e. trade, diplomacy, politics and education. A good mastery of English is seen as a prerequisite for the success of developing Indonesia (Madya, 2010).

Through the Ministry of National Education document produced in 2007, the government of Indonesia states:

Education will produce people of high quality who can compete locally and internationally. This is important in the era of globalization and the free market, in which competition between nations is becoming ever more transparent and uninhibited [competitive] (Hadi et al. 2007, cited in Coleman, 2011, p. 15).

The important role of English as a medium of instruction in Indonesia is frequently collocated with ‘globalization’ and ‘competition’ (Coleman, 2011). The perception is that globalization is “synonymous with international competition; international competition in turn is assumed to involve the use of English; and using English appears to necessitate the learning of other subjects through English” (Coleman, 2011, p. 16). Figure 1.3 illustrates the correlation between globalization and learning English in Indonesia.



Figure 1.3 Perceived relationship between ‘globalization’ and other concepts (Coleman, 2011).

1.2.4 Professional development for teachers in Indonesian schools

PD programs for teachers have become a strong tradition in Indonesia. These programs are intended to help teachers improve the effectiveness of their teaching practice. PD also has been used to disseminate new policies associated with the curriculum or approaches to teaching. In many cases, the central government has invited some senior teachers to participate in PD activities such as workshops and training to cover each region/district. Later, the teachers should become disseminators of this knowledge to their colleagues in their district/school to spread the information, including in the rural areas (Cannon & Arlianti, 2008; Tanang & Abu, 2014).

In 2005, the government of Indonesia, through the Ministry of National Education (MONE) started to implement ‘the Teacher Certification Program’ mandated by law for teachers and lecturers. The Teacher Certification Program is designed to establish a quality benchmark for all teachers, including government and non-government teachers. It provides a public guarantee of the standards of training and competency required

from teachers. In addition, the Teacher Certification also has been designed to harness a number of strategies to improve the quality and welfare of teachers. Since the implementation of the Teacher Certification Program, attending PD has become a priority for teachers in schools in Indonesia. In addition, as an integral part of the Teacher Certification Program, the government of Indonesia has implemented many PD activities for teachers. Among these PD activities are seminars, workshops, training, mentoring and coaching (Evans, Tate, Navarro, & Nicolls, 2009; Sudarminta, 2000)

Besides the various types of PD stated above, the government of Indonesia also encourages teachers to actively participate in teacher study groups (TSGs). The TSGs are teachers' forums whose establishment is encouraged by the Government Regulation Law Number 38, 1994. The TSGs are intended and hoped to play significant and strategic roles to improve the professional competence of teachers. A detailed discussion of PD and TSGs in Indonesia will be presented in Chapter Two.

1.2.5 Collectivist nature of Indonesian culture

Collectivist cultures differ from individualistic ones which tend to value personal freedom. In general, individualism is concerned with the idea of individuals valuing their personal goals over group goals; whereas collectivism places an emphasis on the importance of group goals over individual goals (Triandis, 1995). From this view, it can be argued that in individualist approaches, the idea of personal success (or the decision-making process) is independent of the group; while in the collectivist approaches, personal attainment is inseparable from that of the group (Phillipson & Lam, 2011). Triandis (1995) further explains that people in individualistic cultures such as those of Europe have personal tendencies, while people in collectivistic cultures such as those of Asia and Africa have collectivistic tendencies. Although this is a stereotype it does hold true in many of these cultures.

Indonesian culture, like that of several Asian countries, is highly collectivist in nature; that is, it places value on individuals conforming to group customs and expectations (Lamb & Coleman, 2008). Culturally, most Indonesian people like to collaborate and

share with other people. One of the cultural heritages in Indonesia is mutual-help and collaboration (Rahim, 2011), which is well known as ‘Gotong Royong’¹.

The collectivist nature of Indonesian culture can be seen in the lifestyle of the extended family. It is common for grandparents to live together with their children’s families, and children are expected to respect older members of the family.

In terms of education, it is worth noting that learning in an Asian context such as Indonesia is largely rooted in a culture of interdependence rather than independence (Littlewood, 1996, 1999). In Indonesian culture, learning is predominantly described within the context of collectivism that focuses upon the interdependence between personal attainment and value of social relationships (Nguyen, 2014). Thus, when one family member gets success, for example attains a high position in government, his/her whole family could benefit from his/her achievement in several ways, including financial support and social recognition.

1.3 Local Context

The current research took place in three districts in South Sulawesi province of Indonesia. South Sulawesi is one of 34 provinces in Indonesia, located in the south peninsula of Sulawesi island (see Figure 1.4). The 2014 census estimated the population as 8,432,200 which makes South Sulawesi the most populous province on the Sulawesi island (46% of the population of Sulawesi island is in South Sulawesi), and the sixth most populous province in Indonesia (Sulsel, 2015). South Sulawesi, with Makassar as the capital, is bounded by West Sulawesi province at the north side, and the Gulf of Bone and South-East Sulawesi province to the east side. On the western and eastern boundaries there are the Makassar Strait and the Flores Sea.

Administratively, South Sulawesi has 24 districts and most of them are located in rural areas. There are 11 main ethnicities and tribes and approximately 8 native languages

¹ Gotong royong, one of the values of Indonesian people, which means that Indonesian people like to help and collaborate with other people.

across South Sulawesi. Although, it is diverse in languages, people in South Sulawesi use *Bahasa Indonesia* as a national language and informal language. However, as it is an open province for visitors, people of other ethnicities from other provinces in Indonesia have also enriched the diversity of the population, culture, and languages of South Sulawesi. The current population is heterogeneous and comprises many ethnicities, tribes and religions which come not only originally from Sulawesi island itself but also from outside it (e.g. from Java or Sumatra islands).



Figure 1.4 Map of Sulawesi Island (Planetsulawesi, 2016)

South Sulawesi has long been known as the province of education with a strong academic culture. These cultural and academic aspects provide teachers with a social status and respect which affects their daily lives. Many professional development activities have been implemented in this region to help teachers improve their teaching practice. Most of the districts in South Sulawesi have similar educational policies, but often have different socio-economic and infrastructure facilities that may impact on

teachers' teaching practice. The different socio-economic aspects are mostly determined by district location (urban and rural areas). Access to information and educational facilities are also determined by district location. Infrastructure facilities and professional development activities are allocated from national, provincial and district budgets.

In the research setting, I worked as an EFL teacher in one of the senior secondary schools. This professional working experience gave me opportunities to gain in-depth insights into the challenges faced by the teachers, especially EFL teachers in Indonesia, as well as the important role played by professional development activities. When the study commenced, the government of Indonesia had just begun implementing the Teacher Certification Program. As part of the Teacher Certification Program, there were a lot of PD activities. Most of these PD activities were in the form of one-shot seminars and/or workshops. In addition, most of these PD activities did not provide sufficient time for participants to get and give feedback. I also noticed that many teachers attended PD activities, not necessarily to help them increase their knowledge, skills, and practice, but only to represent their school and/or to get a PD certificate in order to allow them to pass the Teacher Certification Program.

1.4 Rationale and Significance of the Study

The rationale and significance of the study are threefold. First, research evidence has pointed out that PD activities are essential approaches for deepening teachers' knowledge and developing their teaching practice (e.g. Darling-Hammond & McLaughlin, 1995; Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001). There is also an agreement among researchers that 'innovative' PD is much more effective than 'traditional' PD² (Borko, 2004; Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Desimone et al., 2002). Innovative forms of PD are believed to be more effective to meet teachers' needs because most of these activities are in the form of collaboration that provide greater opportunities for

² The difference between traditional and innovative forms of PD is discussed in details in Chapter Two.

teachers to share their knowledge and skills, and to try new ideas about teaching (Butler et al., 2004; Darling-Hammond & McLaughlin, 1995; Desimone et al., 2002). On the other hand, traditional forms frequently ignore key principles of adult learning and the content of PD is frequently separated from teachers' daily work (Allen, Osthoff, White, & Swanson, 2005; Sandholtz, 2002). Despite the research evidence that suggests the need to promote effective PD and a growing consensus of what PD should look like, the fact is that many PD activities are still characterized by one-shot and short-term approaches, including in Indonesia (Cannon & Arlianti, 2008; Corcoran, 1995; Hendayana, 2007; Little, 1999; Sandholtz, 2002). In the Indonesian context, although a search of the literature has been conducted on teacher PD, no studies were found identifying the characteristics of effective PD that EFL teachers felt had the potential to positively affect their practice. This study therefore fills a gap in the research about the characteristics of effective PD from the perspective of junior secondary EFL teachers in Indonesia. This study may contribute to the body of research of the aspects that affect the success of the implementation of professional development for teachers in Indonesia.

Second, there is a growing interest in research investigating the relationship between teachers' participation in PD and their self-efficacy (e.g. Hoy & Spero, 2005; Karimi, 2011; Ross & Bruce, 2007). Studies have found that effective PD is able to help teachers enhance self-efficacy (Ross & Bruce, 2007; Zambo & Zambo, 2008). It has been argued that teachers' knowledge and understanding about teaching are not enough to achieve students' academic success; teachers need to have high efficacy beliefs of their own teaching capability in order to allow them to transfer their knowledge optimally to students (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Pajares, 1996). This highlights the importance of finding out the relationship between participation in PD and teacher self-efficacy. So far, to the best of my knowledge, there is no study which has been conducted to investigate the relationship between teachers' participation in PD and changes in perceived levels of their self-efficacy in an Asian context, including Indonesia.

Finally, of a number of studies that have investigated the relationship between PD and teacher self-efficacy, no previous study has reported on the use of TSGs for secondary

EFL teachers in relation to their self-efficacy. Studies have shown that TSGs, as sharing forums for teachers, have great potential to help them increase their knowledge and understanding about teaching (Birchak et al., 1998). Successful TSGs are seen as an important medium of collaboration which can offer teachers opportunities to share experiences, grounded in research, that support best practices, while at the same time the level of teacher self-efficacy has been recognized to affect the success of teaching practice and learning outcomes (Bandura, 1999; Pajares, 1996). In the Indonesian context, the idea of teacher study groups has long been implemented but without research to investigate EFL teachers' perceptions of the benefits of TSGs in relation to their teaching practice or their self-efficacy.

Conducting research on successful aspects of effective PD and TSGs is significant as it has the potential to inform the future direction of PD programs, particularly PD for EFL teachers in Indonesia. This is important as teaching EFL in Indonesia has so far been unable to achieve its desired goals, despite the many efforts made to improve students' English levels. From these considerations therefore, the relationship between teachers' participation in TSGs and changes in perceived levels in their self-efficacy became one of the mainstays of my research. The present study tries to fill the gap in examining EFL teachers' perceptions of characteristics of good quality PD and TSG, and teacher self-efficacy.

Ultimately, it is expected that this study will inform the educational practitioners and educational policy makers in Indonesia, as well as possibly other countries with similar context for successful PD for EFL teachers to optimize TSGs as sharing forums for teachers.

1.5 Research Questions

Three research questions were addressed:

- RQ1. What is the relationship between participation in PD and perceived changes in levels of efficacy beliefs amongst junior secondary EFL teachers in the

areas of instructional strategy, classroom management, and student engagement?

RQ2. What is the relationship between participation in a TSG and perceived changes in levels of junior secondary EFL teachers' self-efficacy?

RQ3. What characteristics of PD do junior secondary EFL teachers perceive affect their self-efficacy?

The rationale for each of these research questions is discussed in Chapter Two.

1.6 Structure of the thesis

This thesis comprises seven chapters. The present chapter provides the rationale and significance of the study as well as the context in which it took place. Chapter Two reviews the literature on teacher self-efficacy, professional development for teachers and teacher study groups, including PD and TSGs in Indonesia. Chapter Three presents the methodological framework and the research design and procedure. This includes the details of investigative tools that were used to collect data. Chapter Four presents the findings from the questionnaires. Chapter Five discusses the findings from the observations and the interviews. This is followed by a discussion of the findings in Chapter Six. Finally, Chapter Seven concludes the thesis by summarizing the key findings and provides contributions and implications of the study, as well as recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study aims to investigate EFL teachers' perception of characteristics of good quality PD, and the relationship between teachers' participation in PD and TSGs, and changes in perceived levels of their self-efficacy. This chapter therefore focuses on reviewing the literature relevant to teacher self-efficacy as a factor that affect teaching practice, PD as a context for teachers' professional growth, and TSGs as approaches to PD that impact teacher self-efficacy. These aspects build the conceptual framework for the study.

This chapter is organized as follows. In the first section, literature on self-efficacy is discussed and presented. This includes the importance of self-efficacy for teachers, and teaching and learning contexts of efficacious teachers. In the second section, an overview of teacher PD is presented. This includes a discussion of approaches to PD, the need for effective PD, and PD in Indonesia. The last section reviews literature on teacher study groups (TSGs) as a form of professional development activity, including TSGs in the Indonesian context.

2.2 Self-Efficacy

This section begins by defining self-efficacy to provide insights into the nature of its meaning and how self-efficacy is different from other concepts of self. Sources of self-efficacy affecting teachers' practice are also addressed. Finally, teacher self-efficacy, as well as three domains for teacher self-efficacy for effective classroom practice are discussed.

2.2.1 Definitions of self-efficacy

Bandura's (1999) social cognitive theory provides the theoretical foundation for self-efficacy. The social cognitive theory defines "human behaviour as a triadic, dynamic, and reciprocal interaction of personal factors, behaviour, and the environment" (Stone, 1993, p. 3). This theory implies that people need to develop ability in regulating the motivational, affective, and social determinants of their intellectual functioning as well as the cognitive aspects. Good self-regulators do better academically than poor self-regulators (Pajares, 1996).

One of the fundamental aspects of social cognitive theory is self-efficacy. Bandura (1997) defines self-efficacy as composed of "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). In another work, he defines self-efficacy as people's beliefs about their capabilities which determine their feeling, thinking, motivation and action and "the capacity to exercise control over the nature and quality of one's life is the essence of humanness" (Bandura, 2001, p. 1). He states that people can do something better when they have high efficacy beliefs about their capabilities than those who have low efficacy beliefs about their capability.

Perceptions of self-efficacy are important because they can affect one's beliefs in performing actions and achieving the desired results (Bandura, 1999). Efficacy beliefs determine what actions people choose to do, approaches they choose in difficult times, and the level of accomplishment they achieve (Bandura, 1997). The way people judge their capabilities may also influence how well people use the skills they possess (Bandura, 1997). This is important because an individual's beliefs about their abilities and competencies clearly affect the goals they set for themselves, and their anticipation of success and failure in achieving certain goals (Tuchman, 2010; Zimmerman & Martinez-Pons, 1992).

Bandura's (1997, 1999) self-efficacy theory distinguishes between efficacy expectation and outcome expectancy. An efficacy expectation is the individual's conviction that he/she is personally capable of successfully executing actions that will result in the

wanted outcome. Outcome expectancy is defined as a person's estimation that a given behaviour will lead to certain outcomes. As Bandura (1999) states, outcome and efficacy expectations are differentiated because individuals can believe that a particular course of action will produce certain outcomes, but if they possess serious doubts about whether they can perform the necessary activities, such information does not influence their behaviour.

The following section is the discussion of self-efficacy and other self-concepts to see the connections and differences between them.

2.2.2 Self-Efficacy and other Conceptions of Self

Self-efficacy is different from other conceptions of self, such as self-concept, and self-esteem, in that self-efficacy is specific to a particular task (Bandura, 1997; Tschannen-Moran et al., 1998). Self-concept is commonly defined as a composite view of oneself. Byrne and Shavelson (1996) believe self-concept as people's perceptions of themselves that influence the ways in which they act, and their acts in turn influence the ways in which they perceive themselves.

Self-concept is formed through experiences with the environment and is influenced especially by environmental reinforcements and significant others (Byrne & Shavelson, 1996). Self-concept is also characterized as having both descriptive and evaluative elements (Hansen, 2005). Purkey and Novak (1996) further describe self-concept as a "complex, organized and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence" (p.1).

Different from self-concept, self-esteem usually refers to a trait reflecting an individual's characteristic affective evaluation of self, such as feelings of self-worth or self-liking. By contrast, self-efficacy is "a judgment about task capability that is not inherently evaluative" (Gist & Mitchell, 1992, p. 85). A person may feel demotivated or less efficacious for a certain activity, such as playing badminton or speaking in front of many people, because that person has not invested self-worth in doing that activity well. Therefore, he/she suffers of self-esteem. On the other hand, a person may possess a

great skill or capability in a certain activity, but he/she still feels less efficacious because he/she has set very difficult standards to meet (Hansen, 2005). A person may question his/her self-worth, despite being very competent, if other people do not value his/her accomplishments, if his/her skills cause harm to others, or if he/she is a member of groups that are not valued by society (Bandura, 1997). In relation to teaching activity, high achieving teachers tend to set themselves high standards, and every time the standards are not met they are tempted to evaluate themselves negatively (Hansen, 2005).

On the other hand, self-efficacy itself refers to:

One's capabilities to organize and execute the courses of action required to produce given attainments.... Such beliefs influence the course of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize (Bandura, 1997, p. 3).

Like self-concept and self-esteem, self-efficacy is related to one's thought, emotion, and action. However, as Bandura (1997) states, efficacy judgment considers more important what individuals believe they can do with whatever skills and abilities they may possess and is less concerned with what skills and abilities individuals possess. The self-concept judgment itself is considered more an evaluation of skills and abilities. While self-efficacy represents individuals' expectations and convictions of what they can accomplish in given situations, self-concept represents one's general perceptions of the self in given domains of functioning (Bandura, 1993; Soupen, 2013).

Woolfolk Hoy (2004) and Gibbs (1994) give additional definitions of self-efficacy, self-esteem, and self-concept in order to understand the difference between them. Self-esteem involves individuals' emotional reactions to their actual accomplishments, such as feeling good or bad about themselves because they can or cannot convey speech well in front of many people or get good grades in English. Self-efficacy also is different from self-concept, which reflects more general beliefs about competence (e.g., I can convey speech well in front of many people or I'm good at English subject). Self-

efficacy beliefs refer to much more specific and situational judgments of capabilities. Gresham, Evans, and Elliott (1998) offer further distinctions of the three aspects (i.e. self-efficacy, self-concept, and self-esteem) in order to distinguish between them.

Self-concept contains information that contributes to individuals' self-esteem or evaluation of self-worth. Judgments of self-esteem and self-capability (i.e., self-efficacy) are not equivalent. Self-esteem depends in part of how the culture values one's behavior and its relation to personal standards. Self-efficacy percepts are concerned with judgment of personal capabilities. These two constructs may moderate each other, as when students regard themselves as highly efficacious in an activity that is not culturally valued or judge themselves inefficacious at an activity with no self-esteem loss. Accordingly, people typically cultivate self-efficacy in activities that give them a sense of self-worth and, thereby, enhance self-concept (p. 135).

Besides the importance of knowing the difference between self-efficacy and other self-concepts, it is also necessary to know the main sources of self-efficacy. The next section discusses main sources of self-efficacy.

2.2.3 Sources of Self-Efficacy

According to Bandura's (2006) theory, people develop self-efficacy beliefs by interpreting information from four sources. The four sources are: mastery experiences, verbal persuasion, vicarious experiences, and physiological states. The four sources of information are important because individual's beliefs are developed by cognitively processing diverse sources of information (Schwartz, 2010). In addition, from this study context, the four sources of self-efficacy may be influenced by PD, which is one of the main focuses of this study. Teachers may obtain mastery experiences when their knowledge and skills increase after attending PD. Below is the discussion of the four sources of self-efficacy according to Bandura (1999, 2006).

Mastery experiences (performance experiences) refer to interactions in a specific situation. A strong sense of efficacy is created through repeated successes. Repeated success builds strong beliefs in one's personal efficacy, whereas failures create weak efficacy beliefs (Tschannen-Moran et al., 1998). Mastery experiences are the most powerful in shaping self-efficacy because they "provide genuine evidence about the

person's ability to perform in a situation" (Mongillo, 2011, p. 17). However, Williams (2010) indicates that developing efficacy beliefs through mastery experiences is not something like "ready-made habits". But the mastery experiences require "the cognitive, behavioral and self-regulatory tools for creating and executing appropriate courses of action to manage ever-changing life circumstances" (p. 37).

Vicarious experiences (social comparison through observing the successes and failures of others). Vicarious experiences impact people's efficacy beliefs when they observe others' behaviour and use these experiences to form their expectancies in relation to their own behaviour and its consequences (Bandura, 1997; Hansen, 2005). Seeing others like oneself succeed through their efforts provide a framework for mastery of like activities. When someone observes a good performance from others, his/her efficacy expectation enhances. When someone observes poor performances from others, his/her efficacy expectation decreases (Hoy, 2000).

Verbal or social persuasion refers to specific performance feedback from colleagues, supervisors, or from other people concerned with one's ability to achieve something (Hoy, 2000). People who are persuaded verbally that they possess the capabilities to be successful most often exert greater effort and try harder. Therefore, a learner can be persuaded of the likelihood of success for a task. Yet, if the task is not deemed successful by the learner, it will be disregarded (Schwartz, 2010).

Physiological and emotional states refer to the physical and emotional reactions of the body during an activity (Bandura, 1997). People's physical reaction to stressful situations can lead them to worry about their abilities to succeed. Therefore, the influence of physiological arousal on one's self-efficacy depends much on his/her interpretation of the meaning of the physical and emotional changes (Mongillo, 2011). Examples of physiological and emotional states are excitement and enthusiasm which indicate as positive responses, and anxiety and stress which indicate negative responses.

Of the four sources of self-efficacy above, mastery experiences are considered as the most important source of self-efficacy in relation to one's performance (Bandura, 1999; Schmidt & Shumow, 2012). This is because a prior success in an activity is thought to

build one's self-efficacy beliefs for similar tasks in the future, while repeated failures can lower one's self-efficacy perceptions (Schmidt & Shumow, 2012).

The discussion now turns to the definition of teacher self-efficacy, including the effect of teachers' perceptions of self-efficacy on their practice, and the definition of teacher self-efficacy used in this study.

2.2.4 Teacher self-efficacy

The construct of teacher efficacy is generally grounded in the psychological frames of Bandura (1997, 1999). Teacher's self-efficacy has been defined as "teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran et al., 1998, p. 233). Further, teacher self-efficacy has also been conceptualized as teachers' beliefs in their own ability to plan, organize and carry out activities required to attain given educational goals (Federici & Skaalvik, 2012), or as "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, 1994, p. 4).

There are two major dimensions discussed in the literature in relation to teacher's sense of efficacy: personal teaching efficacy and general teaching efficacy (Ross, 1992; Tschannen-Moran et al., 1998). The first dimension is generally agreed upon as having to do with teachers' beliefs that the teaching profession in general can bring about student change or teachers' beliefs in their ability to support and change student learning (Bandura, 2011; Ross, 1992). Swars (2005) describes personal teaching efficacy as teachers' beliefs in their ability to become effective teachers. Another definition by Poulou (2007) defines personal teaching efficacy as teachers' judgments of their ability to execute particular courses of action and to bring about desired goals.

The second dimension, general teaching efficacy, refers to teachers' beliefs that effective teaching can bring about student learning regardless of other factors such as home environment, family background, and parental influences (Ross, 1992; Swars, 2005). Therefore, Enochs, Smith, and Huinker (2000) tend to call this dimension

‘outcome expectancy’ that reflects the idea that teachers expect specific teaching behaviours to result in desirable outcomes. Guskey and Passaro (1994) make a similar distinction of the two dimensions by proposing that the two dimensions do not correspond to a personal versus general teaching efficacy but rather to an internal versus external control distinction. These two dimensions of teacher efficacy are distinct in terms of name used and, therefore, an individual teacher may have a high level of personal teaching efficacy with regard to a particular content area but a low level of teaching outcome expectancy (Allinder, 1995; Swars, 2005).

Teacher self-efficacy theory that is applied in the educational context has encouraged a rich line of research (Tschannen-Moran et al., 1998). This is because teachers’ self-efficacy beliefs are related to actions teachers take and/or outcomes of actions they achieve. According to Tschannen-Moran and Hoy (2001), self-efficacy for teachers is important because it determines the degree to which teachers can control their own actions internally or externally. For example, teachers who do not expect to be successful with certain students are likely put less efforts in preparing and delivering instructions, and to give up easily although they, in fact, know instructional strategies that could assist these students.

Teachers who concur that the influence of the environment overwhelms a teacher’s ability to have an impact on a student’s learning exhibit a belief that reinforcement of their teaching efforts lies outside their control or is external to them. Teachers who express confidence in their ability to teach difficult or unmotivated students evidence a belief that reinforcement of teaching activities lies within the teacher’s control or is internal (p.784).

Previous research indicates that efficacious teachers tend to plan their duties better than low efficacy teachers (Bandura et al., 1996; Gersten, Keating, Yovanoff, & Harniss, 2001; Stempien & Loeb, 2002). This is because high efficacy teachers perceive difficult tasks as challenges to be solved rather than consider them as threats to be put aside. They set challenging teaching goals and set a strong target to achieve them (Bandura, 1993; Tschannen-Moran & Hoy, 2007). On the other hand, low efficacy teachers usually shy away from difficult tasks because they perceive these tasks as personal threats (Tschannen-Moran & Hoy, 2007). Low efficacy teachers also have low commitment to the learning goals that they have stated. They tend to give up easily in

handling and facing difficult conditions and find difficulties in recovering their sense of efficacy after failure or setbacks (Bong & Skaalvik, 2003; Caprara, Barbaranelli, Steca, & Malone, 2006). Onafowora (2005) in her research on the issues of self-efficacy of novice teachers at the beginning of their teaching career, argues that although teachers come to classrooms with good understanding of subject matter, they find difficulty in balancing their theoretical framework and practice. According to Onafowora, the stage of transition from learning to teaching requires a lot of confidence, which new teachers mostly do not possess. Providing new teachers with some PD opportunities to help lift their self-efficacy would be highly critical in their first years of teaching. Similarly, Knoblauch and Hoy (2008) state that teachers need more than content and pedagogy knowledge to allow them to be effective in teaching and gain the goals. Teachers need motivation and a sense of efficacy to be able to transfer content and pedagogy knowledge optimally.

The effects of teachers' self-efficacy on teachers' commitment, job satisfaction and motivation have been recognized. A study by Schepers et al. (2005) was conducted to find out if self-efficacy is related to behavioural changes that affect motivation. Schepers et al. concluded that teachers' efficacy is the primary motivator in teachers' work and changes the level of teachers' motivation. Canrinus, Helms-Lorenz, Beijaard, Buitink, and Hofman (2012) describe the effects of teachers' self-efficacy on teachers' commitment and job satisfaction as:

“(1) teachers' self-efficacy contributes to teachers' change in level of motivation, job satisfaction, occupational commitment; (2) teachers' job satisfaction contributes to teachers' change in level of motivation, occupational commitment; and (3) teachers' change in level of motivation contributes to teachers' occupational commitment (p. 118).

Further evidence supporting the value of high efficacy beliefs among EFL teachers is provided by Chacón (2005) and Eslami and Fatahi (2008). Chacón (2005) investigated perceived level of self-efficacy of a group of 100 EFL middle school teachers in Venezuela and how this related to their self-reported English proficiency. Using the short version of the Teacher Self Efficacy Scale (TSES) by Tschannen-Moran & Woolfolk Hoy (2001), and two other subscales (self-reported proficiency and pedagogical strategies), Chacón (2005) found that teachers' perceived efficacy was

positively correlated with self-reported English proficiency. Similar results were reported by Eslami and Fatahi (2008) who also utilized TSES and the English proficiency test to investigate forty Iranian EFL teachers' self-efficacy beliefs. Eslami and Fatahi's study revealed that the more efficacious teachers felt, the more inclined they were to use communicative-based strategies. This study also found that the EFL teachers rated themselves as more efficacious on instructional strategies than classroom management and student engagement.

In recent years, a few studies have been conducted to investigate the link between teacher self-efficacy and teacher teaching practice in Asian countries (Ahmmed, Sharma, & Deppeler, 2014; Chong & Ong, 2016; Malinen, 2016), including one study in the Indonesian context (Kamil, Mukminin, & Kassim, 2014). Chong and Ong (2016) investigated the link between self- and collective efficacy and school academic climate on student achievement. A total of 183 teachers from five primary and secondary schools in Singapore participated in their study. Using the long version of the Teacher Self Efficacy Scale (TSES) by Tschannen-Moran & Woolfolk Hoy (2001), and a School-level Environment Questionnaire, Chong and Ong (2016) found that teachers with higher perceptions of self- and collective efficacy had higher beliefs to promote organizational changes and student achievement.

Ahmmed et al. (2014) examined how teaching efficacy, attitudes and perceived support would influence primary school teachers' intention to include students with disabilities in their classrooms. Ahmed et al.'s study involved 1387 in-service teachers from four sub-districts of Dhaka, Bangladesh by employing the School Principals' Attitudes toward Inclusion (SPATI) scale (Bailey, 2004) and the Teacher Efficacy for Inclusive Practices (TEIP) scale (Sharma, Loreman, & Forlin 2012). They found that Bangladeshi teachers with a higher sense of efficacy to teach in inclusive classrooms had stronger intentions to include children with disabilities in their classroom and they possessed a more positive attitude towards inclusion when compared with their counterparts with lower levels of self-efficacy in relation to inclusive education.

Another study by Kamil et al. (2014) was conducted to examine the self-efficacy of Indonesian secondary school EFL teachers in developing a school-based EFL syllabus.

The data were collected through a survey to 98 secondary school EFL teachers in the District of Kerinci, Jambi Sumatra, Indonesia. The results revealed that the teachers had high-self efficacy in developing the syllabus. However, they tended to be less efficacious on theoretical tasks in the syllabus development and on tasks that were not part of their responsibility in previous curricula.

It is important to note that teacher self-efficacy is a motivational construct based on the self-perception of competence rather than *actual* level of competence (Tschannen-Moran & Hoy, 2007). A teacher's self-perceived level of competence may be either higher or lower than an external assessment of teaching skill. Bandura (1997) suggests that it is better when teachers slightly overestimate their actual teaching skills, as their motivation to expend efforts and to persist in facing difficult conditions will encourage them to try to do their best based on skills and capabilities they possess.

In relation to the four sources of self-efficacy (see section 2.2.3), Goddard, Hoy, and Hoy (2004) indicate that these sources of self-efficacy are important in creating collective teacher efficacy. Collective teacher efficacy is perceived as perceptions of teachers in a school or in a learning community that the efforts of a school or a learning community as a whole will have a positive effect on their practice. Goddard, Hoy and Hoy further identify collective teacher efficacy is associated with “the tasks, level of effort, persistence, shared thoughts, stress levels, and achievement of groups” (p. 482). Teachers are a group and/or are members of school organizations, and therefore they share beliefs with other teachers and school administrative staff that will produce collective teacher efficacy. Zimmerman (2000) mentions the importance of collective teacher efficacy because it is related to teachers' persistence, drive, and success. In addition, Goddard, Hoy and Hoy (2004) indicate that the major influences of collective teacher efficacy are considered as “attributional analysis and interpretation of the four sources of information – mastery experience, vicarious experience, social persuasion, and affective state” (p. 485).

In this study context, understanding about collective teacher efficacy is important because one of the aims of this study is to see the effects of involvement in PD/TSGs

activities on teacher self-efficacy. TSGs and PD activities potentially create collective efficacy for teachers.

For the purpose of this study, teacher self-efficacy refers to EFL teachers' judgments on their capabilities to organize and execute courses of action that are specific to teaching tasks and in a particular context (Bandura, 1999; Tschannen-Moran et al., 1998). This definition is suitable for this study, as Bandura (1997, 1999) proposes that self-efficacy beliefs are context-specific rather than a generalized expectancy. This is also in line with methods for assessing efficacy beliefs, in which researchers have emphasized that self-efficacy relates to judgments about performing activities rather than judgments about personal qualities and that they are context dependent (Bandura, 1997).

Based on the discussion above, it is clear that self-efficacy is important for teachers because their perceptions about self-efficacy affect their teaching practice. However, further research is needed, especially in the Indonesian context, to get an understanding of how Indonesian EFL teachers perceive the importance of self-efficacy in relation to their teaching practice. Although there are a few studies about teacher self-efficacy which have been conducted in Asia (Chong & Ong, 2016; Malinen, 2016; Sharma & George, 2016), including one study in Indonesian context (Kamil et al., 2014), no study has been conducted to investigate the link between teachers' participation in PD and their perceived level of self-efficacy within the Indonesian context.

2.2.5 Teaching and learning contexts of efficacious teachers

This section discusses teaching and learning contexts of efficacious teachers. Particular attention is given to three areas: instructional strategy, classroom management, and student engagement because these three areas are directly related to teachers' classroom practice (Tschannen-Moran & Hoy, 2001), and these three areas became the three aspects that were investigated in this study using the Teacher Sense of Efficacy Scale (TSES). In addition, these areas are relevant as instructional strategy, classroom management, and student engagement are common topics for teachers when attending PD. The TSES was adapted in this study (see Chapter 3) to measure teacher self-efficacy across multiple grade level and teaching contexts by addressing a wide range of

teaching tasks that teachers believe are necessary for classroom practice (Tschannen-Moran & Hoy, 2001).

Bandura (2011) in his more recent work states that teacher self-efficacy can be affected by both positive and negative factors in the teaching environment. Teachers assess their contextual situations that affect their beliefs about whether they 'can' or 'cannot' perform tasks as teaching tasks are embedded within contexts which vary in difficulty and influences (Tschannen-Moran et al., 1998). Pajares (1996) also implies a strong relationship between teachers' educational beliefs and their instructional decisions and classroom practices. The following sections discuss the three areas of self-efficacy: instructional strategy, classroom management, and student engagement.

Instructional strategy

Instructional strategies include all approaches that teachers may take to help them conduct teaching and learning. These strategies drive teachers' instruction as they work to meet specific learning objectives. According to Pressley and Allington (2014), and Van Der Stuyf (2002), effective instructional strategies help teachers to meet the learning styles and the development needs of all their learners.

There has been a great deal of evidence describing the effects of teacher self-efficacy on teacher's instructional practice (Atay, 2007). Earlier research shows that teachers with high efficacy beliefs implement more effective teaching strategies (Gordon, 2001; Ross & Bruce, 2007), try out new ideas (Ross, 1998), have a positive attitude toward the use of instructional innovations in the classroom (Allinder, 1994; Ross, 1994), and are willing to use difficult techniques that involve taking risks and involve sharing control with students (Ross, 1998) than those with low efficacy beliefs.

Social cognitive theory suggests that intellectual functioning and cognitive aspect need to be developed to allow regulation of people's motivational, affective, and social determinants (Bandura, 1993). One key point from this theory is that the ability to choose and select appropriate strategies, and use them optimally rest heavily on the self-efficacy of teachers. Evidence shows that the possibility to create good classroom

situation is partly determined by teachers' beliefs in their instructional efficacy (Onafowora, 2005; Pajares, 1996). A study by Ghaith and Yaghi (1997) found strong and statistically significant relationships between teachers' perceptions of instructional effectiveness and their attitudes toward the implementation of instructional innovation.

Teachers' willingness to implement new instructional practices is one of the key factors influencing educational improvement (Chacón, 2005; Eslami & Fatahi, 2008). One of the variables that determines teachers' willingness to implement instructional innovation is teachers' sense of efficacy (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & McMaster, 2009). A study by Tschannen-Moran and Hoy (2007) found that teachers with high efficacy are more widely to be effective in classrooms and they also appear to be the most receptive to the implementation of new instructional practices like those associated with mastery learning. Teachers with low efficacy beliefs, on the other hand, might be less effective and appear to be the least receptive to such implementation.

Teachers with high efficacy beliefs have also been shown to make good plans for student learning, set goals for their learning activities, and identify appropriate instructional strategies to achieve them (Allinder, 1994). A study by Coladarci (Coladarci, 1992) found that teachers with a high sense of instructional efficacy dedicate more time to academic learning than teachers with a low sense of instructional efficacy. In addition, teachers with high efficacy also provide students with help, including those who have difficulty in learning, and compliment students for their accomplishments during the learning process. In contrast, teachers with a low sense of instructional efficacy spend more time on non-academic aspects, give up more easily in difficult situations, and tend to blame others for their failures. Thus, teachers who have high instructional efficacy are able to generate more mastery experiences for their students (Deemer, 2004).

Classroom Management

Classroom management as used in this study refers to the wide variety of skills and techniques that teachers use to keep classroom organized, orderly, focused, and

academically productive during a class. When classroom-management strategies are executed effectively, teachers minimize the behaviours that impede learning and increase students' learning achievement (Pressley & Allington, 2014).

The task of creating classrooms conducive to learning rests heavily on the talents and self-efficacy of teachers (Tschannen-Moran & Hoy, 2007). That is why many teachers continue to see effective classroom management as a major concern and challenge (O'Neill & Stephenson, 2012). Brouwers and Tomic (1999) define teachers' sense of efficacy in classroom management as "teachers' beliefs in their capabilities to organize and execute the courses of action required to maintain classroom order" (p. 242).

Brouwers and Tomic (2000) indicate the importance of understanding classroom management as that skills will help teachers to manage their classroom practices. A study by Dibapile (2012) found that teachers need to apply different strategies in order to allow them to control destructive behavioral problems of students. Further, Tschannen-Moran and Hoy (2001) confirmed that positive efficacy allows teachers manage classroom behavior, stimulates student achievement, and enables them to help students with low motivation.

Teachers with high efficacy beliefs try to create a conducive classroom atmosphere and focus on student learning (Deemer, 2004). This implies that the use of mastery practices in classrooms is related positively to the level of personal teaching efficacy. Liu, Jack, and Chiu (2008) indicate that efficacious teachers work with appropriate management strategies, stimulate and assist low-achieving students, and set attainable learning goals for their students. Teachers with high efficacy beliefs can organize classrooms more effectively to achieve learning and good performance (Dibapile, 2012).

Student Engagement

Student engagement is frequently used to refer to students' willingness to participate in routine school activities, such as attending class, submitting required work, and following teachers' directions in class (Chapman, 2003). For the purpose of this study, the term student engagement refers to students' cognitive, behavioral and affective

dimensions in relation to their participation in academic-related activities (Badiozaman, 2012).

The level of teachers' self-efficacy is related to their ability to engage students to learn. A study by Woolfolk and Hoy (1990) indicates a correlation between beginning teachers' self-efficacy and the way they manage and motivate students. Similarly, a study by Deemer (2004) indicates that less efficacious teachers often expend little effort in finding learning materials and making good plans for lessons that encourage students to engage in learning. Conversely, highly efficacious teachers tend to seek various learning resources to encourage students' willingness to learn and develop more challenging lessons (Bandura, 1997; Pajares, 1996; Tschannen-Moran et al., 1998). Indeed, personal teaching efficacy impacts learning goals that teachers promote in their learning processes as a way to increase students' willingness to engage and follow the lesson (Deemer, 2004).

Studies also have demonstrated that teachers with high efficacy beliefs put less emphasis on students' weakness (Allinder, 1995), and work hard to help students with difficulties (Coladarci, 1992). Teachers with low efficacy beliefs are oriented toward using punitive management strategies that potentially demotivate students. In contrast, high efficacy teachers stimulate student autonomy, and try to build students' responsibility (Deemer, 2004). Well-defined organizational structures in the classroom have also been found to promote student engagement and adaptive behaviour (McMahon, Wernsman, & Rose, 2009).

The ability to provide information to students rather than controlling them is seen as a way to encourage students' intrinsic motivation (Linnenbrink & Pintrich, 2003). Intrinsic motivation has been viewed as part of students' behavioural dimension in relation to their participation in academic-related activities (Badiozaman, 2012). Teachers' orientations toward autonomy and control are related to students' intrinsic motivation and their approaches to solving classroom problems (Linnenbrink & Pintrich, 2003; Skinner & Belmont, 1993). Linnenbrink and Pintrich further indicate that teachers with high efficacy are able to encourage students to do tasks or schoolwork. This is caused by the fact that efficacious students are much more likely to

be cognitively engaged than those who have lower self-efficacy beliefs. Teachers who perceive the need to encourage student autonomy and responsibility as ways to solve classroom problems tend to have students who are more intrinsically motivated and who solve problems more effectively (Woolfolk, Rosoff, & Hoy, 1990).

2.2.6 Summary of self-efficacy

Self-efficacy is defined as people's beliefs about their capabilities to organize and execute courses of action required to produce given attainments. Self-efficacy is important because individual's beliefs about their abilities and competencies clearly affect the goals they set for themselves, and their anticipation of success and failure in achieving certain goals. Self-efficacy is different from other conceptions of self, such as self-concept, and self-esteem, in that self-efficacy is specific to a particular task (Bandura, 1997; Tschannen-Moran et al., 1998). According to Bandura (2006), there are four sources of self-efficacy: mastery experiences, verbal persuasion, vicarious experiences, and physiological states. Of the four sources of self-efficacy, mastery experiences are considered as the most important source of self-efficacy in relation to teachers' practice.

Teacher's self-efficacy is viewed as teachers' beliefs in their capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context (Tschannen-Moran et al., 1998). Self-efficacy beliefs for teachers are important because these beliefs are related to actions teachers take and/or outcomes of actions they achieve. In order to allow teachers to gain effective classroom practice, they need to have sufficient knowledge and understanding about instructional strategy, classroom management and student engagement (Tschannen-Moran & Hoy, 2001). These three areas have a direct relationship to classroom practices that affect teacher self-efficacy. The present study investigates the relationship between participation in PD and changes in perceived levels of teacher self-efficacy in the areas of instructional strategy, classroom management, and student engagement. The next section discusses PD, including characteristics of good quality PD that affect teachers' self-efficacy.

2.3 Professional Development

This section discusses professional development for teachers, especially the key features of effective PD. It also presents and discusses what previous studies found about the effect of professional development (PD) on teacher self-efficacy. This is followed by a discussion of the current condition of PD for teachers in Indonesia.

In teacher education literature, a differentiation is often made between teacher PD and teacher professional learning (PL). PD in its simplest form can be defined as “the development of competence or expertise in one's profession”, or “the process of acquiring the skills needed to improve performance” as a teacher (Simpson, 2008 as cited in Keown, 2009, p. 26). Professional learning, on the other hand, is a more recent term that implies to internal process through which teachers create professional knowledge (Timperley, Wilson, Barrar, & Fung, 2008). Poskitt and Taylor (2008) provide a succinct difference between PD and PL. Poskitt and Taylor describe PD as having connotations of delivering some kinds of information to teachers in order to improve their practice, while PL implies a more internal process through which individual teachers create and develop professional knowledge.

For the purpose of this study, PD is defined as a process of delivering some kinds of information to teachers to help them improve their practice and/or activities designed and implemented by teachers themselves to develop their professional knowledge. This agrees with the definition of both PD and PL offered by Poskitt and Taylor (2008). For this study, PD is seen as a process that supports teachers to construct and reconstruct new knowledge of teaching practice, and/or how teachers make sense of and develop their own way of teaching (Cochran-Smith & Lytle, 2001; Guskey, 2003). Also as PD is the term most often used in the Indonesian context, in this thesis the term PD will be used rather than PL without there being a clear disparity between the two terms.

A growing body of research has pointed out the benefits of PD for teachers (e.g. Darling-Hammond & McLaughlin, 1995; Desimone et al., 2002; Guskey, 2003). Diaz-Maggioli (2003) stresses the importance of PD as the way for teachers to succeed in their professional job. This is because PD focuses especially on how teachers learn new

methods and skills as processes to meet their students' learning needs. Along the same lines, Ingvarson, Meiers, and Beavis (2005) see PD for teachers as a vital component of policies to enhance the quality of teaching and learning which promotes a responsible, creative, and proactive approach. Therefore, PD is seen an appropriate process to increase teacher knowledge and skills (Boyle et al., 2004; Desimone et al., 2002; Fishman, Marx, Best, & Tal, 2003; Guskey, 2003). According to Fishman et al. (2003), PD should be able to help teachers increase their knowledge, skills, and attitude because these aspects have a strong link to teachers' practices in the classroom. These ideas are supported by Feiman-Nemser (2001) who perceives PD as a process of transferring knowledge, skills, and understanding to teachers to improve their personal practice and shared responsibility.

In order to allow teachers to transform knowledge, understanding, and skills, they need to become adaptive experts (Darling-Hammond & Baratz-Snowden, 2007). Darling-Hammond and Baratz-Snowden define adaptive teachers as teachers' ability to transform knowledge and skills they have learned during PD into their classroom practice that meet students' needs. Adaptive teachers understand how to adjust practices in the best way to support students' learning. They implement appropriate strategies and content and make necessary adjustments in students' learning (Murray, 2009). Thus, from these views, it is clear that PD needs to meet teachers' needs in order to allow them to meet students' needs.

The discussion now turns to current approaches to professional development, including innovative and traditional models of PD.

2.3.1 Approaches to Professional Development

There is an agreement among researchers that 'innovative'³ PD is much more effective than 'traditional' PD (Borko, 2004; Butler et al., 2004; Desimone et al., 2002). Van Veen, Zwart and Meirink (2012) provide definitions of traditional and innovative forms of PD. *Traditional* refers to the way PD is organized in that the PD activities are not

³ Some researchers called innovative PD as reform or collaborative models of PD. Throughout this thesis, innovative forms will be used.

situated in teachers' workplace, the content is not adjusted to the issues and problems in teachers' daily teaching practice, and teachers play a passive role during the PD process. Some examples of traditional forms of PD are seminars, one-day workshops, and conferences. *Innovative forms* refer to all those interventions in which teachers play an active role and the issues in their own teaching practice determine the content. Some examples of innovative forms are mentoring, coaching, study groups, research by teachers, and networking (Garet et al., 2001).

A growing body of research indicates that many of PD programmes are still conducted in more traditional forms and may not meet the ultimate objectives of PD namely to enhance the quality of teaching and learning (Little, 1993; Sandholtz, 2002). Some researchers indicate that many teachers attend short term PD sessions that are selected by others, presented by outside experts and predominantly led by the use of direct instruction (e.g. Sandholtz, 2002; Schlager & Fusco, 2003). This is because PD providers assume that teachers need information from outside experts to 'fix up' inadequacies in their practice (Keown, 2009). Such PD frequently ignores key principles of adult learning (Vella, 1995), and teachers are often seen as passive recipients and the content of PD is frequently separated from teachers' daily work (Allen et al., 2005; Sandholtz, 2002).

Butler, et al., (2004) criticize traditional models of PD as failing to deepen teachers' knowledge and being insufficient to change deep rooted beliefs in practice. Teachers often find traditional models are boring and irrelevant, and claim to forget more than ninety per cent of what they learn (Allen et al., 2005; Miller, 1998). Robb (2000), for example, describes a typical one-shot workshop and noticed that after the first fifteen minutes, "some teachers doodling, others closed their eyes and many other teachers repeatedly looked at their watches" (p. 5).

Another problem with traditional approaches to PD is that the activities do not capitalize on the expertise of teachers, rather they operate from a deficit model (Feiman-Nemser, 2001). The problem with a deficit model is that it assumes teachers do not have sufficient information and skills to be successful in classrooms. This assumption implies that "teacher have been told often enough (or it has been taken for granted) that other

people's understandings of teaching and learning are more important than their own and that their knowledge-gained from their daily work with students" (Murray, 2009, p. 22). According to Bransford, Brown, and Cocking (1999), only about two-thirds of teachers have a voice in selecting their PD opportunities. This is exacerbated in traditional approaches by the fact that there are often few opportunities for interaction and to get follow-up support to make changes in teaching practice (Feiman-Nemser, 2001; Putnam & Borko, 2000).

On the other hand, many researchers claim that innovative forms of PD are more effective to meet teachers' needs because most of these activities are in the form of collaboration and are grounded in teachers' classroom practice (e.g. Butler et al., 2004; Desimone et al., 2002; Penuel, Fishman, Yamaguchi, & Gallagher, 2007). Many researchers believe that innovative models provide greater opportunities for teachers to try new ideas, and reconstruct knowledge and skills about teaching as a prerequisite to increase teachers' knowledge and improve pedagogy (Darling-Hammond & McLaughlin, 1995; Desimone, 2009).

Innovative forms of PD take into account teachers' existing frames of knowledge and experience, as well as a classroom practical focus. James (2001) mentions PD is effective when it exploits fully the knowledge that teachers bring with them. Therefore, Richards (1991) asserts that teachers must not be viewed as entering in PD with deficiencies. Richards indicates that while new knowledge can obviously be presented to teachers on the basis of their wants and needs, the emphasis should be on what teachers know and do, and how they can more fully explore their beliefs and practices. Along the same lines, Hativa and Goodyear (2002) also recognize the importance of addressing teachers' current theories and belief systems, and suggest that teachers need to reflect on their own theories, articulate them explicitly, and compare them with those of their colleagues. Freeman (2002) emphasises that reflection on practice "must become a central pillar" (p.11) in teacher development. McGee (2011) also indicates the importance of teacher professional learning activities having a practical focus because this will enable teachers to value these activities as they are not separate from their everyday work.

Innovative forms of PD meet with Ingvarson, et al.'s, (2005) suggestions that PD for teachers should become the process by which teachers grow professionally and that the PD should support and promote that growth. Clarke and Hollingsworth (2002) define professional growth for teachers as “an inevitable and continuing process of learning” (p. 947). Such growth is identified with learning, in which the significant outcomes of PD are the shift from teachers as relatively passive participants to looking at change as a complex process that involves learning in active collaborative models. Therefore, PD can no longer be viewed as an event that occurs on a particular day of the school year, rather, it must become part of the daily work life of teachers (Lockwood, 1999).

Despite the research evidence that shows the need to promote effective PD and a growing consensus of what effective PD should look like, in fact many PD activities are still conducted in traditional forms which are characterized by one-shot and short-term approaches (Corcoran, 1995; Little, 1999; Sandholtz, 2002). So even though there are many studies that point to the need to reformulate the content, process, and structure of PD, practice lags behind, particularly at local and school levels (Goldenberg & Gallimore, 1991).

2.3.2 Key Features of Effective Professional Development

This section pulls together some key features of effective PD that can successfully increase teachers' knowledge, skills, and practice. This section is important because it is related to one of the aims of the current study, namely to find out the characteristics of effective PD, in the specific Indonesian context.

A number of studies have identified characteristics of effective PD. A study by Garet et al. (2001) has been used in several different contexts and is based on a national evaluation of the Eisenhower PD program, including with a nationally representative sample of teachers in USA, and for the most part, it has been seen valid in other contexts (Desimone et al., 2002; Garet et al., 2001; Penuel et al., 2007; Quick, Holtzman, & Chaney, 2009). Interestingly, some researchers have also used Garet et al.'s (2001) study to investigate key features of effective PD in Asian context (e.g. Cho, 2014; Tanang & Abu, 2014).

Although the Eisenhower model is certainly not the only source on effective PD, it is well known and frequently cited. Therefore, I will organize this review of the literature about effective features of PD around these six key features from Garet et al. (2001). These consist of three 'core features' (content focus, active learning, and coherence) and three 'structural features' (collective participation, form of the activity, and duration of the activity). According to Garet et al., the core features refer to "dimensions of the substance or core of the professional development experience", while the structural features refer to "characteristics of the structure or design of professional development activities" (p. 919). Similar definitions were offered by Quick, Holtzman, and Chaney (2009) who see the core features as the substance of the activity, while the structural features refer to characteristics of the structure of a professional development activity. Following is the discussion of each of these six key features of effective PD, which are content focus, active learning, coherence, collective participation, form of activity, and duration of the activity.

A content focus has been defined as one of the characteristics of effective PD. Content focus is the degree to which the activity is focused on improving and deepening teachers' content knowledge, including subject-area curriculum and assessment. Quick et al. (2009) indicate the importance of a content focus in PD is that this aspect will help teachers to understand "what students are expected to learn (content knowledge) and how students learn the subject matter" (p. 47). Much the same ideas are expressed by Cohen and Hill (2000) who state that content focus is important to improve teachers' knowledge of the content they teach, how students learn that content and how to represent and convey that content in meaningful ways.

Another feature that characterises effective PD is active learning. Active learning is the opportunity for teachers to actively engage and be involved in the meaningful process of teaching and learning. Examples of active learning, as Ingvarson, et al., (2005) state, are obtaining feedback on teaching, reviewing student work, and planning curriculum for classroom implementation. Similarly, Desimone (2009) defines active learning as when teachers have opportunities to get involved in the PD process, such as observing and

receiving feedback or analysing student work, as opposed to passively sitting during PD activities.

Coherence has also been viewed as one aspect that determines effective PD. Coherence means incorporating experiences during learning activities that are consistent with teachers' goals (Penuel et al., 2007). Desimone (2009) indicates coherence as a consistency between what teachers learn in any PD activity and their knowledge and beliefs, and with school, district, and state reforms and policies. The importance of coherence, as Garet et al. (2001) mention, is that PD activities are more likely to be effective in improving teachers' knowledge and skills if these activities form a coherent part of a wider set of opportunities for teacher learning and development.

Collective participation is another characteristic of effective PD. This is related to the degree to which the activities emphasize collaboration among teachers in exploring teaching problems, and facilitates on-going discussion of concepts discussed in PD activities (Garet et al., 2001; Porter, Garet, Desimone, & Birman, 2003). Collective participation may also be in the form of communities of practice, which involve participants collaborating with and learning from one another, and continually attempting to improve their teaching and learning (Corcoran, 1995; Quick et al., 2009). Garet et al. (2001) mention a number of potential advantages of collective participation. First, teachers are more likely to have opportunities to discuss concepts, skills, and problems that arise during PD activities when they work together. Second, teachers who are from the same school or department are likely to share common curriculum materials, course offerings, and assessment criteria. Third, teachers who share the same students or subject may help contribute to a shared professional culture, and develop a common understanding of instructional strategies, problems, and solutions.

Form of activity refers to the way activities are organized, either in innovative forms (i.e. study groups, teacher network, coaching, mentoring, and/or teacher research) or traditional forms (seminars, one-shot workshops or conference) (Desimone et al., 2002; Garet et al., 2001). Conducting PD activities in innovative/collaborative forms are important because these types of activities may be more responsive to how teachers

learn (Ball, 1996), and may have more influence on changing teaching practice (Darling-Hammond, 2008; Garet et al., 2001).

Effective PD also deals with the duration of the activity. Effective PD requires sufficient time for teachers to learn, to discuss, and to reflect how student learn. The duration of PD activities deals with the total number of contact hours that participants spend on the activity, as well as the span of time over which the activity takes place (Desimone et al., 2002; Quick et al., 2009). Desimone (2009) suggests PD activities should be spread over a semester and should include 20 hours or more of contact time. Garet et al. (2001) indicate the importance of PD activities to be sustained over time because longer activities are more likely to provide opportunities for “in-depth discussion of content, student conceptions and misconceptions, and pedagogical strategies”, and are more likely to allow teachers to “try out new practices in the classroom and obtain feedback on their teaching” (p. 921).

Understanding the key features of effective PD is important because these aspects are a focus of the current research. While the literature has provided useful suggestions regarding the need for effective PD and what aspects need to be included in PD, these suggestions are in a variety of contexts and might not always suit specific contexts. Therefore, it is important to investigate how teachers in Indonesia perceive the characteristics of good quality PD and this will be compared with the six key features provided by Garet et al. (2001).

The discussion now turns to the relationship between professional development activities and teacher self-efficacy. This is also in line with one of the aims of this study, namely to investigate the relationship between participation in PD activities and changes in perceived levels of Indonesian EFL teachers’ self-efficacy.

2.3.3 Professional Development and Teacher Self-Efficacy

A small number of researchers have investigated the relationship between participation in PD and teacher self-efficacy (e.g. Hoy & Spero, 2005; Karimi, 2011; Ross & Bruce, 2007; Zambo & Zambo, 2008). These studies were conducted in a variety of settings

which were mostly in western countries and used different scales to measure teacher self-efficacy.

The first two studies are by Fritz, Miller-Heyl, Kreutzer, and MacPhee (1995) and Edwards, Green, Lyons, Rogers, and Swords (1998) who conducted quasi-experimental studies. Fritz et al. (1995) investigated the effectiveness of in-service training on teachers' efficacy beliefs. A total of 241 teachers from a set of elementary school districts in USA participated in their study. Fritz et al. (1995) found that treatment teachers (teachers who participated in in-service training) obtained higher teacher-efficacy scores on the post- and delayed post-tests than the control-group teachers (teachers who did not participate in in-service training). Effects were strongest for teachers identified as frequent users of curriculum materials distributed in the program. Edwards et al. (1998) investigated the effects of PD programmes for K-12 teachers from the largest school district in USA using a Teacher Efficacy Scale (Gibson & Dembo, 1984) and the Standards-Based Implementation Survey (Seahorn, 1995). Edwards et al.'s study employed quasi-experimental pre-test and post-test design with two groups of teachers. They found that teachers who participated in PD programs increased their teaching efficacy and attitudes toward school culture compared to teachers who did not. They also found that teachers who participated in PD programs showed more favourable attitudes toward teaching as a career compared to teachers who did not involve in PD.

Other studies have shown that PD activities impact on teachers' self-efficacy beliefs on their capability to implement instructional strategy (Dixon, Yssel, McConnell, & Hardin, 2014; Zambo & Zambo, 2008). Dixon et al.'s (2014) study focused on teacher efficacy as a way to explain teacher willingness to differentiate instruction by involving 41 teachers from two elementary and high school districts in USA. They found that a greater number of PD hours in differentiated instruction were positively associated with teacher sense of efficacy beliefs. Their study demonstrated that teacher efficacy is an important dimension in implementing the process of differentiation regardless of what level or what content area the teacher taught (elementary, middle, or high school). Zambo and Zambo's (2008) study involved 63 teachers who voluntarily participated in two-week, summer PD workshops on mathematics problem solving in USA. The

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workshops focused on helping teachers increase their own problem solving ability as well as improve their classroom problem-solving instruction. Their study used a Collective Efficacy Questionnaire designed by Goddard et al. (2000) to measure collective teacher efficacy, and an Elementary Science Efficacy Questionnaire designed by Enochs and Riggs (1990) to measure personal competence and personal level of influence. The study found significant increases in teachers' efficacy – both individual and collective – as the result of participating in PD programs.

PD affects teacher self-efficacy concerning classroom management. Ross and Bruce (2007) investigated the effects of PD on the self-efficacy beliefs of Grade 6 mathematics teachers in a single Canadian district. Using the Teachers' Sense of Efficacy scale by Tschannen-Moran and Hoy (2001), Ross and Bruce's (2007) study found that the PD program had a positive effect on teacher expectations about their ability to handle student management issues in the mathematics classroom. They also found that only the changes in classroom management were statistically significant. Ross and Bruce suspected that teachers' confidence in their ability to engage student interest and to use new instructional strategies follows confidence in classroom management.

There have also been a few studies that have been conducted in Asia countries. Karimi's (2011) study investigated the relationship between teachers' participation in PD initiatives and their sense of efficacy for 60 EFL junior high school teachers in the two western provinces of Iran. His study found that teachers' sense of efficacy enhanced as a result of participating in PD activities. An interesting point from the findings of the study is that "PD initiatives provide teachers with mastery experiences in the areas of content knowledge, instructional strategies, student and classroom management" (p. 59). This is important as teachers will persist to implement teaching strategies that they believe to be appropriate to their teaching needs (Overbaugh & Lu, 2008).

Although the literature might provide readers with useful information on PD and teacher-efficacy, much less research to date has examined how Indonesian secondary school EFL teachers' participation in PD influences their self-efficacy. One of the most interesting and important reasons for discussing the relationship between participation

in PD and teacher self-efficacy is the role self-efficacy plays in teachers' willingness to implement new teaching strategies they learn through PD sessions (Tschannen-Moran & McMaster, 2009). It is, therefore, important to investigate Indonesian EFL teachers' perceptions of PD they have followed in relation to their self-efficacy beliefs in order to find out the relationship between PD and teacher self-efficacy. The discussion now turns to PD for teachers in Indonesia.

2.3.4 Professional Development for Teachers in Indonesia

Realizing that the overall achievements of the Indonesian education system are still rather disappointing, the government of Indonesia has made tremendous efforts to improve the quality of teachers (Hendayana, Asep, & Imansyah, 2010). One of their efforts is through PD activities. PD programs for teachers have had a strong tradition in Indonesia since the 1970s. Two-thirds of the World Bank budget for education in Indonesia during the 1980s was devoted to teacher PD initiatives (Fuller, 1987 as cited in Thair & Treagust, 2003).

Indonesian teachers' opportunity to attend PD to improve their professionalism is guaranteed by Indonesian law (Undang-Undang, 2006). One of the current foci for teacher PD, according to the government of Indonesia, is lifting academic qualifications of teachers with a two or three years-diploma degree to bachelor degree. It is believed that gaining an academic professional qualification has a proportional relationship with the mastery of subject content and teaching strategies that can potentially increase successful student learning (Saito, Hendayana, Imansyah, Isamu, & Hideharu, 2006; Tanang & Abu, 2014). Currently, there is an increase in the numbers of teachers who hold master and doctoral degrees as a means to improve the quality of the teaching profession and for career opportunity (Hendayana et al., 2010).

The improvement of teacher academic qualifications has become part of the Teacher Certification Program in Indonesia, which is mandated by law for teachers and lecturers No. 14/2005 (hereinafter called the Teacher Law). The Teacher Law stipulated that teaching was a professional job, and therefore all teachers in this country should be certified (Fahmi, Maulana, & Yusuf, 2011; Kompas, 2014). The objective of teacher

certification is not only to improve teachers' welfare through a professional incentive, but also improve teachers' competencies and professionalism (Jalal et al., 2012; Sanaky, 2005). The result expected from the certification is the improvement of quality teaching performed by teachers in the classroom. So teacher certification is considered as an important factor in school reform in order to provide better teaching in the future (Firman & Tola, 2008). As an integral part of the Teacher Certification Program, the government of Indonesia has implemented many PD activities for teachers.

PD has been implemented in Indonesia to attempt to fulfil the needs of teachers to increase their knowledge, skills, and attitude. Among PD activities are seminars, workshops, training, mentoring, coaching, and teacher study groups⁴ (Evans et al., 2009; Sudarminta, 2000). Each of these activities, in the Indonesian context, is explained briefly below.

- Seminars are educational events that feature a particular topic or set of topics in which speakers deliver information primarily via lecture and discussion. Seminars are mostly conducted by a university, commercial or professional organization. In seminars, there is a speaker (although sometimes more than one speaker) who gives a lecture which highlights the importance and benefits of the topic. After a presentation finishes, participants may ask questions. Generally, seminars are attended by many participants (Purwaningtyas, 2012).
- Workshops are commonly held as a means to introduce individuals or groups to specific concepts or skill sets. Workshops are usually conducted for a brief intensive educational program for a relatively small group of people and focus especially on techniques and skills in a particular field. On many occasions, workshops are a one-shot activity (Hamby, 2014; Purwaningtyas, 2012).
- Training in Indonesia is seen as skill-building programs that aim to help teachers to master specific skills, and/or prepare them to become facilitators/trainers. Training is led by a trainer (instead of a speaker) and involves presentation, discussion, and training skills. The key aspect in training is learning by doing (Floris, 2015; Purwaningtyas, 2012).

⁴ TSGs will be discussed in details in Section 2.4

- Coaching is a process in which two teachers visit each other's classes and later meet to discuss their observations and provide feedback on what they see. Therefore, coaching is a reflection process between two teachers who share their expertise, observe each other while teaching, reflect and provide one another with feedback. Coaching is considered as a strategy to help teachers increase their knowledge, skills and teaching strategy by reflecting teaching process through sharing ideas (Parsloe, 2009; Pask & Joy, 2007).
- Mentoring refers to one-to-one support for a novice or less experienced teacher (the mentee) by a more experienced teacher (the mentor). Mentoring is mostly designed primarily to assist the development of the mentee's knowledge and expertise about teaching. In some instances, school principals or teacher's supervisors act as mentors to observe and give feedback to teachers' practice (Parsloe, 2009; Pask & Joy, 2007).

In Indonesia, PD programs have particularly been implemented to disseminate new curriculum policies or approaches in teaching. In many cases, the central government invites some teachers to participate in PD activities such as workshops and training as a representative for each region/district. Later, the teachers will become disseminators to their colleagues in their district/school to spread the information, including to the rural areas (Tanang & Abu, 2014). In the Indonesian school setting, PD for teachers has increased since 2005 (Iwani, 2014), whilst before this time PD activities were not a priority for teachers and/or schools in Indonesian.

However, despite many PD activities that have been implemented in Indonesia, there is little evidence demonstrating the effectiveness of these activities (Hendayana et al., 2010), especially PD activities that are organised and implemented by government. Questions have arisen about the effectiveness of PD when teachers could not implement the knowledge and skills they have learnt in PD in their day to day classroom teaching activities (Kerrison, 1992; Lunetta & Berg, 1995). Many educators feel that the quality of teachers in Indonesia is still unsatisfactory (Evans et al., 2009). For example, Evans et al. analysed the effect of training programmes and what hinders improvements in teacher quality in Indonesia. Their analysis focused on investigating the effectiveness of training courses and workshops on teachers' classroom practice, and the effectiveness

the teacher professional development networks in improving teacher quality. Their study found that training programs did not significantly improve teachers' practice and many teachers failed to facilitate "interactive, creative, innovative, joyful, encouraging, and challenging" (p.28) learning processes in the classroom. Therefore, it is imperative that dedicated efforts be made to improve the professional competence of teachers. Cannon and Arlianti (2008) also indicate that,

"The impact of training in transforming Indonesian educational institutions is not clearly established at all. The effects of training are arbitrary and, too often, dependent on the unplanned interactions of returning trainees, their supervisors and opportunities in their working environments. Much training leads nowhere except to unrealized potential, frustration and waste" (p. 79).

Although Evans et al. (2009) and Cannon and Arlianti (2008) only focused their analysis on training programmes, their findings could reflect the effect of many PD activities on teachers' practice in Indonesia. This is because, in general, training programmes are more clearly focused than seminars and workshops, and mostly provide teachers with the opportunity to master specific skills and 'hands-on-practice'. Yet, still there appear to be few changes to teacher practice in the classroom.

Most PD activities in Indonesia are conducted in 'one-shot' seminars/workshops/training without follow-up support for implementation and do not provide an opportunity for teachers to collaborate (Saito, Harun, Kuboki, & Tachibana, 2006). According to Hendayana's (2007) and Yuwono and Harbon's (2010) studies, many teachers attended seminars and workshops without participating actively during the processes and/or these programs were only conducted as one-shot activities without follow-up implementation and evaluation. Therefore, many of these activities were still not able to address the needs of teachers associated with efforts to improve the quality of teaching (Cannon & Arlianti, 2008; Saito, Hendayana, et al., 2006).

In Indonesia, there is a need to implement and foster PD that allows collaboration among teachers which is seen to more effectively increase teachers' knowledge and skills. This is important as teacher professional development is more effective when opportunities exist for teachers to interact and collaborate with their colleagues (Packer & Goicoechea, 2000; Palincsar, 1998; Raths & McAninch, 2003).

Another problem is that, in general, PD activities such as seminars, workshops and training in Indonesia have traditionally been designed and implemented using top down approaches to improve teachers' professional skills (Atmadjaja, 2011; Setiawan, 2009; Supriatna, 2011). The problem with the top down approach in designing PD programs is that these programs, in many cases, do not complement teachers' teaching practice and reflect their knowledge (Blumenfeld et al., 1991; Kubitskey & Fishman, 2006). Therefore, there is a strong necessity for future PD for teachers in Indonesia to be based on real teaching practice in the classroom (Saito, Harun, et al., 2006). PD reflecting teachers' teaching practices and their knowledge are important because this has greater possibility to change teachers' classroom practices and behaviour (Raths & McAninch, 2003; Ross & Bruce, 2007).

The current study investigates teachers' perceptions about PD activities in order to understand how effective these various PD activities have been and also how they enhance teachers' self-efficacy. Understanding teachers' perceptions is important to get good understandings of what aspects need to be included in PD activities and what teachers' perceive are the characteristics of good quality PD. This study also investigates teachers' perceptions of the effectiveness of TSGs on teachers' knowledge and understanding about teaching, as well as on teacher self-efficacy. The next section presents and discusses TSGs as professional learning communities for teachers. This includes TSGs in the Indonesian context and in the area of teaching English as a foreign language (EFL).

2.4 Teacher Study Groups

In general, teacher study groups (TSGs) as used in education are defined as "collaborative groups organized and sustained by teachers to help them strengthen their professional development in areas of common interest" (Cramer, Hurst, & Wilson, 1996, cited in Lefever-Davis, Wilson, Moore, Kent, & Hopkins, 2003, p. 782). Ospina and Cano Sánchez (2010) define TSGs as a number of teachers joining together to increase their capacities through new learning for the benefit of students. In TSGs,

teachers remain in charge of their learning through interaction with others as the process to reach their personal goals. For the current study, TSGs are defined as a group of educators who come together on a regular basis to support each other as they work collaboratively to both develop professionally and to change their practice.

The purpose of TSGs is to provide teachers opportunities to collaborate and share goals to achieve their aims (Ospina & Cano Sánchez, 2010). Along the same lines, Brennan and Simpson (1993) define the goal of TSGs as creating an education system in which educators can share knowledge and expertise, support and mentor each other, and attempt to translate theory into practice. In TSGs, teachers can cooperate and take part in activities including searching for solutions and methods for the benefit of their practice (Ospina & Cano Sánchez, 2010). TSGs can be effective forums to encourage and support teachers to experience ongoing lifelong professional development that has an impact on teachers' teaching performance (Clair, 1998).

TSGs are an innovative form of PD, along with networking and mentoring relationships, which offers teachers opportunities to share experiences that support best practices of instruction (Garet et al., 2001). According to Birchak et al. (1998), TSGs can be effective PD because TSGs provide opportunities for teachers to share knowledge and skills. TSGs also help teachers to explore issues and challenges they face which have a direct impact on their teaching practices and students' lives (Birchak et al., 1998; Clair, 1998).

A number of studies have pointed out the benefits of TSGs for teachers (Arbaugh, 2003; Brunelle, 2005; Gersten, Dimino, Jayanthi, Kim, & Santoro, 2009). Arbaugh (2003) conducted a study involved high school mathematics teachers in one school in USA to find out their perceptions of the importance of using teacher study groups as a means to increase teachers' knowledge, thinking and practice regarding teaching mathematics. Using written and oral interview data, as well as transcripts of study group meetings, he found that teachers were supported through study group in four areas: built communities and relationships, made connections across theory and practice, did curriculum reform, and developed a sense of professionalism. He also found that this type of PD helped

teachers to increase their knowledge, skill, and efficacy, as teachers experienced ongoing, school-based, and teacher-centred activities.

A number of studies also has been conducted to investigate the effect of TSGs on teacher's instructional quality (Brunelle, 2005; Gersten et al., 2009). Brunelle (2005) conducted a study aimed at investigating the impact of collaborative TSG meetings on the creation of a professional learning community and teachers' literacy instructional practices. He found the TSG positively impacted on teachers' literacy instructional practices as teachers implemented new materials and increased the number and variety of assessments.

Another impressive example of the benefits of TSGs is on first grade teachers' reading comprehension and vocabulary instruction (Gersten et al., 2009). Using randomized field trials, Gersten et al. wanted to examine the impact of the TSG PD program on teacher knowledge of relevant research in comprehension and vocabulary instruction, classroom applications of the research-based strategies, and student reading outcomes. The multisite study was conducted in three large urban school districts in three states in USA with a total of 81 first grade teachers and their 468 students were involved in this study. The results showed that teachers in TSG schools improved significantly in understanding reading comprehension. The results also showed that teachers in TSG schools outperformed teachers in control schools regarding teachers' knowledge of vocabulary instruction.

A similar example is presented by Chiu (2001) in Taiwan with one significant difference. The study had purposefully involved teachers and administrators, as one of the main objectives of this study was to know how Taiwanese junior high school teachers' and administrators' perceived TSGs as a means of professional development. The study results reveal that TSGs were considered as appropriate professional development approaches due to their connection to teaching practices and the opportunities they provide for collaboration with colleagues.

Finally, there are a number of studies on teacher study groups in the area of teaching English as a foreign language (EFL). Sazawa (2006) conducted a case study of a TSG

for Japanese EFL teachers, held in an intensive summer program. The results showed that through communication with other teachers, the participants noted the potential to change their classroom teaching practices after getting information and knowledge from other TSG participants. Another study was conducted by Piedrahita and María (2007) in Colombia, who wanted to know the effectiveness of using teacher study groups, as this kind of professional development approach is relatively new and rarely used in institutions. In the area of foreign language teaching, teachers had few PD experiences and those who participated in study groups had not been systematically studied in order to understand what teachers gain in these professional communities. Their study concluded that participation in TSGs could promote dialogue among teachers to advance their knowledge on certain teaching issues, such as teaching four basic skills in English.

Teacher Study Groups in Indonesia

Some research has claimed that the quality of teachers in Indonesia is still unsatisfactory (Evans et al., 2009). The government has made some efforts to help teachers increase their competence, and two of these efforts are the establishment of *Kelompok Kerja Guru (KKG)* and *Musyawarah Guru Mata Pelajaran (MGMP)*. Both KKG and MGMP are forms of TSGs in Indonesia. A KKG is a primary school teachers' study group where teachers in the same school cluster periodically meet to share their knowledge and experience and discuss or solve problems encountered in classrooms. The MGMP functions are similar to those of KKG except that a MGMP is a study group for secondary subject teachers at the district level. Each subject in the curriculum has its own separate MGMP network (e.g. teachers of English study groups and Mathematics teachers study groups). The activities of MGMP are also very similar to those of KKG. The KKG and MGMP are usually chaired by a key teacher who manages the activities of the meetings (Evans et al., 2009; Supriadi, 1999).

The growing number of TSGs are hoped to play significant and strategic roles in improving the professional competence of teachers. The objectives of the TSGs are to “(i) solve teaching-learning problems, (ii) test and develop new ideas to improve the

quality of teaching and learning, and (iii) improve teachers' professionalism. The TSGs main activities are to (i) develop professional competence of the teachers, (ii) improve teachers' capability in preparing lesson plans and teaching of lessons based on topics or themes from the curriculum, and (iii) discuss teaching and learning issues, such as: preparation for teaching, including preparing the steps within a lesson, preparing and testing teaching aids and performing peer teaching (Evans et al., 2009, p. 29).

Supriatna (2011) also sees the objectives of the TSGs are to help teachers increase their knowledge and skills about teaching, as well as to share and solve problems in daily teaching practice. In addition, Jalal et al. (2012) discusses the key principles of TSGs which consist of a collaboration, a focus on practical rather than a theoretical knowledge, a grass-roots support, a focus on topics that relate to a local context, and the capacity for an ongoing consultation and discussion during the progress of programs.

However, despite the positive intended outcomes of TSGs and greater opportunities to collaborate among participants in TSGs, there have been some issues and challenges in Indonesia (Hendayana, 2007). Evans et al. (2009) indicate some challenges have been: TSGs have not always been able to help teachers increase their competence and skills; a lack of support budget from the government to run the meetings; and some teachers' resistance to innovation, especially senior teachers. In addition, many TSGs are often active only during semester time, and many teachers do not use TSGs as many prefer traditional forms of PD, such as seminars and workshops. One reason why many teachers do not attend TSGs could be because teachers' involvement in TSG is voluntary and TSGs are mostly led/facilitated by one of TSG members. This is in contrast to PD activities that are organised and implemented by the government (e.g. seminars, workshops), where teachers often attend these activities to represent their school, and these activities mostly invite expert speakers from university, and so are given a higher status.

Considering the important position of TSGs in the Indonesian PD context and the government focus for effective PD, it is important to investigate teachers' perceptions of the benefits they get from the TSGs, and their perceptions of the relationship between participation in TSGs and their self-efficacy beliefs. Although a few studies have been

conducted in Indonesia to see how effective TSGs helped teachers improve their practice, there has not been a focus on the link between TSGs and teacher self-efficacy. The present study fills a gap in the literature on the relationship between participation in PD, TSGs and changes in perceived levels of EFL teacher self-efficacy in the Indonesian context.

2.5 Chapter summary

Research has pointed out the importance of self-efficacy as it can affect one's confidence in performing actions and beliefs about their ability to achieve the desired results (Bandura, 1999). Teachers' efficacy beliefs determine what action they choose to do, endeavours they exert, approaches they choose in difficult times and the level of accomplishment they achieve (Bandura, 1999; Pajares, 1996; Ross, 1994). Self-efficacy is important for teachers because it can affect teachers' teaching practice in their classrooms. In order to have effective classroom practice, teachers need to have good knowledge and understanding of aspects of instructional strategy, classroom management, and student engagement because these three aspects seem to have a direct relation to classroom practice (Tschannen-Moran & Hoy, 2001).

PD activities have been seen as appropriate ways to enhance teachers' classroom practice. Research conclusively demonstrates that PD activities potentially help teachers increase their knowledge and develop their teaching practice (Darling-Hammond, 2008; Diaz-Maggioli, 2003). The quality of PD, however, is a critical issue that must be addressed. Research evidence indicates that innovative forms of PD are much more effective than traditional forms of PD. Innovative forms seem more effective to meet teachers' needs because most innovative forms of PD are in the form of collaboration that offer opportunities for teachers to share knowledge and expertise in order to improve their practice. Despite the agreement among most researchers that innovative forms of PD are much more effective than traditional PD, the fact is that many PD activities are still conducted in traditional forms which are characterized by one-shot and short-term approaches, particularly in Indonesia.

One type of innovative PD is TSGs. Research has indicated that TSGs are part of effective PD that is consistent with what is known about teaching and learning as they provide opportunities for teachers to share knowledge and skills, and explore issues and challenges they face which have a direct effect on their teaching practices and students' lives. The goal of TSGs is to create professional learning in which educators can share knowledge and expertise, support and mentor each other, attempt to translate theory into practice and create onsite experts.

Despite many studies that have investigated the characteristics of effective PD, few have been conducted in Indonesia. This dearth of research is far more evident when it comes to seeing the relationship between participation in PD on Indonesian teachers' self-efficacy. The present study deals with the relationship between junior secondary EFL teachers' participation in PD activities and changes in perceived levels of their self-efficacy in the Indonesian context.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This chapter presents the overall approach and design of the investigation. It is divided into three major parts. The first part of the chapter presents the research methodology, which provides the theoretical and conceptual foundation for the research methodology used. It also includes the justification of using a mixed method research approach in this study. The second part of this chapter describes the way in which the study was designed and undertaken. This includes the discussion of the research samples and data gathering tools in this study. The last part of the chapter discusses ethical considerations, including informed and voluntary consent, respect for privacy and confidentiality, avoidance of conflict of interest, and minimising the risk of harm.

3.2 Research Paradigm

Research has been described as a systematic investigation (Burns, 2000) or inquiry whereby data is collected, analysed and interpreted in some ways as the effort to “understand, describe, predict or control an educational or psychological phenomenon or to empower individuals in such contexts” (Mertens, 2005, p. 2). It has been suggested, however, that the “exact nature of the definition of research is influenced by the researcher’s theoretical framework” (Mertens, 2005, p. 2). The theoretical framework is sometimes referred to as a paradigm (Bogdan & Biklen, 2003; Mertens, 2005) that influences the way knowledge is studied and interpreted (Mackenzie & Knipe, 2006). It is the choice of paradigm that sets down the intent, motivation and expectations from the research.

A paradigm is defined as a set of beliefs that provides an understanding about how researchers’ views of the world can help them to choose some fundamental ways of doing research (Lincoln & Guba, 1994). It is a “loose collection of logically related

assumptions, concepts, or propositions that orient thinking and research“ (Bogdan & Biklen, 2003, p. 22) or a philosophical intent or motivation for undertaking a study (Cohen, Manion, & Morrison, 2013).

In conducting research, paradigms are central concept in social science research methodology (Morgan, 2007). Paradigms guide and direct thoughts and actions for conducting research (Mertens, 2009; Morgan, 2014). The theoretical perspective informs the nature of reality (ontology), the nature of knowledge (epistemology), and the procedures in understanding and gaining knowledge (methodology) (Mertens, 2009, 2014). Creswell (2013) also describes a certain paradigm or worldview as a basic set of assumptions that guide research. Crotty (1998) describes four key features to consider in designing research as shown in Figure 3.1.

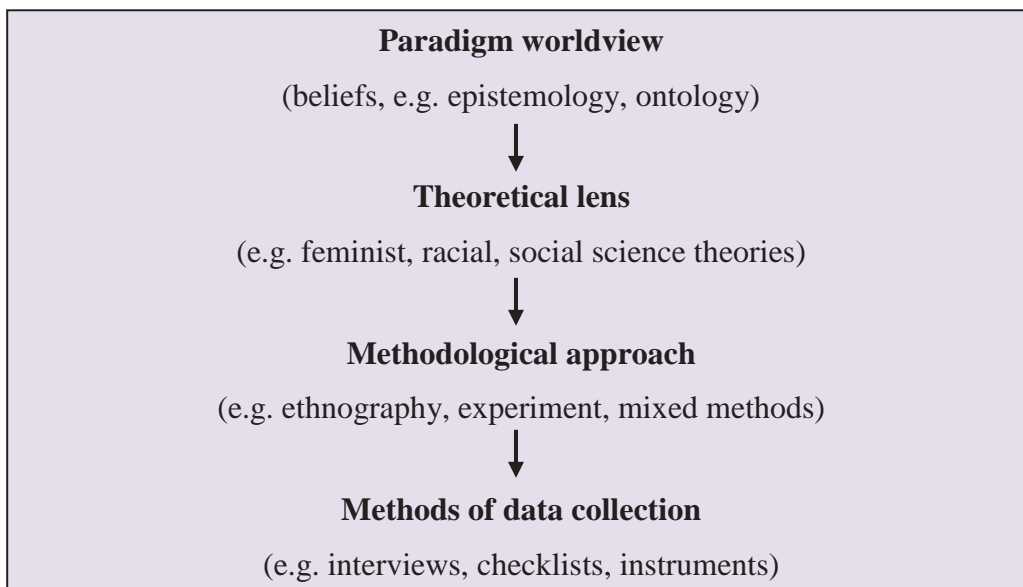


Figure 3.1 Four levels for developing a research study (Crotty, 1998).

As shown in Figure 3.1, Crotty contends that the broadest level in designing research is the issues of philosophical assumptions, the epistemology behind the study or how researchers gain knowledge about what they know. These philosophical assumptions inform the use of a theoretical ‘stance’ that a researcher might use. This stance then informs the methodology used, such as strategy, plan of action, or research design. Finally, the methodology incorporates the methods, which are techniques or procedures used to gather, analyse, and interpret the data (Creswell & Plano Clark, 2011).

Cohen, Manion, and Morrison (2013) describe two major research paradigms common in educational research. These two major research paradigms as being linked to either a positivist or an interpretivist nature of the research study. Some refer to these two contrasting paradigms as the “scientific empirical tradition” and “the naturalistic phenomenological mode” (Burns, 2000, p. 3), or as an “established, traditional view” on the one hand, and a “more recent interpretive view,” on the other (Cohen et al., 2013, p. 5).

Quantitative studies are more readily associated with the scientific empirical tradition, a positivist ontology and an objectivist epistemology (Guba & Lincoln, 1994; Huberman & Miles, 2013). The positivist/objectivist paradigm relates to the historical “received view of science” (Guba & Lincoln, 1994, p. 106) where the focus is on the verification and quantification of an objective reality. The positivist/objectivist paradigm views human behaviour as essentially rule governed and should be investigated using the methods of natural science. Therefore, Scott (2005) suggest that positivist approaches imply a philosophical stance that assumes that features of human environments have an objective reality existing independently of those who have created them or are observing them.

The positivist/objectivist paradigm of educational research dominated educational inquiry from the late 19th century and through much of the 20th century (Creswell, 2002). Educational research using this approach often investigates experimentally-manipulated psychological factors (Shank, 1995). It assumes that the methodological procedures of science can be applied directly to the social sciences, including education. Typically in quantitative approaches to research the researcher “collects numeric (numbered) data from participants, analyses these numbers using statistics, and conducts the inquiry in an unbiased, objective manner,” (Creswell, 2002, p. 41). The strength of quantitative research lies in its ability to quantify generalizable variables and measure factors in terms of amount, intensity or frequency (Best & Kahn, 1998).

The second major paradigm is interpretive, where knowledge is considered subjective and to be socially embedded (Cohen et al., 2013). The interpretivists believe that the

individual or group being studied can only be studied in a social situation and with their active participation. Grbich (2007) suggests “Multiple realities are presumed, with different people experiencing these differently” (p. 8). Emphasis on the emic perspective in qualitative research originates from the basic ontological assumption about reality, that reality is constructed by each knower/observer subjectively (Glesne, 2011; Grbich, 2007); therefore, what we know about reality is only through representations (Denzin & Lincoln, 2011). From this perspective, Denzin and Lincoln, therefore define interpretist qualitative research as an aesthetic experience through which multiple interpretive practices emerge in the process rather than being planned.

The aims of Interpretist research are to communicate understandings developed by researchers through observing and recording the everyday life of the participants (Merriam, 1998; Patton, 2002). Reasons for selecting a qualitative approach can include a researcher’s stance, the nature of research questions, or practical reasons for the choice of particular methods of data collection (Cohen et al., 2013; Patton, 2002). The key concern of qualitative researchers is to understand a phenomenon from the participants’ perspectives and in the context in which it occurs (Merriam, 1998; Stake, 2013). The strength of qualitative research is its attempt to achieve a deeper, holistic understanding of the phenomenon being studied from an emic perspective (Best & Kahn, 1998).

The theoretical paradigm that informs the current study is pragmatism. The pragmatism philosophy links the paradigm – methodology – method continuum in a more flexible manner (Johnson & Onwuegbuzie, 2004). In the context of research application, researchers focus on being practical and allowing them to use multiple sources of data collection to answer their research questions. Pragmatism focuses on the nature of experience rather than the nature of reality, the outcome of action rather than the nature of truth, and social shared sets of beliefs rather than individual sources of beliefs (Morgan, 2007, 2014).

Researchers who adopt a pragmatic stance argue that paradigm differences are independent of, and therefore can be used in conjunction with one another to address a research question (Johnson & Onwuegbuzie, 2004; Morgan, 2007). According to

Morgan (2007), pragmatists stress the creation of knowledge “through lines of action [that] point to the kinds of ‘joint actions’ or ‘projects’ that different people or groups can accomplish together” (p. 72). Wheeldon (2010) summarizes this view:

Instead of relying on deductive reasoning and general premises to reach specific conclusions, or inductive approaches that seek general conclusions based on specific premises, pragmatism allows for a more flexible abductive approach. By focusing on solving practical problems, the debate about the existence of objective “truth,” or the value of subjective perceptions, can be usefully sidestepped. As such, pragmatists have no problem with asserting both that there is a single “real world” and that all individuals have their own unique interpretations of that world (p. 88).

With regard to epistemology, pragmatists believe that all knowledge is based on experience and is social knowledge (Morgan, 2014). Each individual’s knowledge is unique depending on their own experience and that unique knowledge comes from socially shared experience. The pragmatic epistemological view is relevant to this study, which took the perspective that teachers’ perceptions of the importance of self-efficacy, PD/TSGs, and the relationship between participation in PD and changes in perceived levels of teacher self-efficacy came from both their own experience and from interactions with other teachers.

The decision to favour pragmatism led to the selection of a mixed methods research approach. The mixed method research approach is now discussed.

3.3 Mixed Method Research

The concept of mixed methods research has been defined in a number of ways. Johnson et al. (2007) define mixed methods research as “an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research)” (p. 113). Mixed methods research is also described as an approach to complement the strengths of quantitative and qualitative approaches because these “both approaches may provide stronger evidence for a conclusion” (Johnson & Onwuegbuzie, 2004, p. 21).

Mixed methods research bridges the quantitative and qualitative conflicting approaches in educational research. Therefore, mixed methods researchers reject any forced choice between quantitative and qualitative (Johnson et al., 2007; Sharp et al., 2011). They consider specific decisions regarding the use of mixed, qualitative and quantitative approaches and methods, which depend on the nature of the research question and the nature of each stage of the research cycle, and avoid the use of metaphysical concepts such as truth and reality (Johnson et al., 2007; Keown, 2009). Not only do mixed methods researchers acknowledge quantitative as well as qualitative approaches having a valuable contribution to make to research, they actively seek to utilise and integrate both (Van Griensven, Moore, & Hall, 2014). Johnson et al. (2007) further justify the use of mixed methods research,

...in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) (p. 123).

A central feature of mixed methods research is the fact that the research question drives the entire study (Greene, 2008; Onwuegbuzie & Leech, 2006). Researchers are therefore advised to ensure they are clear about the question they wish to address, and that they also formulate separate questions for the individual qualitative and quantitative segments (Creswell & Plano Clark, 2011; Abbas Tashakkori & Teddlie, 2010). The next section discusses the type of mixed methods research design employed in this study.

3.3.1 Mixed Methods Design

Creswell, et al. (2003) and Ivankova, Creswell, and Stick (2006) highlight three key issues to be considered in designing a mixed methods study: priority, implementation, and integration. Priority refers to “which approach, quantitative or qualitative (or both), a researcher gives more weight or attention throughout the data collection and analysis process in the study” (Ivankova et al., 2006, p. 9). The current study placed both quantitative and qualitative data equally because the purpose was to not only identify, but also to understand the relationship between teachers’ participation in PD and

changes in perceived levels of their self-efficacy. The quantitative data helped to find out changes in perceived levels of teacher self-efficacy in the areas of instructional strategy, classroom management, and student engagement. The qualitative data helped to find out EFL teachers' perceptions of the importance of self-efficacy, characteristics of good quality PD, and the relationship between PD/TSGs activities and teacher self-efficacy.

Implementation refers to whether the quantitative and qualitative data collection and analysis come in sequence (one following another), or concurrently (at the same time) (Creswell et al., 2003). This study adopts "convergent parallel design" (Creswell & Plano Clark, 2011, p. 69) where the researcher collects qualitative and quantitative data at the same time during the study and then integrates the information in the interpretation of the overall results. Creswell (2013) and Morse (1991) mentioned the purpose of the convergent design is to obtain different but complementary data in one study or on the same topic to best understand the research problem.

Integration refers to the stages in the research process where the quantitative and qualitative strands are mixed (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010). At this point, findings from both the quantitative and qualitative data are "integrated to ascertain whether commonalities or differences exist to further enhance the understanding of the topic" (Badiozaman, 2012, p. 64). In the present study, the researcher integrated the results during the overall interpretation in the discussion chapter. Figure 3.2 provides a visual model of the convergent parallel investigative procedures for the present study.

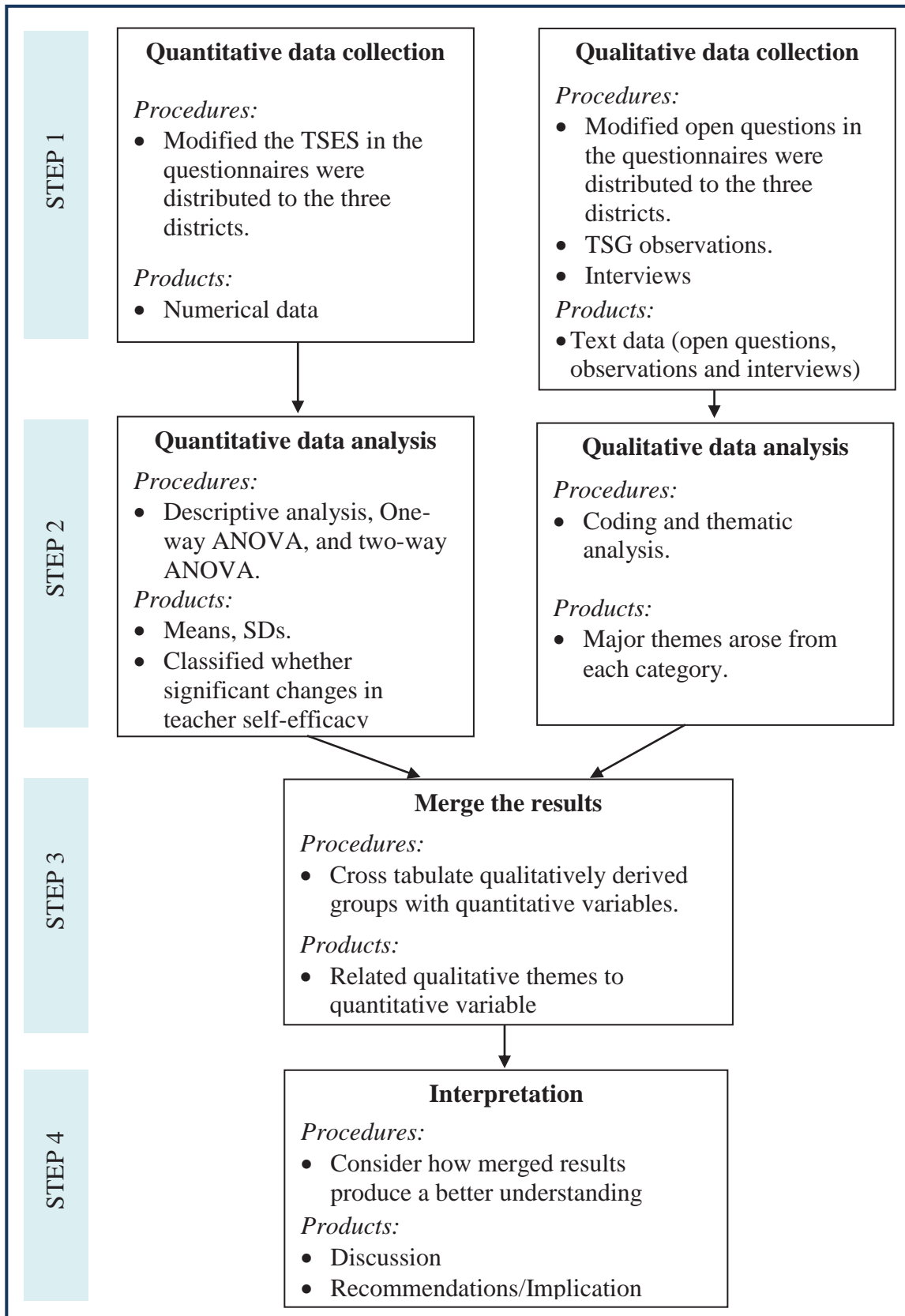


Figure 3.2 Visual Model for the convergent parallel design. Adapted from Creswell and Plano Clark (2011, p. 79).

As indicated in Figure 3.2, there are four major steps in the convergent design. First, both quantitative and qualitative data about the topic of interest were collected. The quantitative and qualitative data were collected concurrently but separately, that is “one does not depend on the results of the other (Creswell & Plano Clark, 2011, p. 78). Second, the two types of data were analysed separately and independently from each other using typical quantitative and qualitative procedures. In the third step, the results of the two data sets were merged and included comparing the separate results or transforming them. In the final stage, as Creswell and Plano Clark (2011) suggest, “the researcher interprets to what extent and in what ways the two data sets of results converge, diverge ... combine to create a better understanding in response to the study’s overall purpose” (p. 78).

The next section discusses the justification of using the mixed methods research in this study.

3.3.2 Justification of using mixed method research

After careful consideration of the methodological approaches discussed above, the researcher positioned this study within the pragmatic paradigm, using mixed methods research approaches.

There are three reasons for using mixed methods research for this study. First, to meet the aims of the research. The aims of this study are to investigate EFL teachers’ perceptions of characteristics of good quality PD, and the relationship between teachers’ participation in PD and TSGs, and changes in perceived levels of their self-efficacy. In order to meet these aims, different approaches were required. Quantitative means were appropriate to systematically investigate changes in perceived level of teacher self-efficacy in the areas of instructional strategy, classroom management, and student engagement. The quantitative approach allowed for an investigation of the relationship between PD activities and teacher self-efficacy in these three areas. On the other hand, in order to explore and understand how teachers perceive the characteristics of good quality PD, and the relationship between participation in PD and TSGs and teachers’ self-efficacy, an in-depth explanation is needed. Qualitative data could reveal the types

of explanation that teachers offered in relation to characteristics of good quality PD, and the relationship between participation in PD and TSGs and teacher self-efficacy. Thus, the qualitative approach ensured that data was interpreted meaningfully. In this sense, the complementary function of a mixed method approach allowed the researcher to see “elaboration, enhancement, illustration, and clarification of the result of one method with results from the other method” (Johnson & Christensen, 2008, p. 451).

Second, a mixed method approach to sample selection shaped the researcher’s conceptions of generalizability and how the findings can be applied when reporting study results. Careful selection of sites is no trivial matter and this choice is often governed by whether the researcher wants to generalize results to a larger population (in which case random sampling is often used) or desires to learn more about a specific setting or phenomenon (in which case purposive sampling strategies are often used) (Onwuegbuzie & Leech, 2007; Sharp et al., 2011). Tashakkori and Teddlie (2010) claim that mixed methods researchers often switch between different types of generalizability (i.e. generalizing results to a theoretical population and generalizing results to another specific setting).

Last, previous studies that tried to investigate the relationship between PD activities and teacher self-efficacy were conducted using either a quantitative design or a qualitative design. While large scale quantitative studies allow generalisation of the findings, the method is not designed for in-depth understanding of a phenomenon (Johnson & Christensen, 2008), such as the understanding of teachers’ perceptions of self-efficacy and PD activities. In contrast, although qualitative methods provide information relevant to an in-depth understanding of the phenomenon under investigation (Denzin & Lincoln, 2011; Simons, 2009), they cannot be generalised to other people or settings (Johnson & Christensen, 2008). The mixture of qualitative and quantitative approaches and their underlying philosophies is a central feature of mixed methods research, where there is a need to generalize research findings (Simons, 2009). Therefore, the current study employed a mixed method research that integrated quantitative and qualitative approaches to improve the potential for generalization of the findings.

3.4 Research Procedure

Prior to data collection, full ethics approval was obtained from the Massey University Human Ethics Committee (MUHEC) in June 2013 (see Appendix A). The study involved four phases of data collection (see Figure 3.3). Data for phases one and four were collected using the questionnaires. Data for phase two were collected using TSG observations, and the data in phase three came from individual semi-structured interviews. Discussion about the details of the data gathering tools in each of the phases is presented in Section 3.5. The following diagram outlines the data collection procedure.

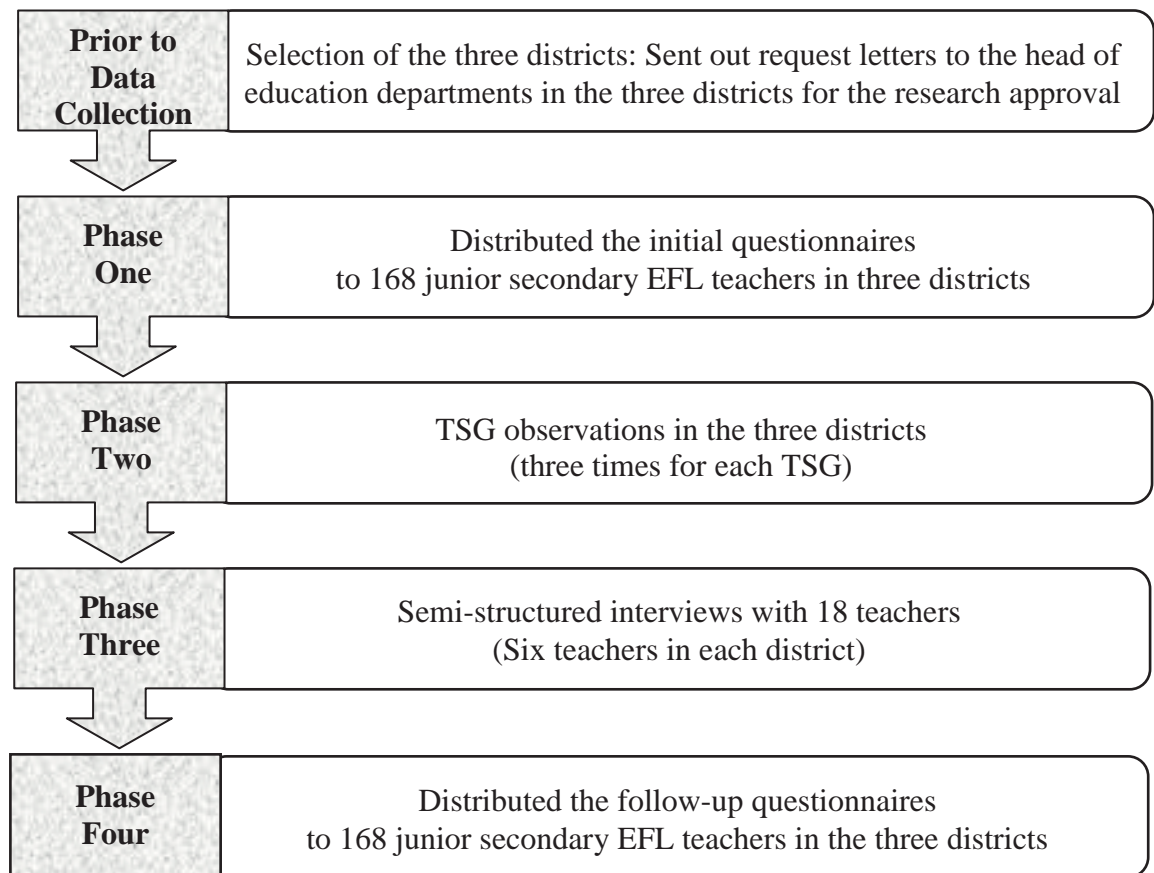


Figure 3.3 Data collection procedure.

3.5 Site Selection and Research Participants

This section discusses the identification and selection of the sites and teachers who participated in the present study.

3.5.1 Site selection

This research was conducted in three districts, two districts in rural areas and one district in an urban area. After gaining ethical consent from Massey University, letters were sent to the education departments (see Appendix B) in the three districts to explain the research plan and to get research approval. The researcher especially selected the three districts that were “likely to be information-rich” (Gall, Gall, & Borg, 2005, p. 310).

All the three districts were purposefully selected from among a list of potential districts using predetermined criteria. First, the researcher selected two districts located in rural areas and one district located in an urban area because most of the districts in South Sulawesi province were located in rural areas. In this case, the representation of the type of districts was taken into account. Second, these three districts had regular English language TSG meetings every month. This was important as one of the investigative tools in this study was TSG observations.

Another reason is that the three districts had a significant number of junior secondary EFL teachers who had been involved in PD activities. This criterion aimed to ensure that the researcher could obtain significant data relevant to the research aims and research questions. Finally, these districts were selected because they were convenient samplings, and the researcher was located near the districts. Fink (2012) defines convenience sampling as sampling where participants are available and willing to take part in a study. In this case, the researcher took into account the time constraints in conducting research and the considerable size of the districts. These three districts are located within a reasonable distance of each other.

3.5.2 Research participants

As indicated in Figure 3.1, this study involved four phases of data collection. The participants, including the selection process, in each of the four phases are discussed below.

3.5.2.1 Participants for the initial and follow-up questionnaires

The participants for the initial questionnaires and the follow-up questionnaires consisted of the entire population of junior secondary English language teachers (around 168 teachers) in the three districts. After getting positive responses from the education department, the researcher sent the initial questionnaires together with the information sheets to all EFL teachers in the three target areas. The information sheets explained the research plans and asked for volunteers for taking part in the research. The teachers were informed of the objectives and benefits of the research and that their confidentiality was assured. Participants' consent was implied when they sent the questionnaire back.

The rationale for targeting all EFL teachers in the questionnaires is to ensure that the results obtained are as generalizable as possible for the three areas. To encourage the participants to be involved in this study, they were informed of the objectives and benefits of the research. The participants were asked to write down their name on the questionnaires to enable the researcher to identify the participants' questionnaires. This also was done enable the researcher to investigate the perceived level of teachers' self-efficacy at the beginning and end of the research, and changes in teacher self-efficacy. A pseudonym for participants was used throughout the study by administering a numerical code to replace their actual names. This numerical code provided the participants with confidentiality. The participants' code number was only known to the researcher. All participants were given information regarding their voluntary involvement and informed consent.

Any additional information that the participants needed concerning the study was explained further, either face to face, by phone or through email. Participants were

assured that none of the information from this study would be used for evaluative purposes, and all information would be kept confidential.

As indicated above, the initial questionnaire and the follow-up questionnaires were distributed to 168 junior secondary EFL teachers in these three districts. Of the 168 questionnaires sent out, 121 (72%) of the initial questionnaires were returned and 107 (63.7%) of the follow-up questionnaires. From 121 responses to the initial questionnaires and 107 responses to the follow-up questionnaires, there were 104 respondents who returned both questionnaires. Therefore, the 104 teachers who responded to both the initial and the follow-up questionnaires were the participants for the questionnaires. Detailed information about the research participants of the questionnaires in regards to their teaching experience, gender and teaching locations is provided in Chapter 4 (see Table 4.1).

3.5.2.2 Selection of TSG for observations

O’Leary (2009) suggests it is worth keeping in mind that a prerequisite to all case selection should be access. It is absolutely essential that researchers who wish to delve into cases will be able to reach the required people and data. O’Leary further suggests that when a researcher decides to use non-random samples, he or she should bear in mind that selection is done with the goal of representativeness, and strategies are used to ensure samples match population characteristics. For these considerations, purposive sampling was used to identify three TSGs within the population that met the specific criteria and could be accessed. The criteria for the selection included: 1) TSGs which had active meetings at least once a month; 2) TSGs which were willing to participate in this study; and 3) TSGs that were different from each other in term of geographical location (i.e. rural or urban). The decision to include TSGs that were different from each other in this way also was applied to make data more varied and the study results applicable to other similar contexts or settings.

Prior to the TSG observations, the researcher did coordination with each TSG coordinator and explained the intention to observe the TSGs. The researcher informed the coordinators of the objectives and benefits of the research and that the TSG

participants' confidentiality was ensured. After getting approval from the TSG coordinators, the researcher attended the TSG meetings and informed to the TSG's members who followed the meetings of the objectives and benefits of the research. This enabled the participants to gain an understanding of the purpose of observations was to learn how TSGs are conducted and there was not intent to evaluate their TSGs. This was followed up with the information sheet (see Appendix D) and the consent forms which were given to the participants who attended the TSGs and were asked to sign. The participants could attend the TSG meetings without signing the consent form if they did not want. The participants' signatures were kept confidential as it was only be used for this study purposes and not for release.

3.5.2.3 Selection of interview participants

To find out more in-depth details and to triangulate the data from both the questionnaires and TSGs observations, six teachers from each of the TSGs (N = 18) were interviewed. The reason to choose six participants in each TSG was to ensure that the participants who were interviewed included: 1) teachers who taught in different schools (state schools and private schools), and 2) a mix between very experienced teachers (more than 15-year teaching experiences), experienced teachers (between 6 - 15 years of teaching experiences) and novice teachers (less than 6-year teaching experiences). The consideration in applying the two criteria above was to gain broader viewpoints from the participants about self-efficacy, PD/TSGs and the effect of PD/TSGs on teacher self-efficacy.

All junior secondary English language teachers who were involved in the TSG meetings during the study process became potential participants for interviews. The researcher contacted them in person to see if they were willing to be interviewed. The purposes and benefits of the study, including the reason of conducting the interviews were explained to them. Although all the interviewees filled out the questionnaires indicating their willingness to participate in this study, they were still asked to sign informed consent to make sure they agreed to take part in the interviews (see Appendix F).

Detailed information about the research participants of the interviews in regards to their teaching experience, gender and geographical locations is provided in Chapter 5 (see Table 5.3).

3.6 Data Gathering Tools

This section explains and justifies the investigative tools that the researcher used. As this research employed a mixed method research approach, various forms of data collection were used. The investigative tools that the researcher utilized in this study included questionnaires, TSG observations, and semi-structured interviews. Using different tools allowed the researcher to gather rich data about the participating teachers' perceptions of the importance of self-efficacy, PD and TSGs, and the relationship between participation in PD and TSGs to changes in perceived levels of teacher self-efficacy. These multiple sources of data also provided triangulation that contributed to the trustworthiness and validity of the study (Glesne & Peshkin, 1992; Maxwell, 2012). All the questions in the questionnaires and the interviews were in Bahasa (Indonesian language) to reduce any misinterpretation by the participants. Below is the discussion of each of the investigative tools.

3.6.1 Questionnaires

A questionnaire is a self-report instrument useful for economically and speedily obtaining data from a large number of respondents (Brown, 2001). According to Wisker (2007), questionnaires gather information directly by asking people questions and using them as data for analysis. A questionnaire-based survey in this study context was used to easily obtain information from a large number of participants in order to investigate perceptions and changes in teachers' self-efficacy and their perceptions of the importance of self-efficacy, characteristics of good quality PD, and the relationship between participation in PD/TSGs and their self-efficacy (see Appendix H).

The six-page questionnaire used for this study was divided into three separate parts. Part A (demographic data) was used to gather teachers' demographic information, including

their gender, location of school, and years of teaching experience. Data gained from this section were used to analyse if there were any relationships between the level of teachers' self-efficacy and length of teaching experience, gender, and teaching location.

Part B employed a Teacher Sense of Efficacy Scale (TSES). The TSES by Tschannen-Moran and Hoy (2001) that consist of 12 items was adapted and administered for this study. In the current study, the 12 items were modified to suit the study context, namely teaching of English as a foreign language in Indonesia by substituting 'To what extent' or 'How much' with 'How well' in all items, and adding 'English language' in all items (see Table 4.5 for all individual items). The TSES required the participants to rate each of the 12 statements on a given five point scale, ranging from "Strongly disagree" to "Strongly Agree". The TSES consists of three subscales: (a) efficacy for instructional strategies, (b) efficacy for classroom management, and (c) efficacy for student engagement. An example of efficacy for instructional strategies is: "How well can you implement alternative teaching strategies in your English class?" An example of efficacy for classroom management is: "How well are you able to prevent disruptive behaviour during English language class?" And an example of efficacy for student engagement is: "How well are you able to help students who have difficulties in English language?" The TSES was employed because it is a well-known and researched instrument for teacher efficacy and covers a wide range of teacher activities that determine success in the classroom (Tschannen-Moran & Hoy, 2001). In addition, the TSES has a high reliability rate in previous research (Hoy & Spero, 2005), with .86 reliability for the subscales and .90 for the full scale (Tschannen-Moran & Hoy, 2001).

The TSES was designed to measure teacher self-efficacy across multiple grade levels and teaching contexts by addressing a wide range of teaching tasks that teachers believe are necessary for classroom practice (Tschannen-Moran & Hoy, 2001). The 12 items have been used by other researchers (e.g. Karimi, 2011; Murshidi, Konting, Elias, & Fooi, 2006; Ross & Bruce, 2007). Ross and Bruce (2007), for example, used the 12 items with Mathematics teachers in the province of Ontario, Canada to measure teacher self-efficacy with success.

Part C comprised of 10 items consisting of closed questions and open-ended questions. The questions in part C were employed to find out the participants' perceptions of the importance of self-efficacy, characteristics of good quality PD, and the relationship between participation in PD/TSGs and changes in perceived levels of their self-efficacy (see Appendix H, Part C). Closed questions required the participants to tick their choices or to rate each statement on a given five point scale, ranging from 'Strongly disagree' to 'Strongly Agree'. The example of closed questions: "Please indicate the quality of the following types of professional development you have participated in?"

In terms of the open-ended questions in this study, Mertens (2005) explained the value of them for the purpose of getting "balanced view of all perspectives, values, and beliefs of the participants" (p. 257). The researcher found it necessary to include open-ended questions in the questionnaires to elicit each teacher's perceptions of the topic being investigated. The example of items in relation to self-efficacy: "In your opinion, why is self-efficacy important for English language teachers?" An example of items in relation to the effect of TSGs on teacher self-efficacy: "In your opinion, does the teacher study group help you to enhance your self-efficacy?" At the end of the questionnaire (open-questions), participants were asked to add any further comments or suggestions they had regarding PD/TSG activities or other aspects in their area.

3.6.1.1 Questionnaire pilot

Prior to data collection in Phase One, the questionnaire was piloted with four secondary EFL teachers (three females and one male) who were studying in two universities in New Zealand. A pilot study, as Van Teijlingen and Hundley (2002) indicate, is important to ensure that the instrument is appropriate to be used to collect data for a particular study or research project. For this study context, the pilot study was done to ensure that the questions in the questionnaires were easy to understand by the participants and had content validity.

Potential participants for the pilot study were identified in coordination with the Indonesian Students Association, both in Wellington and Palmerston North. An Information Sheet and Participation Consent Form were sent to them. A time and place

to conduct the pilot was set that was mutually convenient. The average time to complete the questionnaires was 30-45 minutes. Suggestions from the pilot participants were sought and used to develop the final version.

3.6.1.2 Administration of questionnaires

Permission to access junior secondary EFL teachers was obtained from the head of the education department in the three districts (see Appendix B). School names and addresses of the participants were given by the education department staff. The questionnaires that were sent to the participants were accompanied by an information sheet. The information sheet provided information about the researcher, the research purposes, and the confidentiality commitment (see Appendix C).

The initial questionnaires were distributed during the first month of data collection (on 15 - 16 August 2013), while the follow-up questionnaires were distributed during the last month of data collection (on 10 - 11 January 2014). Potential participants were provided with a stamped, pre-addressed envelope to send the completed questionnaires back to the researcher. The initial questionnaires were distributed by post, while the follow-up questionnaires were distributed by post and through email. To be noted, at the end of the initial questionnaires, the participants were asked to provide their email address if they would prefer to get the follow-up questionnaires via email (some of the participants provided their email address).

Recognising that there is not specific or particular word to differentiate between self-efficacy (i.e. a judgement about task capability that is specific to a particular task) and self-confidence (i.e. a general concept of self) in the Indonesian language, I provided the participants with a definition of self-efficacy by writing it in the questionnaires (see Appendix H) and clarified it again at the beginning of the interviews. This was done to minimize the potential misconception or misunderstanding of the meaning of self-efficacy and the role played by self-efficacy itself in relation to the teachers' teaching activities.

3.6.2 TSG Observations

According to Gebhard (1999), an observation is a non-judgemental description of events which can be analysed and given interpretation. Observation is one of the primary sources of data in qualitative method and this tool is worth using as it “represents a first-hand encounter with the phenomenon of interest rather than a second-hand account of the world obtain in an interview” (Merriam, 1998, p. 94). Hendricks (2012) suggests that observations need to be planned in terms of how the observations are going to take place and what is going to be observed. He further suggests that observation techniques need to be flexible so that they are able to cope with the unexpected. Observation is a necessary stage because with the observation and recording techniques lie the foundations for the critical stage of research (Hutton, 2008).

The purpose of observations in this study context was to observe the process in the three TSGs to allow a means of understanding what, when, and how teachers conducted the TSGs and comparing reported practice to what actually happened. This is related to what Hendricks (2012) mentions, in that observations can provide useful information about reality. Observing the three TSGs directly was important as a process of “...watching and listening to what people do rather than asking them directly” (Silverman, 2009, p. 230). Thus, the TSG observations allowed the researcher to get data through the TSG observations which provided opportunities to build a complex picture about the TSG processes. This means that the data from the TSG observations were useful to double-check what the participants said in the interviews about TSGs and how they conducted TSGs meetings. Using the TSG observations were also forms of data triangulation with the questionnaires and interviews.

This study involved non-participant observation of some TSG meetings conducted by the participants in each of the three TSGs using a loosely structured observation protocol (see Appendix J). The protocol had a list of three key aspects that were considered useful for the present study. The aspects of interest were: (i) specific learning objectives and activities planned for TSG meeting; (ii) preparing and organizing the TGS, and (iii) TSG meeting activities (i.e. content focus, active learning, collaborative participation, and feedback on practice). These three aspects also linked to

some of the areas that were included in the open-ended questions in the questionnaires and interviews questions. A ‘TSG Observation Sheet’ (see Appendix J) was used to take notes during the observations.

In each TSG, three observations were carried out within a four-month period starting from 20th September 2013 to 7th December 2013. Each TSG was observed three times and the observation process was between 60 and 90 minutes. The researcher sat at the back of the meeting room, making no attempt to interact with (or influence) the participants during the TSG meeting process. Written field notes were taken during the observations, and were edited immediately afterwards to provide an electronic record of the observations.

Besides formal observations during the TGS meetings, the researcher also informally talked to the participants before and after the TSG meetings. This helped to familiarize the researcher with the participants and help them to become comfortable with researcher presence. The detailed discussion of the type, time, topic and number of participants is presented in Chapter Five (see Section 5.2.2).

3.6.3 Semi-structured Interviews

The third investigative tool that was used in this study was interviews. Interviews are essential sources in qualitative study because well informed interviewees can provide important insights into the process under study (Yin, 2009). Interviews also are necessary in qualitative study as it enables the researcher to enter into the participants’ perspective and experiences, and make sense of their world (Hatch, 2002; Patton, 2002).

Because of their interactive nature, interviews have many advantages over other types of data collection strategies (Best & Kahn, 1998). Interviews can obtain unique information or interpretation held by the person interviewed. They are particularly useful to ascertain participants’ views, feelings, perceptions, and retrospective accounts of events (Rossman & Rallis, 2011), since these cannot be directly observed (Merriam, 2009; Patton, 2002). Bogdan and Biklen (2003) further indicate that “good interviews produce rich data filled with words that reveal the respondents’ perspectives” (p. 104).

Of the three types of interviews: structured, semi-structured, and unstructured (Fontana & Frey, 2005), this study employed semi structured interviews because these allowed the researcher to control the direction of the interviews and to have more opportunities to acquire extensive follow-up responses (Bogdan & Biklen, 2003; McDonough & McDonough, 2014). Semi-structured-interviews allowed more sufficient flexibility for the researcher to uncover the different perspectives of participants than structured interviews. Thus, semi-structured interviews allowed for flexibility while also providing “comparable data across subjects” (Bogdan & Biklen, 2003, p. 104).

A semi-structured interview usually begins with open-ended questions followed by prompts and probes (Bogdan & Biklen, 2003; Gillham, 2005). In the current study, the semi-structured interviews were carried out in Bahasa Indonesia employed open-ended questions that were organized into three categories: characteristics of good quality PD, the relationship between participation in PD/TSGs and teacher self-efficacy, and teachers’ perception of the importance of self-efficacy on their teaching practice (see Appendix I). The use of the three categories helped the researcher to find out details of the participants’ perceptions and experiences about PD and TSG activities. These categories also allowed the researcher to investigate the relationship between participation in PD/TSGs and their self-efficacy, and their perceptions of the effect of self-efficacy on their teaching practice. These three categories are related to the questions in the open-ended questions in the questionnaires. This was done to double-check and expand on what the participants’ stated in the questionnaires and what they informed of in the semi-structured interviews.

3.6.3.1 Semi-structured interview pilot

The pilot for the semi-structured interviews was conducted with three senior secondary EFL teachers in District A. All three teachers were not involved as participants in this study. Information Sheets and Participation Consent Forms were given to them. A time and place to conduct the pilot was set that was mutually convenient. Each teacher was asked for permission to record the interviews to get a picture of the recording procedure and the length of the interview process. Each teacher was asked for suggestion/advice in

relation to the questions in the interviews. The feedback was used to develop the questions in the final interview protocol.

3.6.3.2 Conducting semi-structured interviews

The interviews were conducted from 10th December 2013 to 24th December 2013. The main questions that were asked in the interviews were given to the participants a week before the actual interviews. This enabled the participants to have sufficient time to read and understand the questions, which were written in Bahasa Indonesia.

Prior to the interviews, the participants were once again informed about the study and their rights as participants, in addition to the earlier written information. Once agreed, they were invited to sign the Consent Form (see Appendix F). As all interviews were audio recorded, the participants were also reminded about the recording and their right to stop it at any time. In addition to audio recording, the researcher also took notes during the interviews to highlight some important points made by participants.

All the participants were interviewed once. They were interviewed individually at times and venues convenient to them. They could choose to be interviewed in English or Bahasa (Indonesian language) to provide them choice of expressing their ideas. All the participants chose to be interviewed in Bahasa. The interview questions focused on teacher self-efficacy, PD/TSGs, and the effect of PD/TSGs on teacher self-efficacy (see Appendix I). In particular, participants were asked about PD/TSG activities they attended, and their perceptions of the effects of these activities on their self-efficacy and their practice. In addition, although there were some predetermined questions, the researcher could still probe and follow up on unanticipated comments from participants (Seidman, 2006). Each interviews lasted no more than one hour.

Once an interview was transcribed, the transcript was returned to each participant for member checking which allowed them an opportunity to read through their transcriptions before and after the researcher translated them into English. Participant checking is important as a way to avoid any misunderstanding or misinterpretation of the participants' words (Mertens, 2005). All participants accepted and agreed to the

transcription and did not request any changes. A summary of the interview process can be seen in Appendix K.

3.7 Data Analysis

The data sources in this study consisted of two types, quantitative and qualitative data. The quantitative data were gained from closed questions in the questionnaires, while the qualitative data was gained from open-ended questions in the questionnaires, TSG observations, and semi-structured interviews. The quantitative and qualitative data were analysed separately. Below is the discussion about each stage of the data analysis.

3.7.1 Quantitative data analysis

The quantitative data (i.e. responses to scales and multiple choice questions) in the initial questionnaires and the follow-up questionnaires were transferred and analysed using the computer software Statistical Package for Social Sciences (SPSS). Descriptive statistics, such as means and standard deviations, were used to describe the data that had been collected from the participants. An analysis of variance (one-way ANOVA) was used to investigate changes and perceived levels of EFL teachers' self-efficacy in the TSES subscales, and based on their attendance in TSGs. If one-way ANOVA showed differences of perceived levels and changes in teacher self-efficacy, a post hoc test was then performed to identify the group that was significantly different.

Finally, two-way ANOVA analysis were conducted to investigate the interaction between the level of participation in TSGs and teaching experience, between the level of participation in TSGs and gender, and between the level of participation in TSGs and geographical location.

3.7.2 Qualitative data analysis

Bogdan and Biklen (2003) mention that data analysis in qualitative research involves the process of “systematically searching and arranging interview transcripts, field notes

and other materials” (p. 147) that the researcher uses to come up with the findings. In order to investigate teachers’ perceptions of good quality PD, and the relationship between teachers’ participation in PD (TSGs) and teachers’ self-efficacy, thematic analysis was used in the present study. Thematic analysis is a search for themes that emerge as being important to the description of the phenomenon (Daly, Kellehear, & Gliksman, 1997). The process involves the identification of themes through “careful reading and re-reading of the data” (Rice & Ezzy, 1999). It is a form of pattern recognition within the data, where emerging themes become the categories for analysis.

The method of thematic analysis chosen for this study incorporated both inductive approaches and deductive approaches (Boyatzis, 1998). These approaches complemented the research questions by allowing the themes emerged from elements of theory (the theory-driven approach) while also allowing for themes to emerge directly from the data using inductive coding. The coding process involved recognizing (seeing) important points/aspects and encoding them prior to the process of interpretation (Boyatzis, 1998). Boyatzis states that a “good code” is one that captures the qualitative richness of the phenomenon (p. 1) and organizes the data to identify and develop themes. Boyatzis defines a theme as “a pattern in the information that at minimum describes and organizes the possible observations and at maximum interprets aspects of the phenomenon” (p. 161).

The data from open-ended responses, semi-structured interviews transcriptions, and observation notes were entered into the NVivo 10 data management program, and a comprehensive process of data coding and identification of themes was undertaken. Although presented as a linear, step-by-step procedure, the research analysis was an iterative and reflexive process. This interactivity, applied throughout the process of qualitative inquiry, is described by Tobin and Begley (Tobin & Begley, 2004) as the overarching principle of ‘goodness’. The data collection and analysis stages in this study were undertaken concurrently, and I reread the previous stages of the process before undertaking further analysis to ensure that the developing themes were grounded in the original data. The primary objective for data collection was to represent the subjective viewpoint of the participants who shared their experiences and perceptions

about PD, TSGs, and teacher self-efficacy. The process of coding is described as a systematic, step-by-step process as follows:

Stage 1: Developing the code manual

The choice of a code manual for this study was important because it served as a data management tool for organizing segments of similar or related text to assist in interpretation (Crabtree & Miller, 1999). For this study, codes were written with reference to Boyatzis (1998, p. 31) and identified by:

- a. the code label (i.e., a name);
- b. the definition of what the theme concerns (i.e., the characteristic or issue constituting the theme); and
- c. a description of how to know when the theme occurs.

Stage 2: Summarizing data and identifying initial themes

The process of paraphrasing or summarizing each piece of data enters information “into your unconscious, as well as consciously processing the information” (Boyatzis, 1998, p. 45). This process involves reading, listening to, and summarizing the raw data. I used this technique as a first step when analyzing data from open-ended responses, semi-structured interviews transcriptions, and observation notes. I summarized the data separately by outlining the key points made by participants in response to the questions asked. The summary for each data source reflected the initial processing of the information and provided the opportunity to make sense and takes note of potential themes in the raw data.

Stage 3: Connecting the codes and identifying themes

Connecting codes is the process of discovering themes and patterns in the data (Crabtree & Miller, 1999). The process of connecting the codes and identifying themes across the three sets of data in this study were clustered under headings that were directly related to the topics (i.e. self-efficacy, PD, TSGs, and the impact of PD (TSGs) on teacher self-efficacy). Similarities and differences between separate groups of data were emerging at

this stage, indicating areas of consensus in response to the topics and areas of potential conflict. Themes within each data group were also beginning to cluster, with differences identified between the responses of the participants with varying demographics; for example, differences were expressed by the teachers who attended the TSGs very frequently and those who never attended the TSGs, or between very experienced teachers and novice teachers.

Stage 4: Corroborating and legitimating coded themes

The final stage illustrates the process of further clustering the themes that were previously identified from the coded text. “Corroborating” is a term used to describe the process of confirming the findings (Crabtree & Miller, 1999, p. 170). At this stage, the previous stages were closely scrutinized to ensure that the clustered themes were representative of the initial data analysis and assigned codes. The interaction of text, codes, and themes in this study involved several iterations before the analysis proceeded to an interpretive phase in which the themes were connected into an explanatory framework consistent with the data. The themes were then further clustered and were assigned succinct phrases to describe the meaning that underpinned the themes.

3.8 Research Quality of the Study

Definitions of research quality have evolved over the years and differ for quantitative and qualitative research. Debates in both areas continue to explore what validity means and how it is determined. Presently, quantitative and qualitative researchers tend to treat issues of research quality differently, even though terms used by both may be similar in name and/or function (Dellinger & Leech, 2007). For quantitative research, an early definition of validity was offered by Garrett (1937 as cited in Osterlind, 2006, p. 93) as “the extent to which it [scores] measures what it purports to measure”. For qualitative research, some researchers argue that validity and reliability is based upon trustworthiness (Lincoln & Guba, 1998; Schwandt, Lincoln, & Guba, 2007). Trustworthiness constitutes four key elements: credibility, transferability, dependability, and confirmability (Lincoln, Lynham, & Guba, 2011).

The concept of validity has been addressed sparingly in the mixed methods literature. Unfortunately, it has not been thoroughly discussed or widely considered (Onwuegbuzie & Johnson, 2006). Early treatments of research quality for mixed methods studies tended to assess the quantitative and qualitative parts of studies separately (Krathwohl, 1993; Newman & Benz, 1998). Since then, there have been attempts to address validity issues related to the separate parts of a mixed methods study as well as the validity issues arising from the mixing of methods in a study (Onwuegbuzie & Johnson, 2006).

Onwuegbuzie and Johnson (2006) argue that because mixed methods research involves combining complementary strengths and non-overlapping weaknesses of quantitative and qualitative research, assessing the validity of findings is particularly complex. They recommend that validity in mixed research “be termed legitimation in order to use a bilingual nomenclature” (p. 51). Similar ideas are offered by Teddlie and Tashakkori (2003) who state that mixed methods researchers “should adopt a common nomenclature transcending the separate QUAL and QUAN orientations when the described processes (QUAL and QUAN) are highly similar and when appropriate terminology exists” (p. 12). Moreover, legitimation in mixed research should be seen as a continuous process rather than as a fixed attribute of a specific research study.

A typology of mixed methods legitimation was offered by Onwuegbuzie and Johnson (2006). Onwuegbuzie and Johnson’s model focuses on how well a researcher has integrated or blended the various design and inference aspects of a mixed methods study, therefore specifically addressing the validity of the qualitative and quantitative segments of a mixed methods study with multiple validities legitimation. The model by Onwuegbuzie and Johnson provides meaningful criteria for assessing issues associated with mixed methods research and the inferences associated with that research.

The types of legitimation for my study involve five aspects: sample integration legitimation, inside-outside legitimation, strength maximization/weakness minimization legitimation, paradigmatic mixing legitimation, and multiple validities legitimation (Onwuegbuzie & Johnson, 2006).

Sample integration legitimation

This refers to the degree to which a mixed methods researcher makes appropriate conclusions, generalizations, and meta-inferences from mixed samples (combination of quantitative and qualitative samples). This legitimation type applies to situations in which a researcher wants to make statistical generalizations from the sample participants to a larger target population (Onwuegbuzie & Johnson, 2006). For the current study, a concurrent parallel design was employed in which inferences made from quantitative data yielded by large purposive samples were integrated with inferences made from qualitative data arising from a smaller subset of these samples.

Inside-outside legitimation

This refers to the extent to which the researcher accurately understands, uses, and presents the participants' subjective insider views (emic) and the researcher's objective outsider view (etic). An important strategy for obtaining a justified insider viewpoint is member checking or participant review (i.e., have group members or participants assess the researcher's interpretations) (Onwuegbuzie & Johnson, 2006). For the current study, this legitimation type was built through member-checking by giving the participants the opportunity to confirm or challenge the transcriptions of what they had said. I also discussed the research findings with my supervisors and my PhD colleagues in the Institute of Education, Massey University to identify and resolve misinterpretation, unconvincing explanation, and research bias. In addition, I asked peers to review interview transcripts.

Strength maximization/Limitation minimization legitimation

This refers to the extent to which the weakness from one approach can be compensated by the strengths from the other approach. Mixed methods research is in the optimal position for maximizing this form of legitimation because the researcher is able systematically to design a study that combines two or more methods (Creswell & Plano Clark, 2011; Abbas Tashakkori & Teddlie, 2010). The current study employed both quantitative and qualitative data because the purpose was to not only identify, but also

to understand the relationship between teachers' participation in PD and changes in perceived levels of their self-efficacy (see Section 3.3 for more details).

Paradigmatic/philosophical legitimation

This refers to the degree to which the mixed methods researcher explains his or her mixed methods paradigm. Most popular paradigms or worldviews in mixed methods research are pragmatism, transformative, dialecticalism, and critical realism (Tashakkori & Teddlie, 2010). As has been explained in Section 3.2, the theoretical paradigm that informs the current study is pragmatism. The pragmatic epistemological view is applied in this study by realizing that the participants' perceptions of good quality PD (TSGs), and the relationship between teachers' participation in PD and changes in their perceived levels of self-efficacy came from both their own experiences and from interactions with other teachers.

Multiple validities legitimation

This refers to the extent to which all relevant research strategies are utilized and the research can be considered high on the multiple relevant validities. The key point is that the relevant mixed legitimation types are addressed and achieved, including in the integration phase. In addition, one should ask to what extent is the whole greater than the sum of its parts (Onwuegbuzie & Johnson, 2006).

3.9 Ethical Considerations

Ethics has to do with how one treats those individuals with whom one interacts and is involved and how the relationship formed may depart from some conception of an ideal...at more technical level, inquiry is supposed to increase knowledge...The inquiry has to be something worth doing (Smith, 1990).

Ethical considerations are integral to studies involving human participants. Prior to data collection, full ethics approval was obtained from the Massey University Human Ethics Committee: Southern B Application – 13/51 (see Appendix A). Mertens (2009) defines research ethics as “an integral part of research planning and implementation process” (p. 82

12). The researcher needs to consider any issues in relation to the research process because they may become a potential ethical problem (Cohen et al., 2013; Seidman, 2006). There were four main ethical considerations discussed in relation to the research: 1) informed and voluntary consent; 2) respect for privacy and confidentiality; 3) avoidance of conflict of interest; and 4) minimising the risk of harm.

3.9.1 Informed and voluntary consent

Informed consent is the bond of trust which is the foundation and the central stone to any research involving human subjects (Mandal & Parija, 2014). Informed consent is intended to protect participants' well-being throughout research by ensuring that they understand the nature, purpose and risks involved in the research (Mertens, 2009; Silverman, 2009). Therefore, researchers should provide full information, so the potential participants can make an informed decision to participate or not.

In dealing with the informed consent, the researcher provided full information of the research to the participants. In all four phases on this study, the researcher sent the request letter and information sheets to the participants (see Appendix D, Appendix F, and Appendix H). The request letter and information sheets clearly stated that teachers should not feel pressure to participate and could withdraw anytime from the study without any effect of their career. The researcher also provided contact details for the potential participants if they wanted to ask any questions or request more information concerning the research. In the case of the initial and follow-up questionnaires, EFL teachers' consent was automatically assumed when they returned the questionnaires. For the TSG observations and the semi-structured interviews, all participating EFL teachers completed consent forms which they returned to the researcher before the researcher began collecting data.

3.9.2 Respect for privacy and confidentiality

Wiersma and Jurs (2009) define confidentiality as “the researcher not disclosing the identity of the participants or indicating from whom the data were obtained” (p. 438).

Participants' confidentiality in this study was ensured by not disclosing their actual names in the questionnaires and the interviews, or the name of the three districts. The EFL teachers' identities were only known by the researcher.

All data was coded during the analysis and pseudonyms were used in writing up the final report. Data obtained from the participants were stored securely throughout the research process. The data were kept on the researcher's computer hard drive, and protected by a password. The consent forms were also stored in a locked filing cabinet separately from the data. As the researcher collected data in Indonesia, the consent forms were stored in the researcher's private office in Indonesia. Those transcribing audiotapes were required to sign an authority for release of transcripts (see Appendix K). In accordance with MUHEC regulations, all data including questionnaires documents, observational notes, audiotaped data, and interview transcripts will be deleted five years after completion of the doctoral study.

3.9.3 Avoidance of conflict of interest

Thompson (1993) defines a conflict of interest as "a set of conditions in which professional judgment concerning a primary interest tends to be unduly influenced by a secondary interest" (p.1). In Thompson's definition, the reference to 'a set of conditions' is important because having a conflict of interest is a subjective situation and does not depend on underlying motives. Lemmens and Singer (1998) state that if someone has a conflict of interest this does not imply a moral condemnation itself. It is the person's actions in the context of a particular situation that may be a cause for concern.

Further, Gall et al. (2005) indicate that researchers' financial advantages from research they conduct potentially could create a conflict of interest. In the present study, the researcher was not in a position to get any financial advantage. Another aspect that potentially creates a conflict of interest is when research participants have a dependent relationship with the researcher. The researcher was unknown to the participants prior to the study, so had no prior relationship with them.

3.9.4 Minimising the risk of harm

Participating in any research can cause risks. The risks can be physical and/or psychological (Berg, 2006). Therefore, researchers need to reflect on the risk of harm resulting from their research and identify ways to minimize the risk. In this study, the researcher attempted to identify of any risk or harm that might occur during and after conducting the research, and did actions to minimize it.

Potential psychological risks of harm of participants were identified. First, the EFL teachers were invited to share their perceptions of PD activities they were involved in. This sensitive topic had the potential to cause discomfort to them, particularly when participants were unsatisfied with PD activities. Second, some of the TSG members may have seen the TSG observations evaluating their TSGs. Third, some of the participants may have perceived that their responses in the questionnaires and interviews could be used to make a judgment of their perceptions and practices. For all phases of the study, the participants were sent the information sheets, explaining that the research was not to be judgmental of participants' perceptions and practices. The information sheets also explained the participants' right not to participate in the study or the right to refuse to answer any particular question. During the first TSG meetings, the researcher explained to the TSG members the purpose of the observations was not to evaluate their TSG but to find out how they conducted the TSG. The interview processes took time and at a place based on the participants' convenience. This ensured that they felt comfortable to be interviewed. In addition, the interviewees were offered opportunities to edit the interview transcripts to ensure the content was in accordance with what they meant. Finally, pseudonyms were used throughout the study to protect both districts and participants' identities.

3.10 Summary

This chapter has described the research methodology and design used in this study. The mixed method research approach and design were examined, followed by justifications of using mixed method in this study. There were four phases in the study. Phase one and

four utilized questionnaires as an investigative tool and invited all junior secondary EFL teachers in three districts to participate. Data collection using the questionnaires was conducted at the beginning (phase one) and end of the study (phase four). Phase two employed TSG observations in three TSGs. Each TSG was observed three times. Phase three utilized individual semi-structured interviews. There were eighteen teachers (six teachers in each district) were interviewed.

The next two chapters will report on the research findings over the four phases. Chapter Four presents findings from the initial questionnaires (Phase One) and the follow-up questionnaires (Phase Four). Chapter Five describes findings from the TSG observations (Phase Two) and semi-structured interviews (Phase Three).

Chapter Four

The Results from the Questionnaires

4.1 Introduction

This chapter presents the findings from the questionnaires. It begins with the demographic results in Section 4.2. Following this, the results of quantitative data analysis (Part B of the questionnaires) are presented in Section 4.3. Finally, Section 4.4 explores the participants' perceptions of self-efficacy, PD activities they have participated in and the impact of TSGs on teachers' self-efficacy.

The questionnaires, both the initial questionnaires (the Q1) and the follow-up questionnaires (the Q2), used for this study consist of closed questions and open-ended questions. Both questionnaires distributed to the respondents were exactly the same. All the questions were in Bahasa (Indonesian language) to reduce any misinterpretation by the participants. This was also done to ensure that participants could express their views without the hindrance of using a foreign language.

The five-page questionnaires are divided into three separate parts. The first part (part A), gathered general data on the individuals in the study samples to find demographic data. The second part (part B), comprised 12 statements on the teachers' efficacy scale, and was included to investigate teachers' efficacy beliefs in the areas of instructional strategy, classroom management, and student engagement. This part was intended to answer the first and second research questions. The third part (part C), comprised of 10 items concerning teachers' perceptions about PD and TSGs they had participated in. Part C also explores teachers' perception about self-efficacy and the impact of TSGs on teachers' self-efficacy. This was intended to answer the third research question and to further enrich answers to the second research question.

Respondents to the questionnaires were all junior secondary EFL teachers in three districts in South Sulawesi province of Indonesia. The questionnaires were distributed to 168 junior secondary EFL teachers in these three districts. Of the 168 questionnaires

sent out, 121 (72%) of the Q1 were returned and 107 (63.7%) of the Q2. From 121 responses to the Q1 and 107 responses to the Q2, there were 104 respondents who returned both questionnaires.

One of the aims of the study was to determine if participating in a TSG group resulted in any changes in teachers' self-efficacy beliefs, so the 104 teachers who returned both questionnaires were selected for analysis. The questionnaires construction and administration were described in details in the Methodology Chapter.

4.2 Part A: Demographic Results

Section A of the questionnaires was made up of five questions about participants' personal information. In this section, the participants were asked to write their name, years of teaching experience, gender, type of school, and location of school. This information allowed the researcher to get a general picture of the participants, and allowed for analyses relating to geographic areas, gender and teaching experience.

Names were requested to allow the researcher to cross-check and match the returned questionnaires (the Q1 and the Q2). Firstly, to organize the data the researcher categorized the questionnaires based on district categories. Secondly, after sorting the questionnaires based on the district category, the researcher then matched the Q1 and the Q2 based on the participants' name and other personal information written on the questionnaires. The participants' actual names were replaced with a coded number from 1 to 104 based on the number of participants to ensure anonymity. After that, the researcher exported the raw data into SPSS 20 program.

Of the 104 teachers who gave responses on both questionnaires, 45 (43.3 %) teachers were from an urban area, and 59 (56.7%) were from rural districts. The teacher respondents included 35 (33.7%) males and 69 (66.3%) females and they had a range of teaching experience. For analyses, the data on the participants' teaching experience were divided into three categories as shown in Table 4.1.

Table 4.1 Range of Teaching experience

| Teaching Experience | Gender | Frequency | | | Total (%) |
|---------------------|--------|----------------|------------------|------------------|-----------|
| | | Urban District | Rural District A | Rural District B | |
| More than 15 years | Male | 7 | 5 | 6 | 17.3 |
| | Female | 11 | 8 | 6 | 23.1 |
| 6 – 15 years | Male | 4 | 5 | 6 | 14.4 |
| | Female | 15 | 7 | 7 | 27.9 |
| Less than 6 years | Male | 0 | 3 | 0 | 2.8 |
| | Female | 8 | 2 | 4 | 14.4 |
| Total | | 45 | 30 | 29 | 100 |

Based on the results, most of the respondents who returned both the Q1 and the Q2 were either very experienced teachers (more than 15 years) or experienced teachers (6-15 years). There were 17 novice teachers who took part in this study. Based on the data from the education departments in the three districts, more than half of the junior EFL teachers in these three districts responded to the questionnaires. Therefore, the spread of the range of teaching experience represented the participants from the three districts.

Summary of Section A results

Section A of the questionnaires indicated that there was a positive response rate, 72% in the Q1 and 63.7% in the Q2, and a relatively large sample ($n = 104$) who responded to both questionnaires. The demographic results indicate that the sample seems to represent the target population (64.39% of the total population in the three districts). The demographic results also indicate that there was diversity amongst the participants in terms of levels of teaching experience, district categories, and gender which enriches the findings. Most of the respondents were very experienced teachers (40.4%) and experienced teachers (42.3%).

4.3 Part B: Teacher Sense of Efficacy Scale (TSES) Questionnaires

Section B of the questionnaires was made up of 12 questions about the teachers' sense of efficacy (TSE). This section was particularly intended to inform the first research question: 'How does participation in PD change the perceived levels of efficacy beliefs amongst junior secondary EFL teachers in the areas of instructional strategy, classroom management, and student engagement?' and research question two: 'How does participation in a TSG affect junior secondary EFL teachers' self-efficacy?' The participants were asked to respond to the 12 questions using a 5-point Likert scale (ranging from 1 = *Not at all* to 5 = *Very well*). The teacher sense of efficacy scale (TSES) by Tschannen-Moran and Hoy (2001) was employed (see Section 3.6.1 in Chapter Three for more details).

To situate the reader, the first three sections (Section 4.3.1, Section 4.3.2, and Section 4.3.3) present the results of the analysis that involved all 104 participating teachers. The last eight sections (Section 4.3.4, Section 4.3.5, Section 4.3.6, Section 4.3.7, Section 4.3.8, Section 4.3.9, Section 4.3.10, and Section 4.3.11) present the results from the analyses that were based on the levels of the teachers' participation in the TSGs (active group, sometimes group, and non-active group).

From the eleven analyses that are presented below, all of them show that there were no outliers in the data, as assessed by inspection of a boxplot. All of the data were also normally distributed as assessed by Shapiro-Wilks test ($P > .05$), and homogeneity of variance was met as assessed by Levene's Test for Equality of Variances ($p > .05$).

4.3.1 Teacher Self-Efficacy

This analysis was conducted to identify the perceived level of 104 teachers' self-efficacy from the TSES. This enabled me to find out the levels of teachers' self-efficacy at the beginning and end of the study.

In order to investigate if there was a difference between the perceived level of teachers' self-efficacy at the beginning and end of the research, the total scores for each of the

104 participants were calculated for both the Q1 and the Q2. These individual scores were then used to calculate a participant's 'gain score' (GS⁵) representing how much their self-efficacy had changed over the period of the study. The means and standard deviations of the total scores and the gain scores of the 104 teachers for the whole scales are shown in Table 4.2.

Table 4.2 Means and Standard Deviations for the cohort (104 teachers)

| Item | The Q1 | | The Q2 | | GS | |
|--------------|--------------------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| 104 teachers | 45.90 ⁶ | 3.14 | 49.19 | 3.27 | 3.29 | 1.43 |

Table 2 shows that teachers' self-efficacy scores for all participants rose, on average, over the five months of the study from 45.90 to 49.19, an average gain of was 3.29, 95CIs [3.01, 3.57].

4.3.2 Comparing Teacher Sense of Efficacy (TSE) Sub-scales

This analysis was conducted to identify the perceived level of teachers' self-efficacy in the three areas of instructional strategy, classroom management and student engagement at the beginning and end of the research. The means and standard deviations of the total scores and the gain scores on each of the sub-scales are shown in Table 4.3.

Table 4.3 Means and Standard Deviations of the Three Sub-Scales

| TSES Sub-Scales | The Q1 | | The Q2 | | GS | |
|------------------------|--------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| Instructional Strategy | 15.09 | 1.22 | 16.42 | 1.24 | 1.34 | 0.96 |
| Classroom Management | 15.57 | 1.27 | 16.58 | 1.22 | 1.01 | 0.90 |
| Student Engagement | 15.14 | 1.27 | 16.09 | 1.33 | 0.95 | 0.89 |

⁵ Gain score is the difference between the initial and follow-up scores on the TSES

⁶ Maximum score of the TSES is 60

An ANOVA test of the participants' Q1 found that there was a statistically significant difference between the initial average scores of self-efficacy in the three subscales, $F(2, 309) = 4.57, p = .011$. Further ANOVA tests were conducted to investigate if statistically significant differences on the gain scores and the final average scores of the three sub-scales existed. The results from the ANOVA test of the gain scores identified that there was a statistically significant difference in the average gain scores between the three subgroups, $F(2, 309) = 5.50, p = .004$. Similarly, the result from the ANOVA test of the participants Q2 also found that there was a statistically significant difference between the final average scores of self-efficacy in the three subscales, $F(2, 309) = 4.10, p = .017$. Although these results show that there was a statistically significant difference in the gain scores, it was unclear which sub-scales were significantly different. To further examine which sub-scale mean gain scores differed significantly from each other, further tests (Post Hoc tests) were conducted.

A multiple comparison (Post Hoc tests) was applied because there was no assumption about which subscales were significantly different (Field, 2009). The results from the multiple tests are shown in Table 4.4.

Table 4.4 Output from Post Hoc Tests of the gain scores for the Three Sub-scales

| Multiple Comparisons | | | | | | |
|------------------------------------|------------------------|-----------------------|------------|------|-------------------------|-------------|
| Dependent Variable: TSES Sub-scale | | | | | | |
| Tukey HSD | | | | | | |
| (I) Subscale | (J) Subscale | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| | | | | | Lower Bound | Upper Bound |
| Instructional Strategy | Classroom | .327* | .127 | .029 | .03 | .63 |
| | Management | .394* | .127 | .006 | .09 | .69 |
| Classroom Management | Instructional Strategy | -.327* | .127 | .029 | -.63 | -.03 |
| | Student Engagement | .067 | .127 | .857 | -.23 | .37 |
| Student Engagement | Instructional Strategy | -.394* | .127 | .006 | -.69 | -.09 |
| | Classroom Management | -.067 | .127 | .857 | -.37 | .23 |

*. The mean difference is significant at the 0.05 level.

Post hoc comparison using the Tukey HSD test indicated that the average gain score for instructional strategy was statistically higher than the average gain scores for classroom management and student engagement with the significant values 0.029 and 0.006 respectively ($p < 0.05$) (as highlighted). However, there is no difference in the average gain score between classroom management and student engagement subscales ($p = 0.857$).

In order to construct a range of values within which the population values falls or to estimate the mean in the population (Field, 2009), 95% confidence intervals for the distribution of sample means were calculated. The results are presented in figure 4.1.

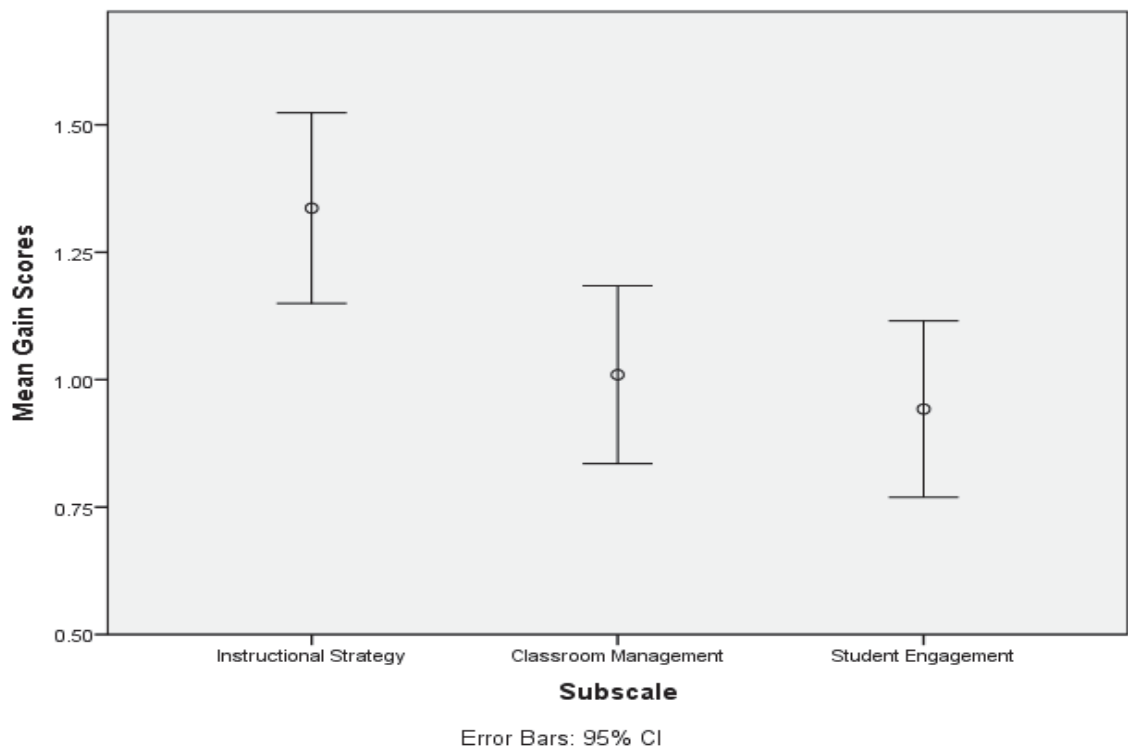


Figure 4.1 95% confidence intervals for the sub-scales mean gain scores

The results from the calculation of the 95% confidence intervals indicate positive gain scores in all three subscales.

4.3.3 Analysing the individual items of the TSES

The individual item analysis was carried out to investigate the level of the participants' self-efficacy on each item of Part B (Teacher Sense of Efficacy Scale). In addition, this

analysis is also intended to unpack further the results from the sub-scale analysis above. The table below presents the results of the analysis, including the two highest mean gain scores and the two lowest mean gain scores of these items. The two highest mean gain scores and the two lowest mean gain scores are highlighted to indicate in which items the participants' self-efficacy improved the most on average and which items the participants scored the lowest improvements on average during the five month period of the study.

Table 4.5 Mean Scores for Individual Items

| Sub-scales and question | Mean Scores | | |
|---|-------------|--------|-----|
| | The Q1 | The Q2 | GS |
| Sub-scale 1: Instructional Strategy | | | |
| 1 How well are you able to implement alternative English language teaching strategies in your classroom? | 3.69 | 4.07 | .38 |
| 2 How well are you able to provide an alternative explanation or example when students are confused about English language? | 3.88 | 4.19 | .31 |
| 7 How well are you able to craft good questions about English language for your students? | 3.88 | 4.25 | .37 |
| 8 How well are you able to use a variety of English language assessment strategies? | 3.68 | 3.96 | .28 |
| Sub-scale 2: Classroom Management | | | |
| 3 How well are you able to prevent disruptive behaviour during English language class? | 4.00 | 4.26 | .26 |
| 4 How well are you able to respond to a student who is disruptive or noisy during English language class? | 4.04 | 4.26 | .22 |
| 9 How well are you able to establish a classroom management system for teaching English language with your students? | 3.68 | 3.93 | .25 |
| 10 How well do the routines you establish keep activities running smoothly during English language class? | 3.85 | 4.13 | .28 |
| Sub-scale 3: Student Engagement | | | |
| 5 How well are you able to ensure students believe they can do well in English language? | 3.92 | 4.20 | .28 |
| 6 How well are you able to help your students understand that learning English language is important? | 4.06 | 4.33 | .27 |
| 11 How well are you able to involve families in helping their children do well in English language? | 3.50 | 3.31 | .19 |
| 12 How well are you able to help students who have difficulties in English language? | 3.90 | 4.10 | .20 |

Note: the Q1 = the initial questionnaires; the Q2 = the follow-up questionnaires; GS = Gain scores

Two items with the highest gain scores are shaded with orange colours

Two items with the lowest gain scores are shaded with blue colours

Items with the two highest average gain scores were in the sub-scale 1 (instructional strategies) and represented by items 1 and 7, with a mean gain score of 0.38 and 0.37 respectively. This implies that, on average, the participants increased their efficacy belief significantly in these two items (item 1 and 7) during the five month period of the study. While the two lowest average gain scores were in the sub-scale 3 (student engagement) and represented by items 11 and 12 with a mean gain score of 0.19 and 0.20 respectively. This indicates that, on average, the participants did not increase their efficacy belief in these two items as much as the other ten items over the five month period of the study. The results also indicate that there were consistent findings between the TSE sub-scales analysis and the individual item analysis of which sub-scales the participants made the highest average gain scores and of which sub-scales the participants made the lowest average gain scores.

The following eight analyses present the findings based on the participants' level of participation in the TSGs (Active group, Sometimes group, and Non-active group).

4.3.4 Differences on efficacy beliefs based on participation level in the TSGs

This analysis was conducted to investigate the extent to which the participants' level of participation in the TSGs and changes in perceived levels of their self-efficacy. To investigate the different levels of 104 teachers' self-efficacy beliefs based on their level of participation in the TSGs, the researcher classified the participants into three groups: active group, sometimes group and non-active group. This classification of the respondents was based on their reply to Question 5, Section C (Do you currently participate in the teacher study group? Yes, Sometimes, No). These groups thus represent the level of teachers' reported participation in the TSGs.

The means and standard deviations of the total scores and the gain scores for each of the groups are shown in Table 4.6.

Table 4.6 Means and Standard Deviations of the Three Groups

| Group Categories | The Q1 | | The Q2 | | GS | |
|------------------|--------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| Active Group | 46.02 | 3.03 | 50.24 | 2.75 | 4.22 | 1.22 |
| Sometimes Group | 45.43 | 2.92 | 48.56 | 3.17 | 3.13 | 0.63 |
| Non-Active Group | 46.25 | 3.66 | 47.79 | 3.78 | 1.54 | 0.66 |

An ANOVA test for all participants' Q1 found that there was no statistically significant difference in the initial average scores of self-efficacy between different levels of attendance of TSGs, $F(2, 101) = .413, p = .663$. However, there was an increase in mean scores between the Q1 and the Q2 (See Figure 4.2).

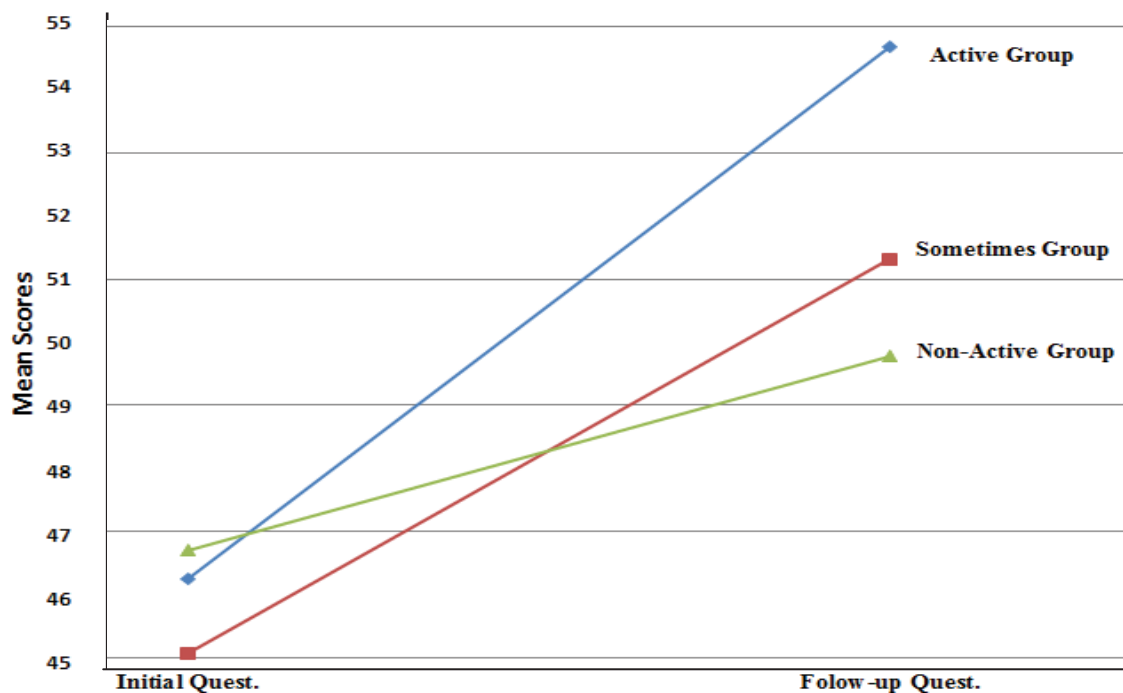


Figure 4.2 The Mean Total Scores of the Q1 and the Q2

In order to investigate if there was a statistically significant difference in the gain scores and the final average scores between the three groups, further ANOVA tests were conducted. The ANOVA test identified that there was a statistically significant difference between the average gain scores of self-efficacy between different levels of attendance of TSGs, $F(2, 101) = 63.04, p = .000$. Similarly, the result from the ANOVA test of the participants' Q2 also found that there was a statistically significant difference

in the final average scores of self-efficacy between different levels of attendance of TSGs, $F(2, 101) = 6.11, p = .003$.

Planned Contrast tests were subsequently applied to find out where the differences between groups lay. Planned contrast tests were conducted as there was an assumption that the ‘active group’ had higher levels of gain scores than the ‘sometimes’ and ‘not-active groups’ (Field, 2009). Assuming that attending the TSGs would be more beneficial than not attending the TSGs, the first contrast compared the average gain scores of the participants who attended the TSGs (either actively or sometimes) with those participants who did not attend the TSGs. The second contrast test examined if it mattered how frequently the participants attended the TSGs. The results of the planned contrast tests are presented in Table 4.7.

Table 4.7 Output from Contrast Tests for the Three Groups

| | | Contrast Tests | | | | | |
|-------|---------------------------------|-----------------------|-------------------|------------|--------|--------|-----------------|
| | | Contrast | Value of Contrast | Std. Error | t | Df | Sig. (2-tailed) |
| Gain | Assume equal variances | 1 | 4.27 | .453 | 9.436 | 101 | .000 |
| | | 2 | -1.09 | .223 | -4.877 | 101 | .000 |
| Score | Does not assume equal variances | 1 | 4.27 | .339 | 12.593 | 52.804 | .000 |
| | | 2 | -1.09 | .207 | -5.252 | 76.661 | .000 |

As shown in Table 4.7, the planned contrast results reveal that those who attended the TSGs, either sometimes or very frequently, showed significantly higher increases in self-efficacy compared to those who did not attend the TSGs, $t(101) = 9.44, p < .05$. Similarly, those who attended the TSGs very frequently showed significantly higher increases in self-efficacy compared to those who only attended the TSGs sometimes, $t(101) = -4.88, p < .05$. Taken together, these results suggest that attending the TSGs helped to enhance teachers’ self-efficacy, and those participants who attended the TSGs very frequently increased their self-efficacy more significantly than those who only attended the TSGs sometimes.

Given the result that, on average, the highest gain score was on instructional strategy subscale and the statistically significant differences between the three groups, further

analyses were conducted. These analyses were conducted to investigate in which sub-scales the three groups (active group, sometimes group, and non-active group) had the highest gain scores and whether these three groups' mean gain scores in each of the sub-scales were significantly different. The three following sections discuss the three group categories related to TSE sub-scales.

4.3.5 TSE Sub-scales for the active group

This analysis was conducted to identify in which sub-scale the active group made the highest gain score, and whether the average gain scores in these three sub-scales were significantly different. The means and standard deviations of the total scores and the gain scores for the active group on each of the sub-scales are shown in Table 4.8.

Table 4.8 Means and Standard Deviations of the Three Sub-Scales for the Active Group

| TSES Sub-Scales | The Q1 | | The Q2 | | GS | |
|------------------------|--------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| Instructional Strategy | 15.09 | 1.15 | 16.84 | 1.09 | 1.76 | 0.88 |
| Classroom Management | 15.64 | 1.28 | 16.91 | 1.16 | 1.27 | 0.96 |
| Student Engagement | 15.22 | 1.36 | 16.44 | 1.27 | 1.22 | 1.02 |

An ANOVA test for the active group found that there was no statistically significant difference in the initial average scores and the final average scores on the three sub-scales, $F(2, 132) = 2.360, p = .098$ and $F(2, 132) = 2.072, p = .130$ respectively. However, the results from the ANOVA test for the active group found that there was a statistically significant difference in the average gain scores between the three sub-scales, $F(2, 99) = 5.25, p = .015$.

Given the result that there was a statistically significant difference on the average gain scores between the three sub-scales, a multiple comparison (Post Hoc tests) was conducted to further examine which sub-scale mean gain scores differed significantly for the active group. The results from the multiple tests are shown in Table 4.9.

Table 4.9 Output from Post Hoc Tests for the Three Sub-scales for the Active Group

| Multiple Comparisons | | | | | | |
|--|------------------------|-----------------------|------------|------|-------------------------|-------------|
| Dependent Variable: Gain Scores for Active Group | | | | | | |
| Tukey HSD | | | | | | |
| (I) Subscale | (J) Subscale | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| | | | | | Lower Bound | Upper Bound |
| Instructional Strategy | Classroom Management | .489* | .202 | .044 | .01 | .97 |
| | Student Engagement | .533* | .202 | .025 | .06 | 1.01 |
| Classroom Management | Instructional Strategy | -.489* | .202 | .044 | -.97 | -.01 |
| | Student Engagement | .044 | .202 | .974 | -.43 | .52 |
| Student Engagement | Instructional Strategy | -.533* | .202 | .025 | -1.01 | -.06 |
| | Classroom Management | -.044 | .202 | .974 | -.52 | .43 |

*. The mean difference is significant at the 0.05 level.

A post hoc comparison using the Tukey HSD test indicates that for the active group, the average gain score for the instructional strategy sub-scale was statistically higher than the classroom management and student engagement sub-scales with the significant values 0.044 and 0.025 respectively ($p < 0.05$). However, for the active group, there was no statistically significant difference in the average gain scores on the classroom management and student engagement subscales ($p = 0.974$). Taken together, these results suggest that attending the TSGs actively helped to enhance the participants' self-efficacy in all three aspects of instructional strategy, classroom management, and student engagement. Furthermore, the results indicate that attending the TSGs very frequently gave the greatest benefit for the participants' self-efficacy beliefs in instructional strategy.

4.3.6 TSE Sub-scales for the sometimes group

This analysis was conducted to identify in which sub-scale the sometimes group made the highest gain score, and whether the gain scores in these three sub-scales were significantly different. Table 4.10 presents the means and standard deviations of the total scores and the gain scores for the sometimes group on each of the sub-scales.

Table 4.10 Means and Standard Deviations of the Three Sub-Scales for the Sometimes Group.

| TSES Sub-Scales | The Q1 | | The Q2 | | GS | |
|------------------------|--------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| Instructional Strategy | 15.09 | 1.19 | 16.44 | 1.24 | 1.35 | 0.73 |
| Classroom Management | 15.44 | 1.05 | 16.44 | 1.02 | 1.00 | 0.78 |
| Student Engagement | 15.00 | 1.18 | 15.91 | 1.33 | 0.91 | 0.75 |

An ANOVA test for the sometimes group found that there was no statistically significant difference in the initial average scores and the final average scores on the three sub-scales, $F(2, 99) = 1.421, p = .246$ and $F(2, 99) = 2.191, p = .117$ respectively. However, the results from the ANOVA test for the sometimes group found that there was a statistically significant difference in the average gain scores between the three sub-scales, $F(2, 99) = 5.25, p = .043$.

A multiple comparison (Post Hoc tests) was conducted to further examine which sub-scale mean gain scores differ significantly from each other for the sometimes group. The results from the multiple tests are shown in Table 4.11.

Table 4.11 Output from Post Hoc Tests for the Three Sub-scales for the Sometimes Group

Multiple Comparisons

Dependent Variable: Gain Scores for Sometimes Group

Tukey HSD

| (I) Subscale | (J) Subscale | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|------------------------|------------------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Instructional Strategy | Classroom Management | .353 | .183 | .137 | -.08 | .79 |
| | Student Engagement | .441* | .183 | .047 | .01 | .88 |
| Classroom Management | Instructional Strategy | -.353 | .183 | .137 | -.79 | .08 |
| | Student Engagement | .088 | .183 | .880 | -.35 | .52 |
| Student Engagement | Instructional Strategy | -.441* | .183 | .047 | -.88 | -.01 |
| | Classroom Management | -.088 | .183 | .880 | -.52 | .35 |

*. The mean difference is significant at the 0.05 level.

A post hoc comparison using the Tukey HSD test indicates that for the sometimes group, the average gain score for the instructional strategy subscale was statistically higher than the student engagement subscale with significant values of 0.047 ($p < 0.05$). However, there was no statistically significant difference in average gain scores between instructional strategy and classroom management subscales ($p = 0.137$), and the average gain scores between classroom management and student engagement subscales ($p = 0.880$).

Taken together, these results suggest that attending the TSGs ‘sometimes’ helped to enhance the participants’ self-efficacy in all three aspects of instructional strategy, classroom management, and student engagement. Furthermore, the results indicate that attending the TSGs ‘sometimes’ gave the greatest benefit to the participants’ self-efficacy beliefs in instructional strategy.

4.3.7 TSE Sub-scales for the non-active group

This analysis was conducted to identify in which sub-scale the non-active group made the highest gain score, and whether the non-active group’s gain scores in these three sub-scales were significantly different. The means and standard deviations of the total scores and the gain scores for the non-active group on each of the sub-scales are shown in Table 4.12.

Table 4.12 Means and Standard Deviations of the Three Sub-Scales for the Non-active Group

| TSES Sub-Scales | The Q1 | | The Q2 | | GS | |
|------------------------|--------|------|--------|------|-------|------|
| | Means | SD | Means | SD | Means | SD |
| Instructional Strategy | 15.28 | 1.37 | 15.68 | 1.25 | 0.40 | 0.58 |
| Classroom Management | 15.48 | 1.50 | 16.20 | 1.32 | 0.72 | 0.74 |
| Student Engagement | 15.20 | 1.26 | 15.85 | 1.31 | 0.48 | 0.59 |

An ANOVA test for the non-active group found that there was no statistically significant difference in the initial and final average scores on the three subscales, $F(2,$

72) = 0.273, $p = .762$ and $F(2, 72) = 0.415$, $p = .436$ respectively. A further ANOVA test was conducted to investigate if statistically significant differences between the average gain scores of the three sub-scales exist for the non-active group. For the non-active group, there was no statistically significant difference in the average gain scores on the three sub-scales, $F(2, 72) = 1.71$, $p = .189$.

Given the result that there was no statistically significant difference between the average gain scores of the three sub-scales ($p > .05$) for the non-active group, there was no need to do further test (Post hoc tests).

4.3.8 Differences in efficacy beliefs based on demographic aspects

Given that the teachers generally had different levels of efficacy belief based on the level of their participation in the TSGs, it was anticipated that the teachers' self-efficacy might also differ due to demographic aspects, such as teaching experience, gender and geographical areas. In order to ascertain if there was a different level of self-efficacy for the 104 teachers based on demographic aspects, further tests were conducted.

However, the results show that there was no statistically significant difference in the initial and the final average scores in levels of teachers' self- efficacy based on their teaching experience, gender, and geographical areas. In addition, there was no statistically significant difference in the average gain scores in levels of self-efficacy between the teachers based on their level of teaching experience ($F[2, 101] = .15$, $p = .86$), geographical areas ($F[2,102] = .153$, $p = .889$), and gender ($F[2,102] = .564$, $p = .574$).

4.3.9 Factorial ANOVA analysis between level of participation in the TSGs and teaching experience

In order to find out if there was an interaction between the level of participation in the TSGs and teaching experience, two-way ANOVA analysis was conducted. The results are presented in Tables 4.13.

Table 4.13 The Interaction between Level of Participation in the TSGs and teaching experience

| Tests of Between-Subjects Effects | | | | | | |
|--|----------------------------|-----|----------------|---------|------|------------------------|
| Dependent Variable: Gain Score | | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 112.950 ^a | 8 | 14.119 | 16.441 | .000 | .581 |
| Intercept | 772.503 | 1 | 772.503 | 899.590 | .000 | .904 |
| Participation | 106.225 | 2 | 53.112 | 61.850 | .000 | .566 |
| Teaching experience | .092 | 2 | .046 | .054 | .948 | .001 |
| Participation * Teaching experience | 1.987 | 4 | .497 | .578 | .679 | .024 |
| Error | 81.579 | 95 | .859 | | | |
| Total | 1339.000 | 104 | | | | |
| Corrected Total | 194.529 | 103 | | | | |

a. R Squared = .581 (Adjusted R Squared = .545)

A factorial between groups analysis of variance (ANOVA) was used to investigate the relationship between teachers' level of participation in the TSGs and their teaching experience on average gain scores of teachers' self-efficacy. The results revealed that when we ignore teaching experience, there is a statistically significant effect of participation in TSGs on their average gain scores, $F(2, 95) = 61.850, p < .000$. However, when we ignore teachers' participation in TSGs, there was no significant effect of teaching experience on their average gain scores, $F(2, 95) = 0.054, p < .948$. When we take participation levels and teaching experience together, there was no statistically significant effect. This means that there is no significant difference between the average gain scores of teachers with different levels of experience at any of the levels of participation in TSGs, $F(4,95) = .578, p = .679$. The nature of this interaction is illustrated in Figure 4.3.

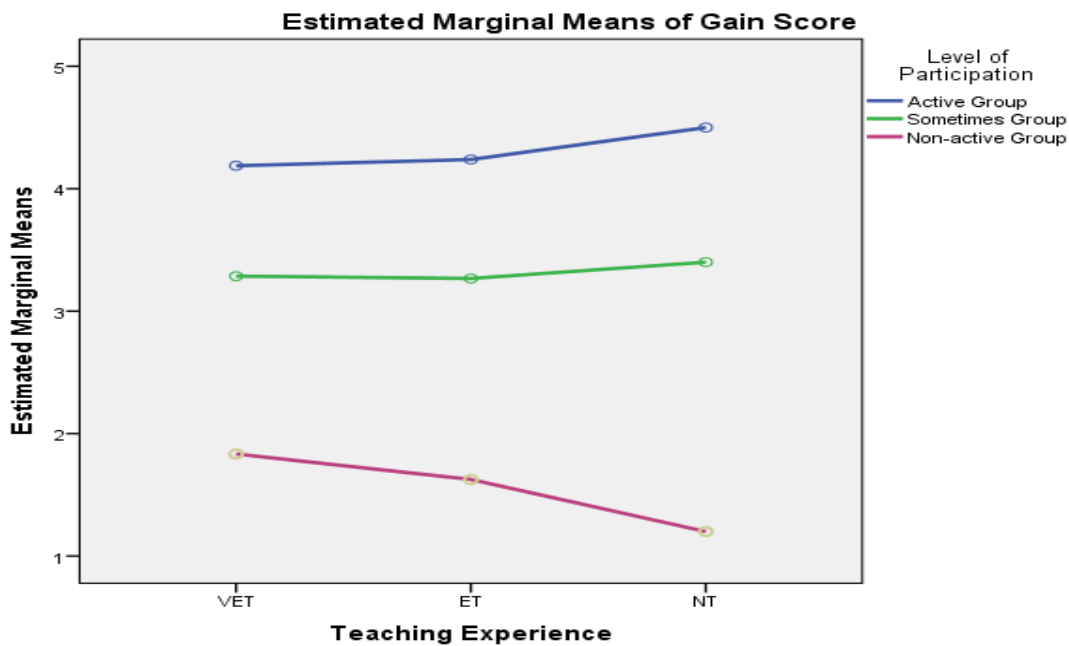


Figure 4.3 Mean of the gain scores by the level of participation in the TSGs and teaching experience on teachers' self-efficacy.

Figure 4.3 shows that there was no cross-over of the mean gain scores based on teachers' teaching experience. This means that there was no significant difference between the average gain scores of teachers with different levels of experience at any of the levels of participation in TSGs.

4.3.10 Factorial ANOVA analysis between levels of participation and gender

In order to find out if there was an interaction between the level of participation in the TSGs and gender on teachers' self-efficacy, two-way ANOVA analysis was conducted. The results are presented in Tables 4.14.

Table 4.14 The Interaction between Level of Participation in the TSGs and Gender

| Tests of Between-Subjects Effects | | | | | | |
|--|-------------------------|-----|-------------|----------|------|---------------------|
| Dependent Variable: Gain Score | | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 114.366 ^a | 5 | 22.873 | 31.092 | .000 | .613 |
| Intercept | 807.953 | 1 | 807.953 | 1098.261 | .000 | .918 |
| Participation | 108.862 | 2 | 54.431 | 73.989 | .000 | .602 |
| Gender | .514 | 1 | .514 | .699 | .405 | .007 |
| Participation * Gender | .848 | 2 | .424 | .576 | .564 | .012 |
| Error | 72.095 | 98 | .736 | | | |
| Total | 1298.000 | 104 | | | | |
| Corrected Total | 186.462 | 103 | | | | |

a. R Squared = .613 (Adjusted R Squared = .594)

A factorial ANOVA was used to investigate the effects of the level of participation in the TSGs and gender on average gain scores of teachers' self-efficacy. The results revealed that when we ignore gender, there was a statistically significant effect of participation in TSGs on their average gain scores, $F(2, 98) = 73.989, p < .000$. However, when we ignore teachers' participation in TSGs, there was no significant effect of gender on their average gain scores, $F(1, 98) = 0.699, p < .405$. When we take participation levels and gender together, there was no statistically significant effect. This means that there was no significant difference between the average gain scores of men and women at any of the levels of participation in TSGs, $F(2,98) = .576, p = .564$. The nature of this interaction is illustrated in Figure 4.4.

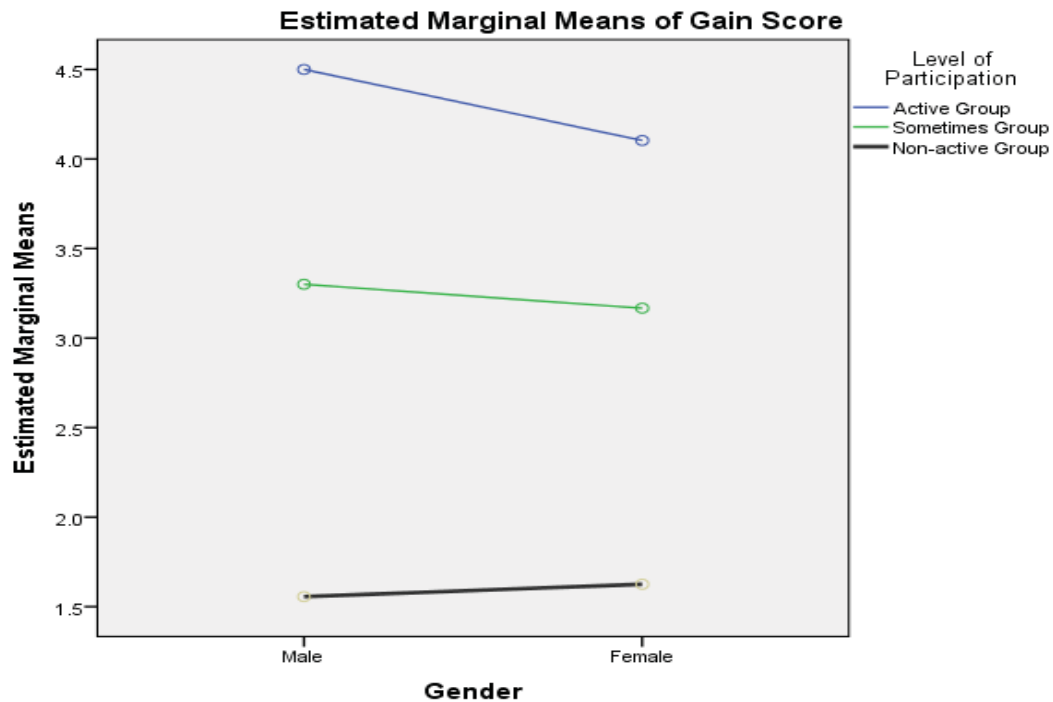


Figure 4.4 Mean of the gain scores by the level of participation in the TSGs and gender on teachers' self-efficacy.

Figure 4.4 shows that, although there was a difference between men and women on their average gain scores based on their level of participation in the TSGs, there was no cross-over of the mean gain scores based on gender. This means that there was no difference between men and women at any level of participation in the TSGs.

4.3.11 Factorial ANOVA analysis between levels of participation in the TSGs and geographical areas

To further investigate the interaction between the level of participation in the TSGs and geographical location on teachers' self-efficacy, a two-way ANOVA analysis was also conducted. The results are presented in Tables 4.15.

Table 4.15 The Interaction between Levels of Participation in the TSGs and teaching areas.

Tests of Between-Subjects Effects

Dependent Variable: Gain Score

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------------------|-------------------------|-----|-------------|----------|------|
| Corrected Model | 117.302 ^a | 5 | 23.460 | 34.005 | .000 |
| Intercept | 877.963 | 1 | 877.963 | 1272.576 | .000 |
| Participation | 104.033 | 2 | 52.016 | 75.396 | .000 |
| DistrictCat | 1.233 | 1 | 1.233 | 1.787 | .184 |
| Participation * DistrictCat | 4.104 | 2 | 2.052 | 2.974 | .056 |
| Error | 67.611 | 98 | .690 | | |
| Total | 1303.000 | 104 | | | |
| Corrected Total | 184.913 | 103 | | | |

a. R Squared = .634 (Adjusted R Squared = .616)

A factorial ANOVA was used to investigate the effects of the levels of participation in the TSGs and the teaching locations on average gain scores of teachers' self-efficacy. The results revealed that when we ignore teaching location, there was a statistically significant effect of participation in TSGs on their average gain scores, $F(2, 98) = 75.396, p < .000$. However, when we ignore teachers' participation in TSGs, there was no significant effect of teaching locations on their average gain scores, $F(1, 98) = 1.787, p < .184$. When we take participation levels and teaching areas together, there was no statistically significant effect. This means that there was no significant difference between the average gain scores of teachers with different teaching location at any of the levels of participation in TSGs, $F(2,98) = 2.974, p = .056$. The nature of this interaction is illustrated in Figure 4.5.

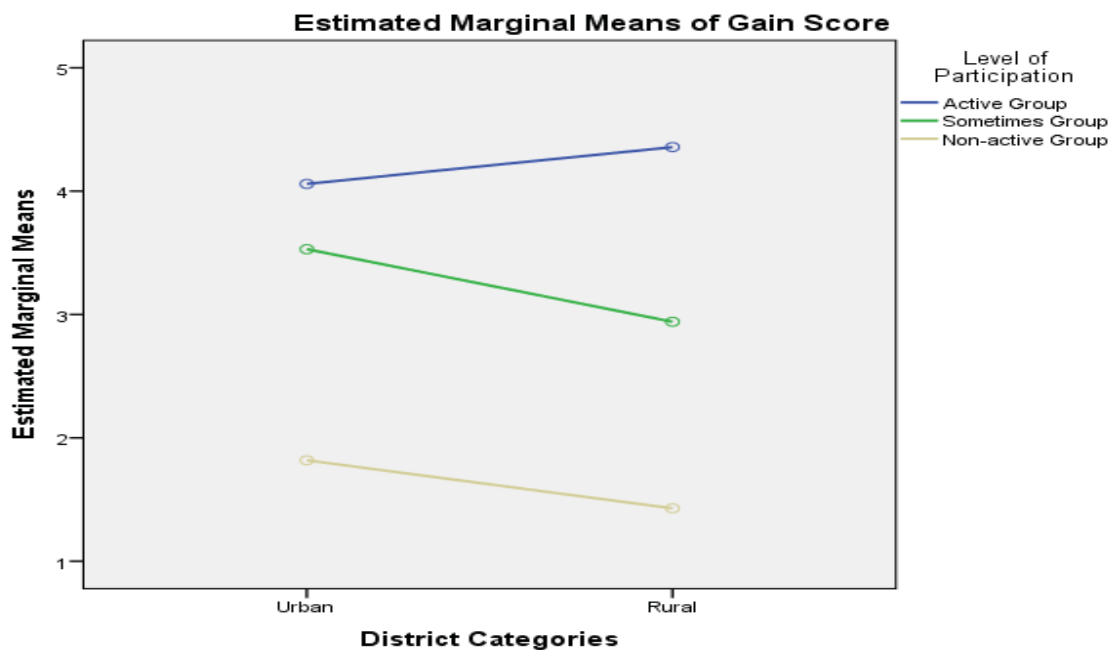


Figure 4.5 shows that although there was a difference on teachers' average gain scores based on their level of participation in the TSGs, there were no cross-over on average gain scores based their teaching location. This means that there was no significant difference between teachers who taught in urban and rural areas on any level of their participation in the TSGs.

Summary of Section B results

The quantitative results involving 104 teachers show that there was an increase in self-efficacy scores from the initial questionnaires to the follow-up questionnaires. The analysis of the TSE sub-scales revealed that the participants made the highest mean gain scores on instructional strategy rather than classroom management and student engagement. The results from TSE sub-scales analysis were consistent with the findings from the individual item analysis in which the two highest mean gain scores were on subscale 1 (instructional strategy). Attending the TSGs actively significantly increased levels of teachers' self-efficacy compared to only attending sometimes or not attending the TSGs. The active and sometimes groups received the greatest benefit on their self-efficacy belief in instructional strategy. There was no statistically significant difference between the three sub-scales for the non-active group. In addition, there was no

statistically significant interaction between the level of participation in the TSGs and years of teaching experience, or between the level of participation in the TSGs and gender, and between the level of participation in the TSGs and teaching location and teachers' self-efficacy.

4.4 Part C: Participants' Perception of the Importance of Self-Efficacy, Characteristics of Good Quality PD, and the Relationship between Participation in TSGs and Teachers' Self-Efficacy

Part C of the questionnaires was intended to get in-depth views from the participants about the importance of self-efficacy, characteristics of good quality PD, and the relationship between participation in PD and TSGs, and their self-efficacy beliefs. Part C consists of 10 questions with some closed-ended questions (Question 1, 2, 3, 5, 7, 8 and 9), asking the participants to tick or circle the provided options using Likert scales, followed by open-ended questions.

From the 104 respondents who returned both questionnaires, all participants responded to the close-ended questions, but only 67 (64.4%) of them gave responses to the open-ended questions. Of the 67 respondents who gave responses to the open-ended questions, 36 only responded either in the Q1 or in the Q2. This means that 31 of the participants commented on both questionnaires.

In presenting the findings from Section C, the researcher organized the data under the categories that emerged from the participants' comments. The reason for doing this is that although the researcher asked specific open-ended questions, the teachers often did not directly answer the questions that were asked. Therefore, the data is combined from different questions and findings described under the categories of information the participants revealed.

The findings from part C of the questionnaires are chronologically presented in three sections. The first section contains insights into the teachers' perceptions of the

importance of self-efficacy on their teaching practices. The second section is about the teachers' perceptions of the PD and TSG activities they had attended, with particular reference to the criterion of good quality PD that enhanced teacher self-efficacy and the reasons for the teachers' level of participation in the TSGs. Finally, discussions of the relationship between teachers' participation in the TSGs and their sense of self-efficacy beliefs are provided.

For these questionnaire results, the coding reference used for the data indicates the participant, level of teaching experience and district category. For example, the reference T.48 refers to teacher 48. The letter 'VET' refers to a very experienced teacher, 'ET' refers to an experienced teacher, and 'NT', a novice teacher. The letter 'UA' indicates urban area, and 'RA', rural area. For example, T.48.VET.RA would refer to teacher 48, a very experienced teacher from a rural area.

4.4.1 Teachers' perceptions of the importance of self-efficacy

This part presents the findings from the participants' comments related to their perception of the importance of self-efficacy. This is important for discussion to more fully understand the effect of professional learning opportunity on teacher self-efficacy. Based on the information the participants revealed, they perceived that self-efficacy is important to their teaching practice in three areas: improving teachers' teaching performance; helping teachers to keep motivated; and increasing students' motivation and achievement. Below is a discussion of the three themes.

Improving teaching performance

The majority of the participants with various teaching experience (VETs, ETs, and NTs) and from urban and rural areas perceived that having high self-efficacy helps teachers to improve their teaching performance. Five of the teachers (two ETs and one NT in IQ and one VET and one ET in FQ) confirmed that teachers can't teach well without having high self-efficacy. One of them said,

Because without self-efficacy, teachers can't teach well both theoretically and practically. That's why teachers need to believe about their capability. (T.85.ET.RA)

Two teachers from rural areas (one VET and one ET) offered very much the same ideas when focusing on EFL. They believed that EFL teachers need to have high self-efficacy to allow them to teach English effectively and optimally.

It is very important for teachers, especially EFL teachers, to believe about their capability so they are able to plan and transfer their knowledge or to teach English lesson content effectively. (T.52.VET.RA)

Another aspect that six teachers (two VETs and four ETs from urban and rural districts) considered was having high self-efficacy helped teachers to create a creative, innovative and enjoyable learning process. One of the teachers in the IQ said,

Teachers with good self-efficacy will teach creatively and democratically, as the way of engaging students. (T.79.VET.RA)

Very similar ideas were offered by two teachers (one ET from urban and one NT from rural districts) who perceived that teacher self-efficacy is important to help teachers create active, creative, effective and enjoyable learning processes (called PAKEM in the Indonesian educational context).

It is very important to create PAKEM. As we know, when teachers implement PAKEM, students then follow the lesson eagerly. (T.58.NT.RA)

Another two teachers (one ET from urban and one VET from rural) perceived the importance of self-efficacy by comparing teachers with high efficacy and teachers with low efficacy beliefs in terms of effort they make to achieve learning goals.

I thought high efficacy teachers will try to make more efforts to gain learning goals than low efficacy teachers. High efficacy teachers will try to do their best for the success of learning. (T.5.ET.UA)

Teacher self-efficacy is also considered to have a direct relation to teachers' ability to improve and solve teaching problems. These views were stated by two teachers (one

VET and one ET from urban area) in the Q1, and two ETs from rural districts in the Q2. One of them said that teachers should believe in their own capability and their teaching skills in order to find the way out of teaching problems (T.3.ET.UA). Another teacher said,

Teachers are facing many problems related to teaching and learning. Having high self-efficacy might help teachers to manage the problems and try to find its solution. (T.77.VET.RA)

Helping teachers to keep motivated

Five teachers (two VETs, two ETs and one NT from urban and rural areas) perceived that teachers need to have high self-efficacy to help them always have high motivation in their activities as teachers. One of them, for example, said that efficacious teachers always try to do their best and “remain motivated without being influenced too much by the school atmosphere and the strong pressure for academic standards among teachers” (T.89.ET.RA). Another teacher said,

Since the implementation of the teacher certification program, teachers are facing very high demands related to their profession. I think efficacious teachers will be able to manage the high demand and always be motivated in teaching in order to achieve the educational goals. (T.24.VET.UA)

Another two teachers (one VET and one ET from a rural district) perceived that having high self-efficacy may help teachers to manage their feelings in relation to the sort of responses they receive, either from their colleagues or from their students. One of the teachers said that not all her colleagues always supported what she did to help students increase their achievement. Having high self-efficacy will help teachers to keep motivated whatever the responses from other teachers (T.5.VET.UA). Another teacher described the importance of teacher’s motivation for students’ learning by saying,

Sometimes he himself found his students had very low motivation in studying English. That’s why EFL teachers need to have high self-efficacy because this may help them to keep motivated in teaching English subject and help their students. (T.57.ET.RA)

Recognising their own strengths and weaknesses is another positive impact of having high self-efficacy for teachers. One of the teachers stated that efficacious teachers will be motivated to carry out self-reflection in an effort to improve their teaching performance (T.90.VET.RA).

Increasing students' motivation and achievement

Three of the teachers (one VET from an urban area and two ETs from a rural district) commented further in the Q2 with different ideas from what they stated in the Q1. Initially they perceived self-efficacy as something that can help teachers create and implement a creative, innovative and enjoyable learning process, yet in the Q2 they viewed efficacious teachers as able to motivate students in learning. One of them said that teachers with a high sense of self-efficacy can affect students' motivation to get involved actively during the learning process (T.5.VET.UA). Another teacher said,

Teachers who have high self-efficacy are able to motivate students in learning, so the students' achievement can be increased as well. (T.66.ET.RA)

Another four teachers (two ETs and two VETs from urban and rural areas) linked teacher self-efficacy, students' motivation, and students' achievement. They perceived that there is a direct link between teacher self-efficacy, teachers' ability to motivate students and the possibility to reach learning goals and increase students' achievement. The two excerpts below represent what the four teachers perceived.

Having high self-efficacy is important because it can become a basic capital for teachers to teach and to motivate students in order to reach the stated goals of learning. (T.6.VET.UA)

Teachers with good self-efficacy have greater chances to optimize their knowledge and skills, so the possibility to reach their teaching and learning goals and to help students increase their achievement become bigger and bigger. (T.50.VET.RA)

From the participants' quotes above, this shows that those teachers with high self-efficacy felt this helped them to increase their classroom practice and ability to increase students' motivation and achievement. The next section presents and discusses teachers'

perceptions about PD activities they had attended in order to see the link between PD activities and teachers' self-efficacy.

4.4.2 Teachers' perceptions of professional development activities

This section presents the findings from participants' comments related to PD activities. It begins with the range and quality of PD, followed by characteristics of good quality PD that enhances teacher self-efficacy. It then discusses and presents the impact of PD on the aspect of instructional strategy, classroom management and student engagement. Finally, the reasons for the participants' level of participation in the TSGs are presented.

4.4.2.1 Range and quality of PD that the participants had participated in

Question 1 of section C was intended to find out the range of PD activities that the 104 teachers who returned the Q1 and the Q2 had attended. The types of PD that the participants have attended can be seen in Table 4.16.

Table 4.16 Types of PD the Participants have participated in

| Types of PD | Data Sources | Number of participants | |
|----------------------|--------------|------------------------|------------|
| | | Quantity | Percentage |
| Seminars | The Q1 | 99 | 95.2 |
| | The Q2 | 101 | 97.1 |
| TSGs | The Q1 | 99 | 95.2 |
| | The Q2 | 102 | 98.1 |
| Workshops | The Q1 | 93 | 89.4 |
| | The Q2 | 95 | 91.3 |
| Mentoring | The Q1 | 63 | 60.6 |
| | The Q2 | 67 | 64.4 |
| Observing Colleagues | The Q1 | 28 | 26.9 |
| | The Q2 | 36 | 34.6 |
| Coaching | The Q1 | 16 | 15.4 |
| | The Q2 | 18 | 17.3 |
| Conferences | The Q1 | 0 | 0 |
| | The Q2 | 0 | 0 |

Note: the Q1 = Initial questionnaires; the Q2 = Follow-up questionnaires

Table 4.16 shows that almost all participants had been involved in seminars, TSGs, and workshops. They also experienced mentoring, which is indicated by more than half of the participants stating that they had been involved in this activity. However, none of them had participated in a conference.

While Question 1 was intended to find out the range of PD the participants had participated in, Question 2 was intended to examine the participants' views of the quality of PD they had attended. The following are the participants' views of the quality of PD they had participated in.

Table 4.17 The quality of PD the Participants have participated in

| Types of PD | Data Sources | Quality | | |
|----------------------|--------------|------------|------------|------------|
| | | Good | Average | Poor |
| Seminars | The Q1 | 33 (32.7%) | 57 (56.4%) | 11 (10.9%) |
| | The Q2 | 33 (32.7%) | 61 (60.4%) | 9 (8.9%) |
| TSGs | The Q1 | 79 (77.5%) | 21 (20.6%) | 2 (1.9%) |
| | The Q2 | 83 (81.4%) | 18 (17.6%) | 1 (1%) |
| Workshops | The Q1 | 28 (29.8%) | 58 (61.7%) | 8 (8.5%) |
| | The Q2 | 29 (30.9%) | 59 (62.8%) | 6 (6.3%) |
| Mentoring | The Q1 | 50 (74.6%) | 17 (25.4%) | 0 |
| | The Q2 | 51 (76.1%) | 16 (23.9%) | 0 |
| Observing Colleagues | The Q1 | 30 (83.3%) | 6 (16.7%) | 0 |
| | The Q2 | 28 (77.8%) | 8 (22.2%) | 0 |
| Coaching | The Q1 | 15 (83.3%) | 3 (16.7%) | 0 |
| | The Q2 | 14 (77.8%) | 4 (22.2%) | 0 |
| Conferences | n/a | n/a | n/a | n/a |

Note: the Q1 = the initial questionnaires; the Q2 = the follow-up questionnaires
n/a = Not available

Table 4.17 shows that from various PD activities the teachers had participated in, observing colleagues, coaching, TSGs, and mentoring were considered as good forms of PD that could help them to increase their competence. Of the seven types of PD, TSGs were seen have most significantly increased in perceived quality between the Q1

(77.5%) and the Q2 (81.4%), followed by observing colleagues (the Q1 = 77.8%; the Q2 = 83.3%) during the five month period of the study. In addition, more than half of the participants saw the quality of seminars and workshops as 'average'. Some of them even stated 'poor' for the quality of seminars and workshops they had attended.

It is important to note that, although the participants were provided a choice of 'N/A' column if they did not want to give a judgement of the quality of PD, no participants ticked N/A. Therefore, it means that all the participants made a judgement of good quality PD either being 'Good', 'Average' or 'Poor'.

In order to find out the characteristics of good quality PD that may help teachers to enhance their self-efficacy, the participants were asked about their perceptions of good quality PD based on their experiences in attending PD. The next section discusses and presents the characteristics of good quality PD according to the participants.

4.4.2.2 Characteristic of good quality professional development

Question 3 of section C was intended to find out the characteristics of PD that may help teachers enhance their self-efficacy. Seventeen of the teachers stated their opinions in the IQ and twenty teachers in the FQ, and only eleven of them commented on both questionnaires. The teachers were from various teaching experience and from urban and rural areas. There were no particularly different perceptions between the teachers based on their teaching experience, gender or geographical location.

Based on the information the participants revealed, three themes emerged about their perceptions of the characteristics of good quality PD that may enhance teachers' self-efficacy: increasing teachers' knowledge and teaching skills; encouraging collaboration; and taking account of teachers' practical classroom needs. As can be seen in the following sections, the participants' statements shed light on these themes.

Increasing teachers' knowledge and teaching skills

The first theme and one that most (85%) of the teachers (of various teaching experience, and from urban and rural areas) articulated as fundamental to maximizing learning

outcomes is teachers' good understanding of content knowledge and pedagogical content knowledge. The teachers perceived that to achieve learning outcomes, teachers not only need to master the lesson content but also know teaching strategies that are appropriate to be used for the lesson content. One teacher, for example, said that she increased her understanding of both lesson content and teaching strategies after joining in PD. Her understanding of these two aspects helped her to manage her teaching activities (T.19.VET.UA). Another teacher who perceived similar ideas said,

For me, the most important things that PD providers need to consider are teachers' understanding of the content knowledge and pedagogical content knowledge. Some PD provided us [teachers] with the knowledge about lesson content and teaching strategies. This is good to help us [teachers] understand the lesson content and teaching strategies that teachers need to know. (T.50.VET.RA)

While the teacher above said he benefited from PD without specifying the types of PD and skills learnt from the PD, another four teachers (one NT from urban area and three ETs, one from urban and two from rural areas) reported their experiences in attending the training. According to them, teachers need to get involved in the training, especially about information and technology communication.

The training that I had attended is very useful; particularly the training about information and technology communication because it increased my understanding of how to integrate technology into teaching activities... This training is needed by teachers. (T.58.NT.RA)

One form of PD that many of the participants perceived had helped them to increase their knowledge and skills were TSGs. The comments below show that the TSGs had allowed the teachers to gain content knowledge and pedagogical content knowledge.

We sometimes discussed certain lesson contents in the TSG, including how to present the contents to the students. (T.12.NT.UA)

The TSG provided information about lesson contents and teaching strategies, especially how to teach English language subject well. (T.46.VET.RA)

Besides helping teachers to increase their content knowledge and pedagogical content knowledge, the TSG forms of PD also helped teachers to create lesson plans and learning materials. These ideas were stated by five teachers (one VET, three ETs, and one NT from urban and rural areas). One of them said, “The TSG meetings helped teachers to understand how to create lesson plans and learning materials in accordance with the curriculum” (T.24.VET.UA). Another teacher said,

I could increase my understanding on how to create learning materials that were based on the syllabus after discussing it in the TSG. (T.56.ET.RA)

Encouraging collaboration

Most of the participants perceived that, in order to promote teacher learning, PD activities need to allow participants to collaborate during PD processes. The processes that allow teachers to collaborate with other participants give greater opportunities to participate actively, and to reflect and get feedback. One of the teachers said,

From my experiences attended PD, some of them allowed us to collaborate and to give and get feedback, but some did not. (T.81.ET.RA)

Besides providing opportunities to participate actively and to get and give feedback, collaboration also can help teachers to feel less isolated. Six teachers (three ETs and three NTs from urban and rural areas) perceived that collaboration in PD was able to help them to feel less alone in their teaching context. One of them said that collaborative PD not just helped them to share their knowledge and expertise but also helped them to feel less isolated (T.85.NT.RA).

Four teachers (two VETs and two ETs from urban and rural areas) considered workshops as an effective type of PD that allows participants to collaborate and get involved actively during the meetings. They shared their experiences when attending workshops. One of them said that the workshops he had attended allowed the participants to give their opinion and get feedback from other participants because they were divided into small groups (T.15.ET.UA).

However, three other teachers (two VETs and one ET from urban and rural areas) perceived that the seminars and workshops they had attended did not provide them with the opportunity to participate actively during the meetings. One of them said,

I had attended seminars and workshops about five years ago. These activities did not provide sufficient time for participants to give and get feedback. In addition, these activities were attended by many participants. (T.94.ET.RA)

In relation to the opportunity to participate actively, five teachers (two VETs, two ETs, and one NT from urban and rural areas) compared the TSGs with the seminars and the workshops they had participated in. They perceived that the TSGs provided greater opportunities to the participants to participate compared to seminars and workshops. One of them said,

From many PD activities, the TSG gave more benefits to teachers compared to seminars and workshops because the activities allow teachers to collaborate and share knowledge with other participants. (T.79.VET.RA)

What T.79 said was also supported by four teachers (one VET, two ETs and one NT from urban and rural areas) in the Q1 who mentioned that the TSGs were a good form of PD that allowed them to collaborate and share knowledge during the meetings. Teacher 5, for example, confirmed that teachers have opportunities to share information, knowledge, and experiences in the TSG about learning methods in classrooms (T.5.VET.UA). These ideas were supported by teacher 48 who said,

Of the many types of PD, the TSG is very good place for teachers to increase and update their knowledge, skills and understanding about teaching. Teachers have opportunities to collaborate and give ideas during the meetings. (T.48.VET.RA)

The quotes above indicate that the TSG members had good opportunities to share knowledge, skills and experience through collaboration. Sharing and collaboration were considered as ways to allow participants to participate actively during the meeting processes. Reflecting on the findings, in general, the participants perceived that they valued PD activities very much that provided opportunities for them to share their knowledge and expertise.

Taking account of teachers' practical classroom needs

Some teachers perceived that, in order to promote teachers' teaching performance, the content of PD needed to be based on teachers' real needs in classrooms. This view of PD involves making connections to teachers' practical needs in classrooms. One of the teachers perceived that good PD will help teachers' teaching practice if the content is directly related to their real teaching conditions in their classrooms (T.80.ET.RA). Another teacher said,

The content of PD needs to be based on teaching needs by emphasizing teachers' own practices, and their knowledge and beliefs regarding these practices.
(T.24.VET.UA)

Although most of the participants mentioned the need for PD to provide participants with content directly related to their classroom practices, some of the participants repeated that on many occasions when they attended PD, the content of the PD sometimes did not related to their classroom teaching activities. One of them said,

Sometimes the content of PD was not suitable to what the participants' need... I attended a seminar I did not get anything from the activity related to my teaching practice in the classrooms. (T.24.VET.UA)

Again, one type of PD that some of the teachers (from a range of teaching experiences and from urban and rural districts) felt had provided them with the opportunity to discuss classroom practice was the TSGs. One of the teachers said that the TSG provided space for teachers to discuss issues and/or innovation about teaching as a way to improve their learning outcomes. He also said, "We determined the meeting topics based on our classroom practices" (T.4.VET.UA). Another teacher related the feedback from other TSG members that may help them to solve teaching problems.

Every teacher faces teaching problems; the problems were discussed in the TSG to find out the solution. TSGs are good forums to get feedback from other teachers.
(T.49.VET.RA)

4.4.2.3 *PD increased teachers' understanding of instructional strategy, classroom management, and student engagement*

This section presents the participants' perception of the impact of PD on aspects of instructional strategy, classroom management and student engagement from the questionnaire. The findings in this section are derived from question 4 of section C. In the first instance, the participants were asked to indicate the impact of PD on these three aspects by circling the boxes provided. Table 4.18 shows these three aspects.

Table 4.18 The Impact of PD on aspects of instructional strategy, classroom management, and student engagement

| Item | Data Sources | Choices | Total Responses |
|------------------------|--------------|-----------|-----------------|
| Instructional Strategy | The Q1 | Yes | 83 (78%) |
| | | Sometimes | 21 (22%) |
| | | No | 0 |
| | The Q2 | Yes | 86 (81%) |
| | | Sometimes | 18 (19%) |
| | | No | 0 |
| Classroom Management | The Q1 | Yes | 64 (59.8%) |
| | | Sometimes | 40 (40.2%) |
| | | No | 0 |
| | The Q2 | Yes | 65 (60.3%) |
| | | Sometimes | 39 (39.7%) |
| | | No | 0 |
| Student Engagement | The Q1 | Yes | 64 (59%) |
| | | Sometimes | 37 (37.4%) |
| | | No | 3 (3.6%) |
| | The Q2 | Yes | 64 (60%) |
| | | Sometimes | 37 (36.8%) |
| | | No | 3 (3.2%) |

Note: the Q1 = the initial questionnaires; the Q2 = the follow-up questionnaires
Total responses are the accumulation of the participants who choose these categories (Yes, Sometimes & No).

Table 4.18 shows that most of the participants found that PD activities they had participated in had positively impacted on their understanding of the areas of instructional strategy, classroom management and student engagement. Of these three aspects, the participants felt they benefited most in the area of instructional strategy from PD (78% in the Q1 and 81% in the Q2).

In order to further gauge the impact of PD in these three areas, the participants were asked to make further comments in each of the three aspects: instructional strategy, classroom management and student engagement.

Instructional Strategy

For instructional strategy, seventeen of the teachers stated their opinions in the IQ, fourteen teachers in the FQ, and eleven of them commented on both questionnaires. The teachers had various lengths of teaching experience and were from urban and rural areas. Generally, the participants perceived that they gained knowledge and understanding of instructional strategies from PD activities. Two themes emerged about the effect of PD on instructional strategy. The two themes are: building knowledge and understanding about instructional strategies, and instructional strategies increasing students' motivation to learn.

Building knowledge and understanding about instructional strategy

The majority of the participants (twenty four teachers) who commented on instructional strategy reported that PD activities had helped them to build knowledge and understanding about instructional strategies. Their understanding of this aspect allowed them to choose the appropriate method for certain lesson content and/or use appropriate instructional strategies in teaching.

One teacher who gave comments in the Q2 stated further why teachers need to understand instructional strategy.

PD provides opportunity for teachers to gain instructional strategy. The instructional strategy is very important because it helps teachers to understand how to transfer knowledge to their students. (T.52.VET.RA)

Another three teachers from rural districts (one VET and two ET) expressed their views in the Q2 that PD activities helped them to understand instructional strategies which are suitable to implement based on the level of students' ability. One of the teachers said that her students' ability varied and was sometimes lower than other schools which meant that she could not apply the same instructional strategies for all students (T.5.VET.UA).

Another aspect that was considered by four teachers as a benefit of increasing knowledge, skills and understanding about instructional strategy from PD was the ability for teachers to provide meaningful learning activities and student-centred teaching. The four teachers were one VET, two ETs, and one NT from urban and rural districts. One of them said that one impact of PD on teachers' understanding of instructional strategy is that "it may help teachers to shift from teacher-centred to student-centred" (T.58.NT.RA).

Instructional strategies increasing students' motivation to learn

Helping teachers increase students' motivation to learn in English was considered by eight teachers (from various teaching backgrounds and from urban and rural areas) as an impact from an instructional strategies focus from PD. One of the teachers stated that appropriate instructional strategies can avoid saturation in studying and this increases students' motivation in learning (T.8.ET.UA). Another teacher said,

The instructional strategy that I have learnt from PD help me to understand how to give clear direction before and during the learning process, so students learn English [language] with passion and pay attention to the lesson contents being taught. (T.46.VET.RA)

One experienced teacher in the FQ also informed that teachers' good understanding of instructional strategy may help students to understand the learning goals and focus on learning processes (T.52.VET.RA).

Another two teachers reported on the impact of PD on teachers' understanding of instructional strategy as the knowledge to conduct the learning process with in a positive way. They were one ET from an urban area and one VET from a rural area.

Good understanding of instructional strategy helps teachers to create a comfortable atmosphere, as well as active, creative and enjoyable learning process so students can receive lessons well. (T.33.ET.UA)

Classroom Management

Eleven teachers stated their opinion in the IQ, fifteen teachers in the FQ, and only eight of them commented on both questionnaires. The teachers had various teaching experience and were from urban and rural areas. Based on the information the participants revealed about the impact of PD on aspects of classroom management, two themes emerged: efficient use of time, and building good relationships with students during the learning process. Below is a discussion of the two themes.

Efficient use of time

Most of the teachers (fourteen teachers) who commented on the aspect of classroom management perceived that PD had helped them to understand classroom management as the way to use their time effectively during the learning process. A well-managed classroom will help teachers to state learning objectives clearly and save time in classrooms. One of the teachers, for example, said,

I think PD has helped teachers to increase their understanding of classroom management. Their understanding of this aspect will help them to manage the classrooms during learning processes and help them to avoid wasting time. (T.3.VET.UA)

Another three teachers perceived that when teachers can organize classrooms and avoid disruptive behaviour during learning processes, it then helps them to maximize the time.

...help teachers learn how to organize classrooms and do their teaching activities. Students know what to do, so this may avoid getting off task or causing disruption. Classroom management will help to create a classroom environment that is conducive to teaching and learning processes. (T.3.VET.UA)

Establishing a good relationship with students during the learning process

Eight teachers reported on the impact of PD on teachers' understanding of classroom management to allow them to establish good relationships with students. They had various teaching experience, were from urban and rural areas, and expressed their ideas either in the Q1 or in the Q2. One of the teachers said,

PD helps teachers to learn how to build good relations with students, including how to overcome noisy behaviour of the students during lessons. (T.24.VET.UA)

Two VETs from urban and rural areas in the Q2 also expressed very similar ideas stating that teachers' good understanding of classroom management may help them to possess good interaction skills. One of them said that PD gave additional knowledge to teachers on how to manage classrooms with different types of students (T.4.VET.UA). Another teacher said,

Teachers should possess good behaviour and social interaction skills with students. PD may help teachers get these skills. (T.66.VET.RA)

Student Engagement

Nine teachers stated their opinion in the IQ and eleven teachers in the FQ, and only five commented on both questionnaires. The teachers had various teaching experience and were from urban and rural areas. Based on the information the participants revealed about the impact of PD on the aspect of student engagement, two themes emerged: increasing students' participation, motivation and achievement, and understanding students' diversity and needs. The following is a discussion of the two themes.

Increasing students' participation, motivation and achievement

Most of the participants (thirteen teachers) who commented on the aspect of student engagement perceived that their understanding of this aspect had helped them to increase students' motivation in learning. The participants were from across teaching experience and from urban and rural districts.

One of the teachers indicated that when teachers have a good understanding of student engagement, they are able to motivate students to be eager follow the lesson (T.79.VET.RA). Another teacher who expressed very similar ideas said,

PD helps teachers to understand how to increase students' willingness, need, and desire to participate in, and be successful in the learning process. (T.85.ET.RA)

Another three teachers (one VET and two ETs from urban and rural areas) commented on the need for EFL teachers to understand student engagement. They stated that teachers' good understanding of student engagement will allow them to help students increase their ability in English. One of them said,

PD helped teachers to motivate students ...students are interested to follow English subject in order to master four basic skills: listening, speaking, reading and writing. (T.76.VET.RA)

Besides helping teachers to be able to motivate students, teachers' good understanding about student participation and engagement will also help them to improve their students' achievement. These ideas were stated by another two teachers (one VET from rural area and one ET from urban) who perceived teachers' understanding of student engagement had a direct relation to student achievement. One of them, for example, said that PD helped teachers to understand about student engagement that would help them "to motivate students to increase their achievement" (T.46.VET.UA).

Another aspect that had been considered by two teachers as a positive impact of understanding about student engagement was the ability to encourage students to submit their assignments on time and follow the learning directions in class. The two teachers were one VET from urban area and one ET from rural district.

For me, it is not easy to ask students to be on time, including submitting their task on time. Teachers' good understanding about student engagement as the result of PD will help them to stimulate students eager to follow the directions, and submit required work on time. (T.5.VET.UA)

Understanding students' diversity and their learning needs

Four teachers (two VETs and two ETs from urban and rural areas) perceived student engagement as, for example, understanding 'students' character' and 'treating students based on their level of ability'. The statements from these four teachers focused on the role of student engagement as a way to understand and treat students. One of the teachers perceived that teachers with good understanding of student engagement are able to handle students with different characteristics. This understanding might be gained from PD (T.8.ET.UA). Another teacher said,

The knowledge that I got from the PD about student engagement has helped me to treat students based on their character and level of ability. (T.48.VET.RA)

Another three teachers (two VETs in IQ and one ET in the Q2) stated the importance of understanding student engagement as a process of creating students' feelings of satisfaction.

...create satisfactory feeling of students due to good understanding of student engagement. PD can help teachers to gain the skills. (T.77.VET.RA)

4.4.2.4 Teachers' participation in the TSGs

This section presents the level of participation of the 104 teachers in the TSGs and the reasons for their level of participation. To find this out the participants were asked to tick their level of participation based on the question "Do you currently participate in the TSG?" There were three choices: Yes, Sometimes and No. Following are the participants' level of participation in the TSGs based on their teaching experience and district areas.

Table 4.19 The Participants’ Level of Participation in the TSGs

| Level of Participation | Teaching experience | | | District | | | Total |
|------------------------|---------------------|-----|-----|-----------|-----------|-----------|------------|
| | VETs | ETs | NTs | A (Urban) | B (Rural) | C (Rural) | |
| AG | 17 | 20 | 8 | 17 | 14 | 14 | 45 (43.3%) |
| SG | 14 | 14 | 5 | 16 | 9 | 8 | 33 (31.7%) |
| NG | 13 | 9 | 4 | 12 | 7 | 7 | 26 (25%) |
| Total | 44 | 43 | 17 | 45 | 30 | 29 | 104 |

Note: AG = Active group; SG = Sometimes group; NG = Non active group
 VETs = Very experienced teachers; ETs = Experienced teachers; NTs = Novice teachers

Of the 104 respondents who returned both questionnaires, most were very experienced teachers and experienced teachers, were from the active group and were from district A (urban area). There were only 17 novice teachers took part in this study and eight of them attended the TSGs actively.

In order to find out the reasons for their level of participation in the TSGs, participants were asked to give further comments.

The reasons for attending the TSGs actively

This part presents and discusses the reasons why the teachers attended the TSGs actively. Thirteen of the teachers stated their opinion in the IQ and nine teachers in the FQ, and only five commented on both questionnaires. The teachers had a range of teaching experience and were from urban and rural areas. Based on the information, two themes emerged: sharing information, knowledge, skills, and experiences; and keeping relationships with other teachers.

Sharing information, knowledge, skills, and experiences

The majority of the participants (eleven teachers with a range of teaching experience and from urban and rural areas) who attended the TSGs actively stated that they attended the TSGs actively to share information, knowledge, skills, and experiences

with other teachers. They implied that this sharing process benefited their understanding about teaching. One of them, for example, said,

Because the TSG often gave new knowledge and skills to us by discussing something related to teaching. We also sometimes got feedback from experienced teachers about teaching. (T.8.ET.UA)

One of the teachers said that he usually gained valuable information from other teachers who attended PD. The members who attended PD shared the PD content with other TSG members (T.80.ET.RA). Another three teachers (one VET from an urban area and two ETs from a rural district) commented on the positive impact of the sharing processes in the TSGs by stating that they might find solutions to their teaching and learning problems.

Every teacher faces problems about learning. In the TSG we have opportunities to share experiences with other teachers and get feedback from them [TSG members]. This is something we usually did. (T.4.VET.UA)

Other aspects that seven participants perceived as a positive impact when attending the TSGs actively were to develop and broaden understanding about teaching strategies, including teaching English. The seven participants had a range of teaching experiences and were from urban and rural districts. One of them said that the TSG gave teachers opportunities to develop understanding about teaching strategies appropriate to apply in the classroom, especially in teaching English (T.76.VET.RA). Another teacher pointed out the reasons why she attended the TSG actively,

I wanted to know all the teaching materials that were being presented, especially how to teach certain genre [types of text] in the English language subject. (T.16.NT.UA)

Changes in the curriculum, new education policies and other aspects related to teaching and learning in Indonesia also became the reasons why some teachers attended the TSGs actively. Three teachers (one VET from urban and two ETs from urban and rural areas) in the Q1 and two ETs from urban and rural areas in the Q2 stated these reasons. The comments below indicate that the teachers increased their understanding about the

Curriculum, education policies and other aspects about teaching and learning through sharing processes in the TSGs.

...to ensure that I always keep an eye on updated knowledge and understandings related to the development of learning and teaching, as well as the changes in education policies. (T.6.VET.UA)

I gained new information or knowledge when I attended the TSG. Three months ago we shared information about the Curriculum 2013⁷. (T.70.ET.RA)

Building relationships

Besides increasing knowledge and skills, three teachers (two VETs from urban and rural areas and one ET from rural area) stated their reason for attending the TSGs was to keep in touch with other teachers. It seems the teachers viewed 'maintaining relations with other teachers' as an additional benefit when attending the TSGs.

Silaturrahim [keep relationship/keep in touch] with other teachers. (T.47.VET.RA)

Many good things we [teachers] can get from the TSG, such as.... In addition, we can also keep and build good relationship with the other TSG members. (T.46.VET.RA)

The reasons for sometimes attending the TSGs

This part presents and discusses the reasons why the teachers only sometimes attended the TSGs. Seven of these teachers stated their opinion in the IQ, six teachers in the FQ, and only four commented on both questionnaires. The teachers had a range of teaching experiences and were from urban and rural areas. Based on the information the participants revealed, five reasons emerged: had other activities as important as the TSG meetings, the TSG meetings were conducted in teaching hours, the TSG meetings were not conducted at regular times, late information about the meeting schedule, and joining in other teacher training programs.

⁷ The Curriculum 2013 is the newest curriculum being implemented in Indonesia.

Had other activities as important as the TSG meetings

Five teachers stated they only sometimes attended the TSGs because they had other activities at the same time. The five teachers were two VETs and three ETs from urban and rural areas. One of the teachers said that the TSG meetings that were conducted in the afternoon did not suit her as she has other business (T.22.ET.UA). Another teacher said,

I have other certain activities. These activities were usually at the same time with the TSG meetings. (T.63.ET.RA)

One very experienced teacher in the Q2 stated the same point. He argued that he sometimes did not come to the meetings because he had other activities as important as the TSG meetings (T.90.VET.RA).

The TSG meetings were conducted in teaching hours

Three teachers from the rural area (one VET and two ETs) stated the meeting time as the reason why they only sometimes participated in the TSGs. One of them stated that the TSG meetings were conducted in teaching hours and she usually taught then (T.91.VET.RA). What teacher 91 said was also supported by another teacher who said,

I could not always attend the TSG meetings because the time was the same with my teaching hours. I already suggested to the TSG coordinator to change the meeting time but no response. (T.93.ET.RA)

The TSG meetings were not conducted at regular times

Another three teachers (one VET and two ETs from urban and rural areas in the Q1) stated that the TSG meetings were not conducted every month. One of them said that because the TSG meetings were not conducted regularly, he sometimes did not know if there was a meeting (T.67.ET.RA). Another teacher indicated that the TSG meetings were only active when the semester time came.

Because the TSG activities were often active only in facing semester time to create the guidelines for semester tests. (T.27.ET.RA)

Late information about the meeting schedule

Access to the information of the schedule of the TSG meetings was another reason why teachers did not attend the TSG. Two teachers (one VET from urban and one ET from rural) stated these reasons.

The information about the meetings was usually very late because my school is located in the suburbs. (T.101.ET.RA)

Joining in other teacher training programs

Two ETs from urban area stated in the Q1, and one of them stated again in the Q2, that they did not actively attend the TSGs because they took part in the training. The training is obligatory for teachers in Indonesia who submit their portfolios to fulfil the requirement of the Teacher Certification Program and were required to take further training.

Because I joined in PPG (teacher training program) as part of the Teacher Certification Program. (T.33.ET.UA)

The reasons for not attending the TSGs

This part presents and discusses the reasons why teachers did not attend the TSG meetings. Six teachers stated their opinion in the IQ, four teachers in the FQ, and only two of them commented on both questionnaires. The teachers had a range of teaching experiences and were from urban and rural areas. Based on the information the participants revealed, three themes emerged: have a lot of activities out of teaching hours, live far from the meeting venue, and get very little knowledge and/or information from the TSG.

Have a lot of activities out of teaching hours

Some reasons were quite similar to those of the five teachers from the ‘sometimes’ group. Four teachers from the non-active group also stated that they had other activities after teaching hours. They were three VETs and one ET from urban and rural areas. One of them, for example, said that she had a lot of activities out of teaching hours (T.38.VET.UA). Another teacher said,

The meetings were conducted after school hours and I had other activities at the same time. (T.71.VET.RA)

Live far from the meeting venue

There were two teachers from rural areas (one VET and one ET) who stated that they did not participate in the TSGs because they live far from the city (the meeting venue). One of them commented in the IQ and another one was in the FQ.

Get very little benefits from the TSG

Three teachers (two VETs and one ET) perceived that they gained little benefit from the TSG. One of the teachers who said this (T.73.VET.RA), unfortunately did not offer further suggestions of what the TSG committee needs to consider in order to encourage more teachers to participate actively.

Another teacher, who gave comments in IQ, said that she did not get additional knowledge about teaching English language from the TSG. She did not give any comment in FQ (T.43.ET.UA).

And another VET from rural area said that the topics of the meetings were usually the same or repeated. He said, “I found the meetings topics mostly about lesson plans and the guidelines for semester tests” (T.45.VET.UA).

4.4.3 Perception of the relationship between participation in TSGs and teachers' self-efficacy

This section presents and discusses the findings from question 6 and question 9 of Section C about the participants' perceptions of whether the TSGs had helped them and other teachers to enhance their self-efficacy. This section is related to one of the aims of the study, namely to investigate the relationship between participation in TSGs and teachers' self-efficacy.

Based on the information the participants revealed, the TSGs helped the teachers to enhance their self-efficacy. Two reasons emerged which were similar to characteristics of good quality PD: sharing information, knowledge, skills and experiences; and finding solutions to teaching problems. Below is a discussion of the two themes in relation to teacher self-efficacy.

Sharing information, knowledge, skills and experiences

The majority of the participants who commented on the impact of TSGs on teacher self-efficacy viewed that sharing and discussing information, knowledge, skills and experiences among the teachers were the aspects in the TSGs that most affected their self-efficacy. Fifteen teachers stated their opinion in the IQ and twelve teachers in the FQ, and six commented on both questionnaires. The teachers had various teaching experience and were from urban and rural areas. One of them said,

Sharing experiences between teachers and getting feedback from senior teachers about learning methods/strategies in the TSG may impact teachers' self-efficacy.
(T.85.ET.RA)

Four of the teachers (two VETs, one ET and one NT from urban and rural districts) perceived that the sharing processes had helped the teachers increase their knowledge, skills and attitude about teaching that affected their self-efficacy.

The TSG meetings help us [teachers] to increase our knowledge, skills, and attitude in doing our job as teachers due to sharing processes. Increasing knowledge, skills,

and attitude helps to increase teacher's self-belief about their capability.
(T.58.NT.RA)

Another three teachers (one VET and two ETs) considered that getting new information on lesson content and/or teaching strategies from the TSG meetings, especially teaching English language, were the aspects that helped enhance their self-efficacy.

...new information about lesson content and/or teaching strategies, especially how to teach English language subject well. That information increases self-belief about teaching the content and teaching strategies. (T.46.VET.RA)

Discussing lesson plans, syllabus, learning media, and the guidelines for semester tests were also considered by four teachers as aspects in the TSGs that mostly affected teachers' self-efficacy. The four teachers had a range of teaching experience and were from urban and rural areas. One of them said they had discussed the guidelines for semester tests and created samples of the semester tests in the TSG. Due to the sharing and discussion process, the teachers could create good tests for students and this had enhanced their self-belief about their capability. (T.55.ET.RA). Another teacher who offered very similar ideas said,

How to create lesson plan, syllabus, and learning media are very useful for me as a new teacher. I learned the skills in the TSG and these teaching materials helped me to teach in better ways and make me more confident in teaching. (T.87.NT.RA)

Another aspect that four participants found very useful to enhance their self-efficacy was observing colleagues when one or two of the TSG members were presenting lesson content (peer-teaching). Peer-teaching was considered by the teachers as part of sharing and discussing information, knowledge, skills and experiences among them. The four teachers had a range of teaching experience and were from urban and rural areas. One teacher, for example, said,

I found the peer-teaching was a very good activity in the TSG. Showing other teachers presenting lesson content helps to increase teacher self-efficacy.
(T.61.ET.RA)

Another novice teacher, who had similar perceptions stated,

For me as a new teacher, it is necessary to carry out peer-teaching after discussing lesson content. By doing this, it allows me to understand the lesson content better and feel more confidence in delivering the content. (T.95.NT.RA)

Solving teaching problems

Four teachers commented that when the TSG members met and tried to find out solutions to the learning and teaching problems they faced, it helped them to become more confident to bring out the desired outcome of learning. The three teachers were two VETs (from urban and rural areas), and one ET from rural district. The comments below show that the teachers usually shared ideas in the TSGs to help them solve their teaching problems.

When we [the TSG members] met, discussed and found the way out of the teaching problems. These processes helped us to increase our motivation and self-belief about our competences. (T.5.VET.UA)

One very good point in the TSG is we shared opinions about teaching problems and solution with other teachers and the teacher supervisor. All the processes could motivate us as teachers and help us to increase our self-belief in teaching. (T.56.ET.RA)

One teacher stated that every school has different problems and when the teachers met and found solutions, it then could help teachers to be more confident in their abilities (T.62.ET.RA). Another teacher related the endeavours that teachers made to solve their teaching problems to the fact that the TSG members have different abilities and experiences.

I believe that every teacher in every school faces problems related to teaching and learning. We [the TSG members] discussed solutions to the teaching problems. We have different abilities and experiences... finding solutions enhanced our self-efficacy. (T.52.VET.RA)

4.5 Summary of Section C results

The questionnaire found that teachers need to have high efficacy beliefs because having high efficacy beliefs will help them to improve their classroom practice, and increase students' motivation and achievement. However, some of the participants indicated that teachers have high self-efficacy as a result of their capability in mastering lesson content and successful teaching strategies.

In term of PD activities, the participants were involved in a wide range of PD such as seminars, training, workshops, TSGs, and observing colleagues. The PD activities affected the participants throughout their career by increasing their knowledge and skills about teaching, and increasing their understanding about students' needs. They believed that in order to experience good quality PD that may help teachers to enhance their sense of self-efficacy, PD activities should be able to help teachers to increase their knowledge and skills about teaching, allow active participation, and take account of teachers' practical needs. Additionally, most of the teachers perceived that PD activities had helped them to increase their understanding about instructional strategy, classroom management and student engagement.

Of the forty five teachers who attended the TSGs actively, most of them perceived that the sharing process had helped them to increase their knowledge and skills about content knowledge and pedagogical content knowledge. They also perceived that the sharing process had helped them to solve teaching problems they faced. Some of them considered that maintaining good relationships with other teachers was necessary, and the TSGs were good forums for that. For those teachers who only sometimes attended the TSGs, they usually had other activities at the same time or did not know about the meetings. On the other hand, some teachers who did not attend the TSG meetings said they had other activities out of teaching hours, lived far from the meeting venue, and a few said they found little benefit from the TSG meetings.

All of the participants perceived that the TSGs had helped them to enhance their self-efficacy by sharing information, knowledge, skills and experiences. In addition to find solutions to teaching problems this had also helped teachers to enhance their self-efficacy.

Chapter Five

The Results from Observations and Interviews

5.1 Introduction

This chapter presents the findings from the observations and the interviews. The first two sections present a brief description of the structure of the TSG meetings from the observations and the process of the interviews involved in this study. This was done to familiarise the reader with the TSG context of the current study and to give a general picture of the TSG process and the participants involved in the interviews. Following this, the three categories that emerged from the findings of the interviews and observations are presented and discussed. The three categories are: teachers recognize the importance of self-efficacy; characteristics of good quality PD; and the challenges of the TSGs. These three categories draw primarily on information provided by the teachers in the interview data, while the data from observations are used to support what the teachers said in the interviews. Where relevant, distinctions are made between the three TSGs to reflect the specificities of each TSG. At the end of the chapter, key points from the three categories are brought together in a summary section.

In reporting the results of the observations and the interviews, the sequence coding reference used for quotations indicates the source of data. In observation notes, the reference OB at the beginning of the reference quotes stand for the observation notes, followed by the time of observing the TSGs and the district location. For example, OB.M1DA would indicate the quote is from the observation notes, meeting 1 in district A.

For the interview data, the coding reference of IT at the beginning of the reference quotes stands for the interview transcript. This is followed by participants' pseudonym name, teaching experience, and district categories. For example, IT.Adel.VET.UA would refer to the interview with Adel, a very experienced teacher, and from an urban area.

5.2 Description of the TSG Meetings Based on the Observations

This section presents a brief description of the data concerned with the three TSGs. This was done to provide the reader with a general picture of the structure of the TSGs that were observed. The general description of the data is derived from my field notes. The data presented in this section are not intended to describe the individual teacher's activities during the observation processes, rather to give pictures of what and how teachers conducted the TSG meetings.

As outlined in the guidelines for the observation (see Appendix J), the field notes consist of three parts. Part 1 is about specific learning objectives and activities planned for the TSG meetings, Part 2 is about preparing and organizing the TSG meetings, and part 3 focuses on four aspects of the TSGs. The data from part 3 of the observation notes is used to support what teachers' said in the interviews related to TSGs, especially on these four aspects of content focus, active learning, collective participation, and feedback on practice. Therefore, the notes from part 3 of the observations are useful to double check what the participants said in the interviews.

Below is the discussion of the type, time, topic and number of the participants in the observation processes. This provides information of the three TSGs that were observed during the period of the study.

5.2.1 Type, time, topic and number of participants

As outlined in the methodology chapter (see Section 3.4.2), the type of TSGs that the researcher selected to observe consisted of one from an urban area and two from rural districts. The members of the three TSGs were all junior secondary EFL teachers in these three districts. In general, there is only one TSG for every subject (e.g. Maths, History, Biology, and English) in every district. However, some districts have more than one TSG for one subject depending on the size of the districts and the number of subject teachers in these districts. There is only one TSG for junior secondary EFL teachers in each of the three districts in this study.

During the observation processes, the TSG meetings were attended by between 15 to 21 teachers. The smallest attendance was at the first meeting of district B (Rural area) with only 15 teachers attending the meeting, and the largest attendance was the third meeting of district A (Urban area) with 21 participants attending. The majority of the TSG meetings (three meetings) were attended by 18 teachers. In general, there were no particular differences in the number of participants who attended the TSG meetings in these three districts.

The distribution of the topics discussed during the observations is shown in Table 5.1.

Table 5.1 Distribution of the topics discussed in the TSGs

| No | District Name | Meeting | Subject Discussed |
|----|----------------------------|-----------|---|
| 1 | District A (Urban Area) | Meeting 1 | Introduction of the Curriculum 2013 |
| | | Meeting 2 | Using Technology in Designing Lesson Plans and Teaching Materials |
| | | Meeting 3 | The guidelines for semester tests |
| 2 | District B (Rural Area) | Meeting 1 | Working Plan for the TSG Meetings in Semester 2 |
| | | Meeting 2 | Introduction to the Curriculum 2013 |
| | | Meeting 3 | Learning Models: Numbered Heads Together ⁸ |
| 3 | District C (Rural Area) | Meeting 1 | Introduction to the Curriculum 2013 |
| | | Meeting 2 | Methods and Approaches in Language Learning |
| | | Meeting 3 | The guidelines for semester tests |

Table 5.1 shows that all the three TSGs discussed the Curriculum 2013. This happened because at the time of the observations, the government of Indonesia through the

⁸ Numbered heads together is a learning model that was introduced by the facilitator. In this model, the facilitator distributed numbers (e.g. 1, 2, 3, 4). The participants were then divided into small groups based on the number they got.

Ministry of National Education (MONE) introduced the new curriculum (The Curriculum 2013). The teachers tried to understand the differences between the new curriculum and the previous curriculum by discussing it in the TSGs. Another subject that two out of the three TSGs discussed was the guideline for semester tests. The teachers discussed this subject just before the end of the semester to formulate the guidelines for the semester tests for students. The other three subjects discussed were different between the three TSGs. In general, the TSG meetings lasted between 90 minutes to 120 minutes.

5.2.2 Preparing and Organizing

In order to help in investigating how the facilitators conducted the TSG meetings in terms of preparing and organizing, the researcher used the following aspects when observing the nine TSG meetings (three meetings for each TSG). There are three aspects under ‘preparing and organizing’ as shown in Table 5.2. The researcher used categories ‘Well prepared’, ‘Prepared’, and ‘Not prepared’ during the observation process to find out how well the three TSGs were conducted in relation to the three aspects under preparing and organizing.

Table 5.2 Preparing and Organizing the TSG Meetings

| Item | Statement | Well prepared | Prepared | Not prepared |
|------|---|---------------|----------|--------------|
| 1 | Preparing meeting aids prior to the meetings | 7 | 2 | 0 |
| 2 | Preparing meeting plans (aims, objectives) | 8 | 1 | 0 |
| 3 | Preparing the time allocation of the meetings | 8 | 1 | 0 |

Table 5.2 displays the frequency of the three items observed under preparing and organising. Below is the explanation of each item.

Preparing meeting aids prior to the meetings

This item refers to equipment needs during the meeting process, such as LCD and board marker. Of the nine meetings observed, seven of the meetings were classified as ‘Well prepared’ by the researcher because the TSG boards prepared the meeting aids well

before they started the meetings. This indicates that all seven meetings ran smoothly without any interruption due to equipment problems. Another two meetings were classified as 'Prepared' due to the preparation process still needing to be improved. In these two meetings, the session was delayed between 10 to 15 minutes due to small problems with the LCD.

Preparing meeting plans (aims, objectives)

Preparing meeting plans refers to the specific learning objectives and activities planned for each meeting session. Almost all the TSG meetings stated the learning objectives clearly to the TSG members before starting the meetings. This was seen from eight out of nine meetings, in which the TSG coordinators or the facilitators started the meeting by reminding the participants of the meeting content and the specific purposes of the meeting. The meeting content and the specific purposes for each meeting were discussed and determined by the TSG members at the beginning of each semester.

Preparing the time allocation of the meetings

This item refers to the time allocated for each meeting in order to allow the speaker/facilitator to manage their presentation and the meeting process as a whole. Almost all the meetings (eight out of nine meetings) that were managed well allowed the speaker to present their presentation or allowed the facilitator to facilitate the meetings, as well as provided sufficient time for the participants to take and give feedback. One of the meetings needed to be improved in terms of time management in order to allow the speaker or facilitator to run the meetings or to provide sufficient time for the teachers to get and give feedback during the meetings. It seemed that in one meeting some teachers still wanted to ask questions or to clarify something but the speaker finished his session due to the limited time that had been set for the meeting.

5.2.3 Typical TSG meetings

In addition to the notes above, the researcher also gained a general picture of all nine meetings in the three TSGs. All the three TSGs shared a similar procedure in

conducting the TSG meetings. Before the meetings started, the teachers socialized (informal talk). That informal conversation lasted between 10 and 15 minutes. After that, the meetings were started with a short introduction (welcoming speech) by the TSG coordinator. At this point, the TSG coordinator conveyed gratitude to the members for attending the TSGs, followed by informing the participants of the objective/topic of the meetings. This phase lasted between 10 and 20 minutes and was sometimes followed by one to three questions or suggestion from the teachers. After the introduction, the TSG coordinator invited the speakers or facilitators to present their presentation. The presenters during my observations were teacher supervisors⁹ who were expert teachers and facilitators, while the facilitators in the TSG meetings were the TSG members. During the observation, the facilitators were senior teachers.

The presentations usually lasted from 45 to 70 minutes. The speaker or facilitator presented their presentation in three different ways as follows:

Firstly, the speakers or facilitators presented their topic before inviting the participants to ask questions or to give suggestions. This sort of presentation happened when the Curriculum 2013 was presented. There were similar patterns in presenting this topic in the three TSGs in which the speaker or facilitator gave their presentation before a question and answer session. This topic was introduced once in each TSG in these three districts during the TSG observations (OB.M1DA, OB.M2DB, and OB.M1DC).

In this approach, the process of transferring information and knowledge about the Curriculum 2013 seemed to focus predominantly on the speaker or facilitator activities and was less concerned with possible participants' interactions and collaboration. Speakers or facilitators focused on lecturing and demonstration of the presentation and the participants' main activities were copying presentation materials produced by the speakers or facilitators on the screen (power point) and asking questions. To be noted, although the meeting were speaker or facilitator driven, the participants had sufficient time to ask questions or get feedback.

⁹ Teacher's supervisors have duties to supervise teachers in regard to their classroom activities.

Secondly, the facilitator spoke between 20 and 30 minutes before inviting the participants to ask questions and/or give feedback. In this second approach, the speakers or facilitators encouraged the participants to directly interrupt their presentation whenever they wanted something to be clarified. This pattern happened when the TSG members discussed: using technology in designing lesson plans and teaching materials (OB.M2DA), working plans for the TSG meetings in semester 2 (OB.M1DB), and methods and approaches in language learning (OB.M2DC).

The second approach seemed to provide greater opportunities for the teachers to interact and share knowledge among themselves compared to the first approach. The observation showed that, on many occasions, when a teacher asked a question or commented on something related to the materials being presented, other teachers and the facilitators gave feedback and responses.

Lastly, the facilitators gave a short introduction to the topic (usually between 15 and 30 minutes), then divided the participants into small groups. After dividing the participants into groups, the facilitator distributed the meeting materials to be discussed in the groups before discussing it with the whole group. The participants were divided into small groups in the three TSG meetings, namely when they discussed: the guidelines for semester tests (OB.M3DA & OB.M3DC); and learning models: numbered heads together (OB.M3DB). The small group discussion lasted between 25 and 40 minutes. During the small groups' discussion the facilitator went around the meeting rooms, checking the participants' understanding and progress.

In this last approach, the processes seemed to focus predominantly on the participants' activities and were concerned much more about how to encourage participants to interact and collaborate among themselves. The facilitator's main activities were to facilitate the meeting processes. In this approach, the majority of the participants seemed to get involved actively during the small group discussions.

In the informal conversations the researcher had with some teachers, they said that most of the TSG meetings were conducted following the last pattern (one of the TSG members acting as a facilitator and participants were divided into groups to discuss a

topic). They said that sometimes they conducted the TSG meetings with seminars and/or workshops when they considered it was a better way to disseminate information (e.g. the Curriculum 2013). The most important point was that, the participants had sufficient time to get and give feedback during the meetings. According to the participants, one of the reasons why the participants had sufficient time in the TSG meetings to reflect and give feedback was because the meetings were not attended by so many participants (in contrast to seminars/workshops).

At the end of their presentation, the speakers or facilitators generally concluded their presentation and then handed over the meetings to the TSG coordinator. Before closing the TSG meetings, the TSG coordinators informed the participants about the schedule and the topics for next meetings. The TSG coordinators always encouraged the participants to attend the next meeting and to invite other teachers as well. Before leaving the meeting venue, the teachers had more informal conversations while having light refreshments.

Another source of data in this chapter is from the interviews. The following section presents a brief description of the interview processes and the participants.

5.3 Description of the Interview Processes and the Participants

After getting feedback from the initial questionnaires and observing the three TSGs, the interviews were conducted with a purposive sampling of eighteen junior secondary EFL teachers from three districts (6 participants in each district) representing a cross-section of the cohort (Patton, 2002). The participants were selected to represent individuals with variations in teaching experience, district categories, and gender, thus covering a wide range opinions (Lincoln & Guba, 1994).

The participants that were involved in the interviews were those who attended the TSGs actively. The participants' actual names were replaced with pseudonyms to ensure confidentiality. Table 5.3 shows the participants in the semi-structured interviews.

Table 5.3 Participants of the semi-structured interviews

| No | Code Number ¹ | Name ² | Gender | District | Teaching Experience ³ | School Category |
|----|--------------------------|-------------------|--------|------------|----------------------------------|-----------------|
| 1 | 2 | Zul | Male | District A | 15 years (ET) | State School |
| 2 | 3 | Rifki | Male | District A | 23 years (VET) | State School |
| 3 | 4 | Adel | Female | District A | 25 years (VET) | State School |
| 4 | 5 | Reski | Female | District A | 17 years (VET) | State School |
| 5 | 12 | Fatia | Female | District A | 5 years (NT) | Private School |
| 6 | 15 | Kamil | Male | District A | 9 years (ET) | State School |
| 7 | 46 | Nurul | Female | District B | 15 years (ET) | State School |
| 8 | 48 | Icha | Female | District B | 20 years (VET) | State School |
| 9 | 52 | Maryam | Female | District B | 18 years (VET) | State School |
| 10 | 53 | Nugi | Male | District B | 8 years (ET) | Private School |
| 11 | 55 | Diana | Female | District B | 6 years (ET) | State School |
| 12 | 58 | Ali | Male | District B | 4 years (NT) | State School |
| 13 | 77 | Diva | Female | District C | 15 years (ET) | State School |
| 14 | 78 | Saleh | Male | District C | 20 years (VET) | State School |
| 15 | 79 | Sultan | Male | District C | 24 years (VET) | State School |
| 16 | 80 | Ahmad | Male | District C | 16 years (VET) | State School |
| 17 | 85 | Fira | Female | District C | 7 years (ET) | Private School |
| 18 | 88 | Jihan | Female | District C | 1.5 years (NT) | State School |

Note: ¹) Code number is the number that was used to replace the participant's actual name in the questionnaires; ²) Pseudonym; and ³) VET = a very experienced teacher, ET = an experienced teacher, and NT = a novice teacher

The majority of the participants in the interviews were very experienced teachers (eight teachers) and experienced teachers (seven teachers), and were from state schools (fifteen schools). In addition, more than half of them (10 out of 18 participants) were female. The participants that were involved in the interviews were chosen purposefully to represent a wide range of teaching experience, gender and teaching location.

The guidelines of the interviews were based on the conceptual framework developed for the study, consisting of four main headings (see Appendix I). Therefore, the questions

that the participants were asked were mainly based on the four main headings which were teacher self-efficacy, professional development (PD), teacher study groups (TSGs), and PD/TSGs on teacher self-efficacy.

In the first instance, the participating teachers in the interviews were asked the types of PD they had attended in order to investigate the range of PD they have been involved in, and get more details that given in the questionnaire. Following are the types of PD that the participants had participated in.

Table 5.4 Types of PD that the participants in the interviews had participated in

| Name | Types of PD | | | | | | |
|--------|-------------|----------|------|-----------|----------|------------------------|----------|
| | Seminar | Workshop | TSGs | Mentoring | Coaching | Observing Colleague | Training |
| Zul | √ | √ | √ | √ | √ | √ | √ |
| Rifri | √ | √ | √ | √ | | √ | √ |
| Adel | √ | √ | √ | √ | √ | √ | √ |
| Reski | √ | √ | √ | √ | | √ | √ |
| Fatia | √ | √ | √ | | | | |
| Kamil | √ | √ | √ | √ | | | |
| Nurul | √ | √ | √ | √ | | √ | √ |
| Icha | √ | √ | √ | √ | √ | √ | √ |
| Maryam | √ | √ | √ | √ | √ | √ | √ |
| Nugi | √ | √ | √ | √ | | | |
| Diana | √ | √ | √ | | | | |
| Ali | √ | √ | √ | √ | | √ | √ |
| Diva | √ | √ | √ | √ | | | √ |
| Saleh | √ | √ | √ | √ | √ | √ | √ |
| Sultan | √ | √ | √ | √ | | √ | √ |
| Nugi | √ | √ | √ | √ | | √ | |
| Fira | √ | √ | √ | √ | | √ | |
| Jihan | √ | | √ | | | | |

As shown in Table 5.4, all the participants had been involved in seminars and TSGs, and most of them had participated in workshops, mentoring, observing colleagues, and training. However, only a few of them (five out of eighteen) experienced coaching. This shows that the participants experienced many types of PD.

The next section presents and discusses the participants' perceptions of the importance of self-efficacy on their teaching practices.

5.4 Teachers recognize the importance of self-efficacy on their teaching practice

Data analysis from the interviews revealed that teachers perceived self-efficacy as important to their teaching practice. There were two themes which emerged supported and added to the data from the questionnaires: high self-efficacy helps teachers to maximize their successful teaching practices, and efficacious teachers will try to do their best and introduce innovations. Below is the discussion of the two themes.

High self-efficacy helps teachers to maximize their successful teaching practices

The majority of the participants (thirteen out of eighteen) said that their perception of their ability in delivering lesson content and using certain teaching strategies determined the success of the learning process in the classrooms. The participants believed that teachers with high efficacy beliefs can maximize their successful teaching practices. One of the teachers said,

Teachers cannot teach well if they do not have high self-efficacy. So, personally I believe self-efficacy helps teachers to maximize their teaching practice. Moreover, when teachers teach English as a foreign language, there are some more challenges and that is why teachers need to have high self-efficacy. (IT.Adel.VET.UA)

Another aspect that most of the participants (ten out of eighteen) perceived to be important for self-efficacy was related to choices teachers make in relation to solving teaching problems. One of them, for example, said that the level of teachers' self-beliefs

about their competence influence the choices they make in solving teaching problems. High efficacy teachers will see teaching problems as challenges that need to be solved (IT.Ahmad.VET.RA).

One of the novice teachers shared her experience in teaching in relation to the importance of having high self-efficacy.

I think teachers should have high self-efficacy so they can teach well. I remember at the beginning of my career as a teacher, I already prepared myself well related to the lesson content and the teaching strategy that I would implement. But when I stood in front of the class, I could not explain the content well because I did not have enough self-belief about my capability. (IT.Jihan.NT.RA)

Another three teachers said that there is a connection between the level of teachers' self-efficacy and students' motivation in learning. They perceived that efficacious teachers are able to motivate students in learning, which is an important teaching practice. One of them said,

There is a great possibility that teachers' self-belief in their capability in teaching influence students' motivation in learning. For example, to the extent that teachers with a high sense of efficacy are also effective in their teaching and this may cause students' motivation to learn in classrooms. (IT.Reski.VET.UA)

Another three teachers believed that having high self-efficacy will help teachers to manage classrooms so students achieve their learning goals. Teachers' ability to manage classrooms and achieve learning goals depends a lot on their self-efficacy.

Variation among students' behaviour and school conditions could result simply from the fact that some teachers may be demotivated when they face a difficulty in teaching, and for this reason teachers need to have high self-efficacy. I think, teacher self-efficacy is also related to teacher's efforts to achieve learning goals. (IT.Kamil.ET.UA)

Five teachers identified teachers' self-efficacy as an important factor for teachers' capability. Sultan, for example, said "teachers have high self-efficacy because they, in

fact, know and mastery the lesson content” (IT.Sultan.VET.RA). This concurs with comments made by Zul who said,

.... Teachers may have low self-efficacy when they do not master lesson content and/or teaching strategies that are appropriate to be used. In other words, teachers may not convey the lesson content in good ways when they do not have high self-efficacy. (IT.Zul.ET.UA)

What Sultan and Zul believed was also supported by Icha. She perceived that, perhaps, some teachers have good capability in their subject areas but they have low efficacy belief, and this impacted on the way they teach.

In fact, some teachers have enough competence but they can't teach well due to lack of self-efficacy or perhaps I may say lack of self-belief about their competence. On the other hand, some teachers have high self-belief but they lack content knowledge and pedagogical content knowledge. For me, teachers should have both. (IT.Icha.VET.RA)

Efficacious teachers will try to do their best and introduce innovations

Another aspect that five teachers perceived as an impact of having high self-efficacy was teachers' motivation and willingness to do their best and introduce innovations in teaching. They said that teachers who have high self-efficacy always feel optimistic and tend to make innovation in teaching.

By having high self-efficacy, teachers always try to do their best for their students. They are always optimistic in teaching and tend to introduce innovations in teaching. They do not feel awkward in front of their students, even if they sometimes make mistakes because they can control the situation and adjust their teaching methods. (IT.Ahmad.VET.RA)

When the teachers were asked further about the difference between high efficacy teachers and low efficacy teachers, two out the five teachers mentioned teachers' creativity and effort in finding out the solution to teaching problems as the difference. One of the teachers said,

...teachers who have high self-efficacy will try hard to find out a solution or alternative ways to overcome teaching problems.... This is different with teachers who have low self- efficacy in which they will give up easily in difficult conditions. Even, sometimes they tend to blame the situation when they find teaching problems. (IT.Saleh.VET.RA)

Diva supported what Saleh perceived by saying,

I guess teachers with low self-efficacy will not spend much time effectively during the learning process, while teachers with high self-efficacy will try to make great efforts to make the learning process running smoothly, including introducing learning and teaching innovations. (IT.Diva.VET.RA)

The statements from Saleh and Diva show different level of effort and action taken by teachers with high efficacy beliefs and teachers with low efficacy beliefs. They believed that efficacious teachers tend to use classroom time effectively and always try to find solutions to their teaching problems.

It has been indicated in the quotes above that those teachers with high self-efficacy felt this helped them to optimize their teaching practices and tend to make innovation in teaching. The next section presents and discusses the teachers' perceptions of the characteristic of good quality PD.

5.5 Characteristics of good quality professional development

This section presents the characteristic of good quality PD based on the participants' perceptions which reflects and adds to data from the questionnaire. Based on the information the participants revealed, three characteristics for good quality PD emerged: increasing teachers' knowledge and teaching skills; encouraging collaboration; and taking account of teachers' classroom needs. These three characteristics are the same as the themes discussed from the questionnaires in Chapter 4. This is because the teachers who made comments in the open-ended questions in the questionnaires were mostly those who attended the TSGs regularly during the period of the study. This means these

were many of the same teachers who were interviewed. Therefore, the data that are presented in the three following sections will focus on findings that enrich and support what the teachers said in the questionnaires.

Increasing teachers' knowledge and teaching skills

All of the participants indicated that, in general, the PD activities they had participated in had helped them to increase their knowledge and skills about teaching. They felt that increasing knowledge and skills about teaching helped teachers to be more confident in teaching.

The PD impacted on my teaching practice, especially on mastering the lesson content and teaching strategies. Further, the PD also increased my confidence in teaching and helped me to become more professional in my profession. It [PD] should be able to help teachers improve their teaching practice. (IT.Icha.VET.RA)

Two participants, who were novice teachers, related the impact of PD on their earlier experiences (first stage) as teachers, where they did not have sufficient knowledge, skills and understanding about teaching. They saw good quality PD impacting their teaching activities by helping to get new knowledge and skills. One of them said that at the beginning of his career, he did not know how to teach appropriately. Fortunately, he had opportunities to join training sessions called LKG (teacher work training) and Training of Trainers (TOT) in which he learned skills about how to transfer knowledge to the students. He said that these activities involved four competences: social, professional, individual and pedagogic competences (IT.Ali.NT.RA). Fatia made similar comments by saying,

Initially I found many difficulties in teaching, particularly teaching English as a foreign language. I usually found difficulties in determining teaching strategies that were appropriate for certain lesson content and students' ability... I had been trying to improve my ability ... I got much information and knowledge from the PD, especially how to transfer knowledge to the students. (IT.Fatia.NT.UA)

Five participants said that PD had helped them to increase their understanding of instructional strategy, classroom management, and student engagement. Of the three

aspects, they mostly discussed instructional strategy in PD activities. One of them remembered that three months earlier he had attended workshops in which he and other participants discussed instructional strategies about how to teach 'Narrative and procedure texts' (IT.Jihan.ET.RA). They also said that they felt higher level of self-belief in their capability in instructional strategy compared to classroom management and student engagement.

Another teacher gave a clear example of the sort of knowledge and skills the participants learned from PD, especially related to their understanding about content knowledge and pedagogical content knowledge.

I joined in the Decentralized Based Education (DBE) program conducted by the World Bank. I was a model teacher in the program. The program focus was on meaningful learning and soft skill development for students. I learnt a lot and got much experience from that. (IT.Ali.NT.RA)

One type of PD that all participants perceived had helped them to increase their knowledge, skills, and understanding about teaching was the TSGs. Nugi, for example, said that the TSG was a very good forum for teachers to increase their knowledge, skills and competence related to teaching and learning. In that forum, according to Nugi, teachers got input/feedback from other teachers concerning teaching problems that teachers usually encounter (IT.Nugi.ET.RA). Another six teachers in the interviews also mentioned the benefit they got from TSGs in relation to their understanding about content knowledge and pedagogical content knowledge. One of them said,

The TSG meetings helped me to increase my knowledge and skills, such as mastering lesson content and teaching strategies. We got feedback from other EFL teachers. The feedback could be in the form of understanding lesson content and/or teaching strategies. (IT.Maryam.VET.RA)

What Maryam said is consistent with my field notes made during the TSG observations in which the teachers discussed the lesson content and teaching strategies. It has already been noted during the observations that there were three meeting topics that directly related to the content knowledge and pedagogical content knowledge, namely when the

teachers discussed about: Using Technology in Designing Lesson Plans and Teaching Materials (OB.M2DA), Learning Models: Numbered Heads Together (OB.M3DB), and Method and Approach in Language Learning (OB.M2DC). The rest of the TSG meeting topics (see Table 5.1) based on my field notes also pointed out that the teachers discussed topics relating to their classroom activities. Following is an example from my field notes about the pedagogical content knowledge. The notes were taken from the meeting 2 in district A.

One of the TSG members who became the facilitator focused his presentation of the use of technology in creating lesson plans and teaching materials. He also explained how to determine KKM using technology. He found that technology can help teachers in integrating the level of scores in KKM (e.g. very difficult, difficult, and average). Two of the participants in that meeting asked questions and three other participants gave additional explanation. (OB.M3DB)

Another sort of knowledge the teachers reported learning from the TSGs was about the Curriculum 2013. One of the teachers said that he was confused about the new curriculum, especially the basic different between the Curriculum 2013 and the KTSP (the previous curriculum) before attending the presentation by the teacher's supervisor about the Curriculum 2013 (IT.Kamil.ET.UA). Based on my field notes, of the nine TSG meetings observed, three of the meetings discussed the Curriculum 2013 (OB.M1DA, OB.M2DB, & OB.M1DC).

One form of activity in the TSGs that helped teachers to increase their knowledge and skills was peer-teaching¹⁰. Five of the teachers perceived that the peer-teaching was a very good activity because the TSG members could see other teachers present lesson content and/or use teaching strategies, and this activity might encourage teachers to improve their capability. Jihan, for example, felt motivated after seeing one of the TSG member's approaches in the peer-teaching. She realized as a new teacher, she needed to improve her teaching (IT.Jihan.NT.RA). Another teacher said,

¹⁰ Peer teaching is a type of sharing process among the TSG members, in which one of the members presented lesson content and/or a teaching strategy, and other teachers gave feedback or suggestions.

When we did peer-teaching, a teacher who was believed to be a model teacher¹¹ would try to do his/her best in front of other teachers. This condition might encourage teachers to always increase their capability. (IT.Saleh.VET.RA)

What Jihan and Saleh said was supported by my observation notes during the research. Meeting 3 in district B involved peer-teaching in which the teachers discussed a learning model. In that peer-teaching, the facilitator explained and presented a model to the participants on how to use the teaching strategy before dividing the participants into small groups.

One of the TSG members (a very experienced teacher) who was the facilitator took one lesson as an example presentation, on functional text. She explained how to use the method before distributing numbers to the participants. The participants were divided based on the same numbers that had been distributed. The participants were given worksheets. They were asked to finalize the task in their own group before discussing with other groups. The participants discussed between themselves in small groups before the group discussion with all participants. (OB.M3DB)

Interestingly, all of the participants in the interviews said that when their knowledge and skills about teaching increased as the result of participating in the TSGs, it helped them to enhance their self-efficacy. The teachers' views are exemplified in the following quotes.

The TSG was a good forum for teachers to increase their knowledge and skills about content knowledge and pedagogical content knowledge. Teachers' knowledge and skills about the lesson content and teaching strategies were able to help them enhanced their self-efficacy (IT.Nurul.VET.UA).

Despite many positive aspects of PD, as stated by the participants previously, some of them expressed their opinion in the interviews about some seminars and workshops that did not have a significant impact on teachers' knowledge and skills about teaching. For example, five of the teachers said that on some occasions when they attended seminars and workshops, they did not get much benefit from these seminars and workshops.

¹¹ A teacher who presents teaching material in the TSGs.

...in general, most of PD gave positive impacts on my knowledge and skills about teaching. But in some occasions when attending seminars and workshops, I did not get much benefit in relation to my knowledge and understanding about teaching. (IT.Ahmad.VET.RA)

What Ahmad said was supported by Nugi who mentioned that on some occasions he attended seminars and workshops but he did not get much benefit from these activities. He said,

I attended some seminars and workshops about six years ago but I did not find much benefit from these. The topics were not directly related to curriculum and my teaching subject. It seems these activities were only formality to provide PD certificate for teachers who really needed to apply for teacher certification programme. (IT.Nugi.ET.UA)

Encouraging collaboration

The opportunity to collaborate with other participants during the PD processes was also considered by all of the participants in the interviews as an important aspect in implementing good quality PD. This idea is similar to what the participants in the questionnaire said of the importance of collaboration. Participants in the interviews explained similar ideas to those expressed in the questionnaire. For example, Ahmad said,

For me, the degree to which the participants can collaborate during PD process determines the quality of PD. The more opportunities participants have to share their knowledge and skills, and to reflect and get feedback, the greater the possibility of the participants getting benefits from PD. (IT.Ahmad.ET.RA)

In terms of the opportunities to collaborate, most of the participants in the interviews considered TSGs were better than seminars and workshops. One of them said,

The TSG was different with seminars and workshops in which the participants tried to share information and knowledge, as well as created lesson plans together in the

TSG. While in the seminars and workshops we often did not get sufficient opportunities to do this. (IT.Nurul.VET.RA)

One of the results from teachers sharing and discussion was the solution to teaching problems. The teaching problems could be in the form of lesson content or teaching strategies or other aspects related to education.

There was feedback from other teachers, and sometimes from teacher's supervisor, concerning teaching problems that we usually encountered when teaching. Through the TSG, we could also share information and knowledge on what appropriate methods to be used on certain lesson content. (IT.Fira.ET.RA)

In addition, some of the participants commented further by saying that time allocated to collaboration was another basic difference between seminars and workshops and the TSGs. The participants said that they did not need to worry about time allocated for sharing and discussing in the TSGs, while the time for seminars and workshops was usually determined by PD providers.

I think the difference was much more on the process of meetings and time available for participants to do interaction and/or get feedback. In the TSG, participants had great opportunities to share knowledge and teaching materials¹², as well as ask questions, while in the seminars and workshops we were limited by the time¹³. (IT.Maryam.VET.RA)

Two teachers commented further in the interviews about the greater opportunities the teachers had to give their ideas or ask questions during the TSG meetings. One of them said that the facilitators always invited any participant to give suggestions or ask questions during the discussion in the TSG. That's why, according to him, the opportunities the participants had during the meetings to give and/or get feedback were "the positive aspects of the TSG in term of engaging every participant to get involved in the process" (IT.Zul.VET.UA). Another participant believed that when the opportunities

¹² This interviewee mostly used this term to mean subject content, though in a few places it may also mean content-related materials such as test paper.

¹³ Based on the informal conversation with some of the participants, they indicated that they had limited time in seminars and workshops by two reasons, namely the short duration of these activities (generally 1 - 2 hours) and the activities were attended by many participants.

to participate actively and to collaborate with other teachers were optimized, teachers were likely to benefit from the TSGs (IT.Ahmad.ET.RA).

What the teachers said in the interviews about opportunities they had in the TSGs to participate actively was supported by my field notes. From the nine TSG meetings that were observed, three of them showed clearly that the meeting processes encouraged the TSG members to collaborate. In these three meetings, the teachers discussed: the guidelines for semester tests (OB.M3DA), Learning models: Numbered heads together (OB.M3DB), and the guidelines for semester tests (OB.M3DC). More evidence came from my notes on meeting 2 in district A about using technology in creating lesson plans and teaching materials.

Teacher 4: Asked a question about using technology in determining KKM¹⁴ (school benchmark).

Facilitator: Before showing his presentation document concerned with the question, he asked the participants what they understand about KKM and how to divide the KKM.

Teacher 5&6: Responded by saying KKM is based on the number and score on each basic competence.

Teacher 7: Asked a question, “how about score in every question in a test?”

Facilitator: The final score on a test is determined from the number of questions and the rank of test difficulties, for example: very difficult, difficult, etc. This answer was supported by two other teachers. (OB.M2DA)

The extract above shows how the participants interacted. It also shows that after the facilitator presented his presentation for about 30 minutes, he asked the participants to ask questions or to give feedback. Some participants asked questions and some others gave responses to the participants’ questions in addition to the facilitator’s feedback. The process shows clearly that there were plenty of opportunities for the participants to get and give feedback on topics being discussed.

¹⁴ The KKM is the minimum level of mastery learning that a student must obtain. The KKM is established by subject teachers in each school before the school year begins.

Similarly to the answers in the questionnaires, five teachers in the interviews also said that collaborative PD helped them to deal with the feelings of loneliness. The participants in the interviews commented in more detail on their experiences in the early stage of their careers when they felt lonely. They also specified the sort of knowledge and skills they needed to share, namely lesson plans, English lesson content, and teaching strategies. In addition, the interactive nature of the TSGs helped the participants to deal with the feelings of loneliness. Kamil, for example, said that he liked to attend the TSG meetings because these meetings not only helped him to increase his knowledge and skills about teaching, but the TSG has also helped him to feel less isolated (IT.Kamil.ET.UA).

Four teachers said that the TSGs allowed them to collaborate and participate actively and helped them to explore further their day-to day teaching experience to solve teaching problems. The four teachers said that when their understanding about teaching increased and they could solve problems related to their classroom teaching activities, it then helped to enhance their self-efficacy.

We [the TSG members] have different ability and experiences.... Many of us [teachers] face teaching problems. When the problems were shared with other teachers, then other teachers gave feedback or solution. I found this as a very good aspect and I believed it affected teachers' self-efficacy in teaching.
(IT.Maryam.VET.RA)

Some teachers also gave extra negative comments. Consistent with their desire for collaboration and active participation in PD, five of the participants in the interviews commented that there were many occasions when they attended seminars and workshops, when they did not have sufficient time to reflect and give feedback. These ideas are similar to what the participants said in the questionnaires. These five participants in the interviews argued that all seminars and workshops have good purposes but the way these activities are conducted in practice is not always appropriate.

Taking account of teachers' practical classroom needs

Similar to their responses in the questionnaires, all the participants in the interviews felt that content of PD should be based on teachers' real classroom needs. Six participants in the interviews elaborated further by comparing some PD activities they had attended in terms of their effectiveness in relation to their teaching practices.

PD providers need to make sure that the content is related to what teachers do in their classrooms. When the content was directly related to teachers' classroom needs, I believed teachers would get much benefit from PD. For example, teachers could learn how to teach 'procedure or functional text' using certain teaching strategies during PD. (IT.Fatia.NT.UA)

Nugi, an experienced teacher from a rural area, gave an example of PD content that was suitable for teachers' classroom practical needs, namely PTK (Classroom Action Research). He said that PTK could help teachers to reflect on their teaching practice.

The content of PD in the future should not just provide teachers with theoretical aspects, but much more on implementing things. For example, PD should talk about PTK.... we need to know how to do it. Even, in the TSG meetings, the members need to discuss how to create a good PTK that meets the standard. (IT.Nugi.ET.RA)

Another aspect about PD that four teachers mentioned was they wanted to learn about integrating technology into their teaching practice because it is directly related to teachers' classroom practical needs. They said that some teachers still find difficulty in integrating technology into their teaching practice. One of the teachers said that teachers' good understanding about this is important because it can help them to create active, joyful and creative learning processes, as well as to encourage active student involvement during the learning process (IT.Kamil.ET.UA).

As with the findings from the questionnaires, some participants in the interviews also said that sometimes the content of PD was not directly related to classroom activities, and therefore they suggested the need for PD content to be based on teachers' real needs in classrooms. One of them said,

Although teachers needed to update their knowledge and information in all aspects related to teaching and learning, teachers were much more in need of the things that were implementable in direct connection to classroom teaching. (IT.Adel.VET.UA)

When the teachers were asked whether the TSGs and other forms of PD such as seminars and workshops allowed them to get feedback on practice, the majority of the participants said that they mostly got this in the TSGs and only sometimes it in the seminars and workshops.

The meeting topics in the TSG were based on teachers' teaching needs. While in the workshops and seminars, sometimes the topics were related to classroom needs but sometimes they were not. The topics in seminars and workshops were determined by PD providers. (IT.Saleh.VET.RA)

The quote above indicates that the teachers sometimes got something directly related to their practical needs from seminars and workshops, but they had much greater opportunities to get this in the TSGs. These findings support what the participants said in the questionnaires.

Likewise my research notes from the TSG observations revealed that the teachers usually discussed topics related to their classroom practices. Six of nine meeting topics related to their teaching practice. These six topics were related to content knowledge and pedagogical content knowledge, and were part of improving teachers' understanding of teaching and learning processes in classrooms. Another three topics in the meetings were about getting feedback on practice, but mostly related about the new education curriculum (the Curriculum 2013). For examples meeting topics related to classroom practice were when the teachers discussed guidelines for the semester tests (OB.M3DA & OB.M3DC), how to integrate technology into their teaching practice, specifically how to create lesson plans and teach certain lesson content such as listening using technology (OB.M2DA). Following is an example from my field notes in relation to integrating technology into teacher's teaching practice.

The facilitator asked the participants what kinds of lesson content or basic competence they have taught using technology. Three participants responded by sharing their experiences using technology. One of them said that he has tried to

present listening skills to his students using technology. He said, “It can stimulate students’ attention to the materials and it seems the students enjoyed the presentation” (OB.M2DA).

Two other positive aspects in the TSGs were the allocated time and flexibility of topics. Three teachers said that the allocated time and topics to be discussed in the TSGs were flexible and could be changed when the TSG members found another topic that they perceived as more relevant to teachers’ classroom needs. The three teachers compared TSGs and seminars and workshops in term of flexibility of meeting topics. One of the teachers said,

The topics and time to meet in the TSGs were flexible which depended much on teachers’ teaching needs and teachers availability. While for workshops and seminars, we needed to invite presenters from outside, and the topic and time were determined by PD providers. (IT.Saleh.VET.RA)

Sultan, a very experienced teacher from a rural area, gave an example of this saying;

Sultan : We were not worried about time in the TSG as we might manage the meetings. We also were very flexible with the topic. We sometimes changed the meeting topic when the participants considered it necessary.... This was one positive aspect of the TSG.... and the time and topics were usually determined by the members themselves.

Researcher: How about seminars and workshops?

Sultan : This was different with seminars and workshops, where the topics were determined by the PD providers and in many cases the topics were not suitable for what teachers really needed in their classroom teaching activities.

Nine teachers in the interviews said that when they learned skills related to their classroom needs, their self-beliefs about their teaching capability increased. One of them said,

What we [teachers] really needed was something that was directly related to our daily teaching activities. When teachers have sufficient knowledge and

understanding about their classroom teaching activities, their self-efficacy increased automatically. (IT.Zul.VET.UA)

Although all of the participants in the interviews viewed TSGs as very good PD forums to help them increase their knowledge, skills and understanding about teaching, most of them (twelve out of eighteen) also expressed their concern (challenge) about the TSGs. Below is a discussion of the teachers' perceptions of the challenges of the TSGs.

5.6 The challenges of TSGs

Besides the many benefits the teachers might get from the TSGs, TSGs still presented some challenges. The challenges could be in the form of: the level of the TSG members' capability, a lack of self-awareness, and lack of financial resources.

The level of the TSG members' capability

One aspect that four teachers perceived as a challenge for the TSGs was the level of TSG members' capabilities. One of the teachers said that they found it difficult to find a suitable presenter for the TSG meeting. He said that it is not easy for them to find a TSG member to present in a meeting because, overall, the TSG members have limited knowledge and understanding about education policy and curriculum. Therefore, they need someone who has better understanding about these areas. Some of the TSG members were reluctant or felt disinclined to attend the meetings when the meetings were led by one of the TSG members but "they [TSG members] would be very keen to come when they invited a presenter from another institution¹⁵" (IT.Rifri.VET.UA).

Icha offered similar ideas to Rifki by saying,

Some of the members felt lazy about coming when they know the meeting is led by one of the members. They, perhaps, felt that their knowledge and skills are the same as the facilitator. Some of them sometimes suggested inviting a speaker from other

¹⁵ Mostly from university

institution in order to give new perspectives about teaching and learning.
(IT.Icha.VET.RA)

Teacher's not willing to present

Teachers' negative reaction to the responsibility they assume as presenters was another challenge that was mentioned by three teachers. Ali, for example, said that some senior teachers did not respond well when they were asked to become a presenter or a teacher model in the peer-teaching activity. He said,

One challenge in the TSG was senior teachers' perceptions and responses. They sometimes refused to become a model teacher in the peer-teaching activity. They said that now is the turn for novice teachers to present something in the peer teaching because the novice teachers have just graduated from a university. On the other hand, we [novice teachers] need input from them on how to conduct good learning processes by seeing them presenting teaching materials. (IT.Ali.NT.RA)

Ali's opinion differed from Reski's. Reski said that sometimes the novice teachers refused to model effective practice for their colleagues in the peer-teaching. According to her, some novice teachers argued that it is better for experienced teachers to model effective practice because they have more experience in teaching (IT.Reski.VET.UA).

Another problem related to teachers' low motivation to share, according to Adel, was teachers' unwillingness to share their teaching strategies and teaching problems. She said that some teachers seemed to resist sharing their teaching instruction and considered teaching to be 'private practice'. They resist even more the opening of themselves to discuss their teaching problems and receiving subsequent possible critical feedback (IT.Adel.VET.UA). Unfortunately, she did not explain further what she meant by private practice.

Another three teachers considered that the low level of teachers' motivation to increase their knowledge and to get involved actively in the TSGs could become a challenge. Ahmad said that it was not easy to encourage all participants to attend the TSG meetings regularly. Some of them only came once in a semester (IT.Ahmad.ET.RA).

During my observations, it was also evident that the TSG meetings were usually only attended by between 15 participants and 21 participants out of about 50 potential participants. During the observations, the TSG meetings were attended regularly by about 65% of the same participants (the active group), and the other 35% were different people (sometimes group).

Zul also perceived that some teachers did not participate actively in the meetings. He said,

As a matter of fact, teachers might gain many benefits from the TSG. But some teachers did not try to maximize it. Let's take an example when we conducted a meeting to discuss lesson plans. Some of the participants worked on how to formulate the lesson plans, but some did not. The participants who did not work seriously on that meeting would only ask for the results from other participants. (IT.Zul.ET.UA)

The quote above indicates that although there were frequent opportunities for the participants to share ideas during the TSG meetings, some of them did not use the opportunities optimally. This was also supported by my field notes on the three TSGs in which I noted that not all the teachers participated actively during the meetings. For example, when the teachers discussed the guidelines of the semester tests in district A, some of the participants did not actively share ideas (OB.M3DA). Another example was when the teachers in district C discussed about the Curriculum 2013, less than half of the participants (eight out of eighteen participants) asked questions or offered feedback (OB.M1DC).

Lack of financial resources

Four teachers said that one of the problems in the TSG was a lack of financial support. They indicated that they wanted to invite an expert who had a good understanding about education policy and curriculum, but they have a problem with the budget. One of the teachers said,

Nowadays we are facing new challenges to understand and integrate the previous curriculum with the new curriculum.... In this case, we need to invite an expert, perhaps from a university, to give us sufficient knowledge about the new curriculum and other aspects related to teaching. Unfortunately, we have a problem with budget as we need to pay the presenter when we invite him/her. (IT.Ali.NT.RA)

Another teacher said that the TSG used to get financial support from the education department from a special allocated budget. Therefore, they could sometimes invite a speaker from a university (IT.Zul.VET.UA).

5.7 Summary

This chapter has presented the findings from the interviews and observations. All of the participants perceived that self-efficacy helped teachers maximize their teaching practice. In addition, the participants also believed that efficacious teachers try to do their best and are likely to make innovation.

The participants perceived that PD activities that can help them to increase their knowledge and skills about teaching, allow them to collaborate and participate actively, and take account of their practical needs were elements of good PD. Given the results that the TSGs gave opportunity for the participants to increase their knowledge and skills about teaching, allow them to collaborate and participate actively during the meetings, and reflect their teaching practices, all of them perceived that the TSGs helped them to enhance their self-efficacy.

Despite the many possible benefits that teachers may get from TSGs, they identified some challenges that still remained. The challenges are teachers' level of capability, teacher's unwilling to present, and lack of financial resources.

CHAPTER SIX

DISCUSSION

6.1 Introduction

The main aim of this study is to investigate teachers' perception of self-efficacy, PD and TSGs, and the impact of PD and TSGs on teacher self-efficacy. This chapter, therefore, aims to reflect on key aspects of findings in relation to the main aim of the study and the research questions guiding this study and discuss these with reference to the literature. The three research questions that guided this study are as follows:

- RQ1. What is the relationship between participation in PD and perceived changes in levels of efficacy beliefs amongst junior secondary EFL teachers in the areas of instructional strategy, classroom management, and student engagement?
- RQ2. What is the relationship between participation in a TSG and perceived changes in levels of junior secondary EFL teachers' self-efficacy?
- RQ3. What characteristics of PD do junior secondary EFL teachers perceive affect their self-efficacy?

The instruments used to collect data for the research were questionnaires, interviews, and TSG observations. In this chapter, the results from the questionnaires, interviews, and TSG observations will be integrated to form the basis for the discussion. The discussion will focus on a number of themes arising from the findings and these themes will be discussed in light of the literature.

This chapter discusses important propositions arising from the findings. The first section discusses the findings in relation to the participating teachers' perceptions of the importance of self-efficacy. The first section is important for the discussion because teacher self-efficacy is part of all three research questions. Therefore, it is necessary to know how teachers perceived self-efficacy. The second section discusses changes in teacher self-efficacy, addressing RQ1 and RQ2. The discussion in the second section

includes: changes on the TSES subscale; changes based on teachers' attendance in TSGs; and changes based on demographic aspects. The final section discusses the perceptions of effective PD in the Indonesian context, and links them to RQ3 about the characteristics of effective PD that affect teacher self-efficacy.

Before discussing the participants' perceptions of the importance of self-efficacy, it is worth exploring participants' understanding of the definition of self-efficacy. Even though the definition of self-efficacy used in this study had been clarified to the participating teachers by writing it down in the questionnaires and explaining it in the interviews, often participating teachers commented about self-efficacy in general terms like self-confidence. The findings show that some of the participating teachers did not take into account any differences between self-efficacy as a judgement about task capability that is specific to a particular task (Bandura, 1997) and self-confidence as a general concept of self (Aydin, 2015). This is because in the Indonesian language we have one word for those concepts. For example, one of the teachers in the interviews said that it is impossible for a person to become a teacher without having self-confidence to stand in front of students (IT.Ahmad.VET.RA). Even when some of the participating teachers commented about self-efficacy, they sometimes used the term 'self-efficacy' interchangeably with other terms like self-esteem and self-worth when referring to how they felt about themselves. Although self-efficacy, self-esteem and self-worth are very similar, they are usually seen as different concepts (Bandura, 1997; Tschannen-Moran et al., 1998). Self-efficacy and self-esteem, for example, tend to correspond so that a person who is low in one is more likely to be low in the other. But it is also possible to have low self-esteem and yet have high self-efficacy (see Section 2.2.3 for more details about the difference between self-efficacy, self-esteem, and self-worth).

This is important to note as the way some of the participating teachers in this study understood self-efficacy may have affected their perceptions about the importance of self-efficacy in relation to their teaching activities. It is also important to realise that the construct of teacher self-efficacy may be interpreted differently by these EFL teachers compared to other subject teachers because the EFL teachers teach their subject in a language that is not their own. So, concepts such as self-confidence could be confused

with self-efficacy because EFL teachers need confidence to stand in front students to teach another language. This means that self-confidence is particularly important for EFL teachers. Although the way some of the participating teachers understood self-efficacy was sometimes in general terms, this is also in line with methods for assessing self-efficacy beliefs by other researchers, where it is understood as context-specific rather than a generalized expectancy (Bandura, 1997).

6.2 Importance of self-efficacy

This section discusses EFL teachers' perceptions of the importance of self-efficacy in relation to their teaching practice. This is related to one of the main aims of this study.

The current study found that most of the participating teachers thought that good self-efficacy was important to be a successful teacher. The participating teachers reported that having high efficacy beliefs helped them to maximize their teaching practices, not only because it helped them to teach creatively, but it also helped them to value and utilise their skills to generate students' motivation to learn. Most of the participating teachers reported the importance of self-efficacy by comparing teachers with high efficacy beliefs and teachers with low efficacy beliefs. Many of the participants explained that teachers with high efficacy beliefs tend to feel more optimistic about their teaching activities and continually put in greater effort to be successful in their teaching. Conversely, according to the participants, teachers who have low self-efficacy are more likely to attribute their failures to outside factors, such as lack of students' motivation to study English and/or lack of teaching resources.

The findings from this study are consistent with those of other researchers who have mentioned the importance of having high self-efficacy for teachers (e.g. Bandura, 1993, 1999; Tschannen-Moran & Hoy, 2001), in which self-efficacy has been viewed as one of the best predictors of teachers' practice (Hattie, 2012; Pajares, 1996). Bandura (1997) argues that self-efficacy affects the way people function cognitively, affectively, motivationally and in terms of the choices they make. Some of the participants in the interviews reported that teachers' perceptions about their competence influenced the

way they approached learning strategies in the classroom and the choices they made in solving teaching problems.

The participating teachers also linked self-efficacy to teachers' commitment to help students achieve learning goals. The participants, both in the questionnaires and the interviews, perceived that teachers with high self-efficacy beliefs tend to make more effort to achieve learning objectives than teachers with low self-efficacy. The findings from this study share some similarities with those of Tschannen-Moran and Hoy (2001) who indicate that teaching efficacy affords teachers the ability and feeling of confidence to make an effort when they find something does not go smoothly to achieve learning goals.

Despite the participating teachers' overall perceptions of the importance of self-efficacy as a single factor, some of them commented further that teacher self-efficacy and teacher competence are interrelated. They reported that teachers will have high efficacy beliefs when they have good knowledge and understanding about teaching. Similarly, they believed that teachers may have good knowledge and understanding about teaching but they would be unable to teach well because they have low self-efficacy. The findings from this study indicate that teachers need to have both high efficacy beliefs and good knowledge and understanding about teaching to help them to teach well. It is interesting to note, as Knoblauch and Woolfolk Hoy (2008) have also suggested, that teachers need more than content and pedagogy knowledge to allow them to be effective in teaching and achieve learning objectives. Knoblauch and Woolfolk Hoy argue that teachers need motivation and a sense of efficacy to allow them to transfer content and pedagogy knowledge optimally. The participating teachers in this study mostly reflected this view that teachers who have good knowledge and understanding about teaching tend to have high self-efficacy beliefs in their teaching.

One of the findings in this study is that the participants agreed with participants in previous studies (Lakshmanan, Heath, Perlmutter, & Elder, 2011; Tschannen-Moran & Hoy, 2007; Wertheim & Leyser, 2002) about the importance of having high self-efficacy, regardless of their individual differences in terms of cultural backgrounds and the content areas they taught. They shared the view that more efficacious teachers are

more effective in teaching than less efficacious teachers. The findings from this study may strengthen the general agreement about the importance of self-efficacy for teachers.

6.3 Changes in perceived self-efficacy from professional development

One of the main focuses of this study was to investigate changes in perceived teacher self-efficacy as the result of participating in PD activities. Three aspects of changes in relation to teachers' self-efficacy found in this study were: changes on the TSES subscales, changes attributed to teachers' attendance in TSGs, and changes based on demographic aspects.

6.3.1 Changes on the TSES subscales

This section focuses on examining changes in teachers' perceived self-efficacy in three areas: instructional strategy, classroom management, and student engagement which relate to the three areas Tschannen-Moran and Hoy (2001) indicate have a direct relationship to classroom practices and teacher self-efficacy.

Findings from this study showed that over the course of the study, PD was perceived to bring about the greatest change in levels of all participants' self-efficacy in the area of instructional strategy. This finding concurs with the study by Murshidi, Konting, Elias, and Foui (2006). However, this finding is in contrast to the study by Ross and Bruce (2007) where PD affected the greatest change in classroom management. The study by Ross and Bruce found that only the changes in classroom management were statistically significant. Ross and Bruce suspected that teachers' confidence in their ability to engage student interest and to use new instructional strategies follows confidence in classroom management. In contrast to Ross and Bruce's argument, some of the participating teachers in the interviews in this study reported that their ability to use appropriate instructional strategies affected their beliefs about engaging students and managing classrooms, and so instructional strategies were perceived to be more important.

The sort of knowledge about instructional strategies that the participants discussed when attending PD, perhaps caused them to make the greatest change in instructional strategy

in this study. This assumption is consistent with many teachers' comments, both in the questionnaires and the interviews, where the participating teachers reported that they had learned how to deliver certain lesson content from seminars, workshops, training and TSGs. This assumption is also strengthened by the participating teachers' comments that they usually discussed and shared more information, knowledge and skills about instructional strategy in the TSGs than about classroom management and student engagement. During the observation processes, of the three aspects, the TSG sessions tended to focus more on instructional strategy than on classroom management and student engagement. The participants discussed teaching strategy three times during the observations (see Section 5.2.3). So, this suggests a greater focus on instructional strategies and related increase in self-efficacy.

Another reason why EFL teachers in this study may have made the greatest changes in self-efficacy about instructional strategy could be because the English curriculum in Indonesia underwent some changes and the participants at the time of the research were focused on how to teach English lessons through appropriate instructional strategies. This seems to indicate why EFL teachers made the greatest change in their beliefs and efficacy about instructional strategy. There is an indication that the participating teachers in this study made the greatest change in the area that they were most familiar with and had experienced some success in performing, which is instructional strategy.

Although not the largest gain in self-efficacy, the participating teachers also highlighted the importance of having a good understanding of classroom management and student engagement, in addition to instructional strategy (see Section 4.3.4). The participating teachers both in the questionnaires and the interviews reported the importance of teachers having good knowledge and skills in all the three aspects because they thought these three aspects had a direct link to their self-efficacy and their teaching practices. The participants reported in the interviews that a thorough understanding of these three aspects was necessary to effectively deliver lessons using appropriate instructional strategies, managing their classroom and engaging students to study. These perceptions are consistent with previous studies (Lloyd, 1995; Peterson et al., 2011) that found that sufficient knowledge in these three aspects was necessary in order to help teachers to

build a good relationship and rapport with students, as well as to help teachers increase students' learning achievement.

The current study also showed that the participating teachers had different perceived levels of efficacy beliefs across the areas of instructional strategy, classroom management and student engagement at the beginning of this study. The highest self-efficacy was in instructional strategy, followed by classroom management and student engagement. The findings from this study support Bandura's (1999) idea that self-efficacy is specific to a particular task, therefore teachers may not feel competent at all tasks. Teachers' efficacy beliefs differing across a subject domain also concurs with previous research such as Tschannen-Moran, Hoy and Hoy (1998) and Hansen (2005) who claim that teachers cannot be expected to be consistently efficacious across all teaching competencies because it is context-specific. Tschannen-Moran, Hoy and Hoy (1998), who studied beginning teachers' efficacy beliefs, found that beginning teachers did not feel efficacious in all teaching domains. A beginning teacher might have high teacher efficacy in one domain - such as classroom control - but low efficacy in another domain - such as teaching strategy. Therefore, Bandura (1997) proposed that self-efficacy beliefs are context-specific rather than a generalized expectancy.

The findings that showed that EFL teachers' efficacy beliefs differed across the three areas at the beginning of the research are in line with the previous studies (Bandura, 1997; Valentine, DuBois, & Cooper, 2004). However, the study by Bandura (1997) and Valentine et al. (2004) only investigated the perceived level of teacher self-efficacy without investigating changes to teacher self-efficacy as a result of participating in PD activities. The current study investigated changes in teacher self-efficacy, including the three areas (instructional strategy, classroom management, and student engagement), as a result of participating in PD. This is important to get an understanding of the effect of PD activities on teachers' knowledge and skills, and the relationship between these activities and changes on teacher self-efficacy beliefs.

In addition, the findings identified from this study about the different changes in teacher self-efficacy in these three areas, also provide some clarification of the areas in which these EFL teachers gained the most self-efficacy. These findings are important for

policy makers and PD providers to take into account when considering what to include in professional activities for EFL teachers. The next section discusses changes to teachers' self-efficacy based on their attendance in TSGs.

6.3.2 Changes in self-efficacy based on attendance in teacher study groups

The results of the quantitative analysis showed that attending the TSGs helped to enhance teachers' self-efficacy, and those teachers who attended the TSGs very frequently increased their gain scores more significantly than those who only attended the TSGs sometimes. The participating teachers also reported, both in the questionnaires and the interviews, that TSGs helped them to increase their knowledge and understanding about teaching. These results suggest that if teachers increase their understanding about teaching after attending TSGs, then they are more likely to report a higher change on their efficacy beliefs.

The results from the quantitative findings also showed that attending the TSGs actively had a more positive effect on teachers' self-efficacy on all three aspects of instructional strategy, classroom management, and student engagement than only attending the TSGs sometimes or never. The greatest change in self-efficacy for the active group was in instructional strategy. As described in the findings chapters, the participating teachers, both in the questionnaires and the interviews, perceived that the TSGs had helped them to increase their knowledge and understanding about instructional strategy, as well as their efficacy beliefs.

Some of the participating teachers in the interviews reported that TSGs provided them with extended time, space and support to explore their own issues in relation to their teaching activities, and therefore their self-efficacy beliefs increased as a result of participating in the TSGs. Two previous studies have also found a link between teacher study groups and teacher self-efficacy (Lakshmanan et al., 2011; Simon, 2011). However, these two previous studies did not investigate changes in teachers' self-efficacy as the result of attending TSGs. The current study provides a step forward by investigating the relationship between teachers' attendance in TSGs and their self-efficacy beliefs.

Interestingly, the findings from this study showed that changes in the participating teachers' self-efficacy attributed to attending TSGs came mainly from mastery experiences. This is because the participating teachers in this study usually shared their knowledge and experience about teaching in the TSGs. The findings from this study concur with Bandura's (1997, 1999) theory of self-efficacy that the most powerful source of self-efficacy is mastery experiences (see Section 2.2.3). The findings from this study also concur with those of Ross and Bruce (2007) which indicate that increasing teachers' self-efficacy occurs when they perceive themselves as professionally masterful or when they experience repeated success as a result of interacting with their colleagues.

The findings from this study offer insight into changes in teacher self-efficacy as a result of participating in TSGs. This understanding is important because if a specific form of professional development is found to have a positive effect on teacher self-efficacy and teacher practices, it will serve to further an understanding of the role of teachers' self-belief on teacher practices (Rots, Aelterman, Devos, & Vlerick, 2010). The findings from this study may also lead to an understanding of the types of effective PD, such as TSGs, which are collaborative forms of PD. The effect of teachers' participation in TSGs on their knowledge and understanding about teaching, as well as on their self-efficacy will be discussed in more detail in Section 6.4.

The next section discusses changes in EFL teachers' self-efficacy that may result from demographic aspects, such as teaching experience, gender, and geographical area.

6.3.3 The effects of demographic aspects on changes in self-efficacy

The importance of this section is to explore the influence of teachers' teaching experience, gender and geographical area on changes in EFL teachers' self-efficacy. Each of the three aspects is discussed separately below.

Teaching experience and teacher self-efficacy

The results of the quantitative analysis showed that there were no statistically significant differences in EFL teachers' self-efficacy at the beginning and end of the research, or on gain scores, based on teaching experience. These results are contradictory to what I previously assumed, that more experienced teachers would have higher self-efficacy.

The findings from this study support, as well as contradict the existing research in the field. The results from this study showing that there was no difference in teachers' self-efficacy at the beginning of the study based on teaching experience concur with the previous study by Murshidi et al., (2006). Murshidi et al. investigated the level of teachers' sense of efficacy among beginning teachers in Sarawak, Malaysia and also found that there was no significant difference in efficacy beliefs between beginning teachers and more experienced teachers. However, this is contradictory to a study by Tschannen-Moran and Hoy (2007) who found differences in efficacy beliefs between novice and experienced teachers, especially in instructional strategy and classroom management. Tuchman (2010) also identified a statistically significant and higher difference in mean scores for teachers with three to seven years of experience, compared with first year teachers.

The fact that the findings from this study concur with the study by Murshidi et al., (2006), perhaps relates to the similar sociocultural background and educational systems of the participants. In many instances, Indonesia and Malaysia share similar cultural and educational systems. Some similarities in sociocultural background and education systems may contribute to the way teachers perceive their level of efficacy beliefs. Likewise, the fact that the findings from this study are contradictory to the results from the study by Tschannen-Moran and Hoy (2007) and Tuchman (2010), perhaps is also influenced by different sociocultural backgrounds and education systems of the participants. Tschannen-Moran and Hoy's (2007) study involved 255 teachers who were graduate students at three state universities, two in Ohio and one in Virginia, as well as teacher volunteers from two elementary schools, one middle school and one high school in the same states. A similar cultural and educational context existed for the study by

Tuchman (2010) who researched three hundred and fifteen teachers of general and Judaic studies in Jewish day schools in the United States.

Even though there was no significant difference in teacher efficacy beliefs and gain scores based on teaching experience in this study, it is worth noting that some novice teachers reported, both in the questionnaires and the interviews, their desire for more PD for novice teachers. They suggested that the Indonesian government should implement more PD and involve more novice teachers in order to help them to better understand teaching and learning. The findings from this study may also lead to an understanding of the types of PD preferred by teachers, such as TSGs. In addition, there is also an indication that the novice teachers often felt that they did not know how to explain to students. For example, one of the novice teachers in the interviews reported that she usually found difficulties in determining teaching strategies appropriate for certain lesson content and the level of students' ability (IT.Fatia.NT.UA). This lack of understanding might reduce the novice teachers' feeling of self-efficacy about delivering a lesson.

Some previous studies have also indicated difficulties reported by novice teachers in the early stages of their career in relation to novice teachers' efficacy beliefs. Onafowora (2005) indicates that the stage of transition from learning to teaching requires a lot of confidence. That's why, in many cases, beginning teachers may find difficulty in balancing theoretical frameworks and practice because most of them have low self-belief about their capability in teaching, despite their understanding of subject matter. Similarly, Reynolds (1992) also indicates that beginning teachers, in many cases, found difficulty in seeing the pedagogical implications of student differences, and were often unable to tailor materials and instruction in classroom teaching. Reynolds further indicates that beginning teachers may have difficulty in transferring knowledge due to undeveloped schemata for a class environment and for establishing rules and routines, and all these factors may affect beginning teachers' self-efficacy. The findings from my study revealed that some novice teachers struggled to select teaching strategies that were appropriate for certain lesson content and this affected their self-efficacy in teaching.

Another interesting finding from my study is that although the very experienced teachers had been teaching for more than 15 years and had been involved in many types of PD, they still often faced teaching difficulties. Some of them reported that they found it challenging to update their knowledge and understanding in the face of the fast changes to the education curriculum in Indonesia, including integrating technology into their teaching activities. Some of them even reported that they felt more comfortable using the grammatical translation approach¹⁶ than communicative approaches in teaching English and in many cases they still used teacher-centred approaches¹⁷ in their classrooms. The fact that the very experienced teachers still reported difficulties in their teaching activities might have affected their level of self-efficacy, which may link to Bandura's (1997) idea about self-efficacy beliefs declining as teachers enter the later stages of their career.

The findings from this study are important because although some studies (e.g. Murshidi et al., 2006; Tschannen-Moran & Hoy, 2007; Tuchman, 2010) have investigated the perceived level of teacher self-efficacy based on years of teaching experience, those studies did not investigate changes to teacher self-efficacy. Investigating changes in teacher self-efficacy based on years of teaching experience is important to find out whether or not teaching experience significantly affects EFL teachers' self-efficacy and this study found that teaching experiences did not significantly affect changes in teacher self-efficacy.

Gender and teacher self-efficacy

This section discusses the effect of gender on teacher perceived self-efficacy. The aim of this section is to find out if gender appeared to influence changes and perceived

¹⁶ It refers to the approach in teaching English that more emphasize on grammar/language structures. Using this approach, the majority of the classroom time is spent on the teachers' elaborate explanation of English grammar rules, while students are either listening or taking notes. Thus little attention is paid to the development of English communicative competence (the current curriculum in Indonesia mandated EFL teachers to be more focus on communicative approach).

¹⁷ It refers to a teaching approach in which students do their work alone where they do exercises related to the teacher's presentation during or after the lesson, and portrays students as basically passive since teachers are the main focus in this approach. In this approach, the students are less engaged during the learning process.

levels of teacher self-efficacy. The quantitative findings from this study showed that gender did not affect changes in teachers' self-efficacy. In addition, the findings from this study also found that there were no significant differences on the perceived levels of teacher self-efficacy at the beginning and end of the study based on gender. That no significant difference existed between genders in this study may be due to the small sample size (Tschannen-Moran & Hoy, 2002), where the sample used was not large enough for the gender differences to be significant.

Although the findings from the questionnaires found that self-efficacy beliefs were not significantly different between male and female teachers in this study, it is interesting to note that there were differences in views about workloads. Some of the female teachers in this study reported in the interviews that they sometimes found it hard to meet the teaching standards because of the amount of work they had to manage. One of the female teachers, for example, reported that she had to look after her family in addition to preparing teaching materials and lesson plans, as well as supporting documents to allow her to pass the teacher certification program (IT.Fira.ET.RA). This view was supported by another two female teachers who reported that there were a lot more jobs to do, such as taking care of their children, outside of teaching hours. This finding was also highlighted in some other studies (Antoniou, Polychroni, & Vlachakis, 2006; Tanang & Abu, 2014). Tanang and Abu's (2014) study found that gender made a significant difference to behaviour-attitude. Similarly, a study by Antoniou, Polychroni, and Vlachakis (2006) confirmed that female teachers experienced a higher level of work-related stress compared to male teachers.

However, in general, the impact of gender on teacher self-efficacy has remained unresolved because researchers cannot agree that there is significant difference in the perceived level of self-efficacy between male and female teachers (Murshidi et al., 2006). Some studies (Edwards, 1996; Ross, 1994; Shahid & Thompson, 2001) found that female teachers had higher teaching efficacy mean scores than male teachers, while other studies (Imants & De Brabander, 1996; Silver, Mitchell, & Gist, 1995) found the contrary. The findings from the current study and two other studies (Murshidi et al., 2006; Tschannen-Moran & Hoy, 2002) found that there was no statistically significant difference in teacher self-efficacy based on gender. It might be that the varied results

about the influence of gender on teacher self-efficacy are dependent on context (Murshidi et al., 2006), and/or as Tschannen-Moran & Hoy (2002) have indicated, gender differences only show up in large samples.

Geographical area and teacher self-efficacy

Another demographic aspect that this study tried to investigate is the effect of geographical area on teacher self-efficacy. This is important, especially in the Indonesian context, where some areas in Indonesia have good access to education facilities but some do not, especially rural areas.

The findings from this study revealed that there was no statistically significant difference in teacher self-efficacy in relation to their geographical location. This is interesting to note this because I assumed that teachers who teach in urban areas would have higher changes and perceived levels of self-efficacy beliefs than those who teach in rural areas. This assumption arose from my expectation that, on average, education resources in urban areas are more accessible than in rural districts in Indonesia. In general, teachers who teach in urban areas have better access to education facilities that allow them to update their knowledge and understanding of aspects in relation to teaching and learning. Furthermore, most of the participating teachers who taught in rural districts in the interviews reported that one of their common problems was the teaching facilities (i.e. LCD, access to district library, internet access).

These findings that there is no difference in teacher efficacy beliefs at the beginning of the study based on geographical area concur with a study by Tschannen-Moran and Hoy (2007). Tschannen-Moran and Hoy also found that the contextual variable of school setting (urban, suburban, and rural) was unrelated to the self-efficacy beliefs of both novice and career teachers. However, it is possible that there was no significant difference in change to teacher self-efficacy based on geographical location in this study due to the small sample size. It may be that the geographical area may contribute to a significant difference on teacher self-efficacy when involving a larger sample size (Tschannen-Moran & Hoy, 2002).

6.4 Perception of Effective Professional Development in the Indonesian Context

One of the aims on this study is to investigate the characteristics of good quality PD that has the potential to affect teachers' self-efficacy. This section, therefore, focuses on discussing the characteristics of good quality PD from the perspective of EFL teachers in Indonesia. This is related to the third research question.

The key findings from this study are that EFL teachers perceived good quality PD: facilitates increased teachers' knowledge and teaching skills; encourages collaboration; and is based on teachers' practical classroom needs. The participating teachers' perceptions of good quality PD seemed to be influenced by their past and current experiences in attending PD activities - what they liked and what they did not like. In addition, it also seems likely that the participants' perceptions of good quality PD were influenced by the Indonesian cultural context, educational system and policies, and teacher resources. The three key aspects of good quality PD are the main points discussed in this section, linking them to Indonesian context, educational system and policies, and teacher resources. Each of the three aspects is discussed separately in the following section.

6.4.1 PD develops teachers' knowledge and teaching skills

This study found that the participants perceived the main aim of good quality PD activities is to help teachers increase their knowledge and understanding about teaching. This knowledge and understanding was mainly related to content knowledge and pedagogical content knowledge. The participants' perceptions assumed that to achieve the learning goals, teachers need a good understanding of their subject matter together with knowledge and skills to convey the lesson content. Most of the participating teachers in this study emphasized the importance of PD that helps teachers increase their understanding of both content knowledge and pedagogical content knowledge. They perceived that, for teachers to have a positive impact on students' learning, they

not only need to master the lesson content but also know how to use teaching strategies that are appropriate for the EFL lesson content.

The findings from this study concur with previous research (Ball, Thames, & Phelps, 2008; Darling-Hammond & Bransford, 2007; Mishra & Koehler, 2006; Shulman, 1999). Darling-Hammond and Bransford's (2007) study indicates that knowing how students understand lesson content and having a repertoire of strategies to help students engage with learning ideas are at the core of pedagogical content knowledge. Similarly, Ball, Thames, and Phelps (2008) point out the need for teachers to know the subject matter they teach. However, as Ball et al. indicate, just knowing a subject well may not be sufficient for teaching without knowing the teaching strategies to convey the lesson content. Therefore, good PD activities are needed to help teachers increase their understanding of content knowledge and pedagogical content knowledge to help them improve their teaching practice. The findings from this study are similar to those of Supriadi (1999) in the Indonesian context who also found that teachers wanted to master their subjects and know how to transfer their knowledge to students. For that reason, Supriadi called for PD that could help teachers increase their knowledge and teaching skills about their subject.

One of the interesting findings from this study is that the participants perceived that effective PD would facilitate teachers' understanding of content knowledge and pedagogical content knowledge, and also enhance their self-efficacy beliefs. For example, one of the teachers in the interviews reported that good PD helped him to increase his content knowledge and pedagogical content knowledge, as well as enhancing his self-belief about his competence in teaching (IT.Kamil.ET.UA). The findings from this study are consistent with Hansen's (2005) study that identified subject knowledge and professional development as direct contributors to positive professional confidence and capability. Likewise, as Khourey-Bowers and Simonis (2004) indicate, teachers' self-efficacy was reported to improve when they felt competent to teach English subject content knowledge using appropriate pedagogical content knowledge.

6.4.2 Encourages collaboration

The second characteristic of effective PD according to the participants is the opportunity to collaborate with other teachers. The findings from this study showed that teacher perceived collaborative PD encouraged teachers to share their knowledge and understanding about teaching. The participating teachers in this study seemed to value the *how (the process)* in addition to the *what (the content)* of PD. So, along with the acknowledgement of the importance of PD that can help them to increase their knowledge and understanding about teaching, teachers felt that it was important to collaborate with other participants during the PD process. The participants' views of the importance of collaboration are exemplified in the following quote.

For me, the degree to which the participants can collaborate during PD process determines the quality of PD. The more opportunities participants have to share their knowledge and skills, and to give and get feedback, the greater the possibility of the participants getting benefits from PD. (IT.Ahmad.ET.RA)

The findings from this study are relatively well aligned with the Eisenhower model (Garet et al., 2001) that identified collaboration as a characteristic of effective PD. In the Eisenhower model, opportunities for collaboration reflected the structural feature of active and collective participation, which indicated that shared learning experiences encouraged reflection and support over time. The findings from my study also concur with other previous research (e.g. Beatty, 2000; Desimone, 2009; Desimone et al., 2002; Penuel et al., 2007) that identifies the opportunity for teachers to collaborate and share knowledge and skills as a characteristic of effective PD.

Indonesian cultural factors may have influenced the way the participating teachers conceptualized collaboration in PD. In the Indonesian context, where the education curriculum often changes to suit the demands of education reform, collaboration can be seen as a good way for teachers to share and update their knowledge and understanding about current issues in education. The participants reported that when teachers work collaboratively with others, they share their strengths with other participants. Most of the participating teachers in the questionnaires and all of them in the interviews reported

that collaborative PD activities were useful for them because these activities provided opportunities for them to learn from one another.

The benefit of collaboration in PD is supported by social constructivist theories of learning (Lave & Wenger, 1991; Packer & Goicoechea, 2000). Social constructivist theories of learning assume that learning occurs when individuals hear and share their thoughts and ideas, and articulate their own emerging understandings. On many occasions, the participating teachers agreed with the idea that learning is more effective when the opportunity exists to interact with others and with their environment (Vygotsky, 1980; Williams, 2010). The findings from this study are in line with Psychoyos' (2012) study that found that the combined strengths of each member in a professional learning community helped to develop each teacher's knowledge and teaching skills, and produced a better understanding of quality teaching. The findings from my study also support what Darling-Hammond and McLaughlin (1995) see as important to the success of teachers' learning that teachers are given "opportunities to work together, assume the role of learner, restructure time constraints and focus on professional trust and encourage problem solving" (p. 4).

Collaboration as a process of sharing knowledge and expertise also helped some rural and novice teachers to combat feelings of loneliness. Some of the participating teachers in the interviews reported that they often felt lonely in the early stages of their careers. Most of the participating teachers in the questionnaires and interviews reported that they liked collaborative PD approaches because those types of activities helped them to feel less isolated.

TSGs were one form of collaborative PD that the participants considered as good quality PD, not just to share their knowledge and expertise, but also to combat isolation. Because TSGs were interactive, the participating teachers in this study found that these forums had helped them towards better quality teaching practice (Birchak et al., 1998; Brunelle, 2005; Carroll, 2005), and felt less isolated. For example, the participating teachers in this study mentioned that TSGs routinely incorporated teambuilding activities through informal social conversation before, during and after TSG meetings. This finding concurs with previous studies (Hord, 1997; Sparks & Hirsh, 2000) about

professional learning communities in which teachers share and learn together while combating isolation, improving teaching practice, and raising student achievement. Similarly, Neuzil and Vaughn (2010) found that when teachers made time to talk to each other about specific aspects of daily needs of teaching, they grew into a learning community.

The findings from my study suggest that teachers, especially novice teachers, need to open their classroom doors more often and invite their peers in for support that may help them to feel less isolated. Teachers need to find and make time for each other to share questions as well as new ideas about classroom behaviour and learning. A previous study by Dussault, Deaudelin, Royer, and Loisell (1999) identifies professional isolation as “the unpleasant experience that occurs when a person’s network of social relations at work is deficient in some important ways, either quantitatively or qualitatively” (pp. 943-944). By identifying collaborative PD for teachers, this study provides usable information that can minimize teacher isolation and at the same time encourage PD necessary for continued teacher growth, as well as facilitating student achievement.

The participants’ preference for sharing and collaboration suggest PD which adopts a bottom-up approach where the starting point was teachers’ needs. Richards (1991) defines this as an internal view of PD when the design and content of PD arises from the teachers themselves, while in the external view the ideas are determined by an outsider. Some comments from the participating teachers indicate that a top-down approach often left them feeling that they had no real personal investment in the programme and were therefore less committed. Therefore, the participants valued PD activities that encouraged teachers to collaborate and used bottom-up approaches. The findings from my study are supported by Attema-Noordewier, Korthagen, Zwart, Kooy, and Van Veen (2012) who indicate that top-down approaches may create external pressure on teachers, especially if ideas are in contrast with teachers’ views and needs.

Notably, due to the interactive and collaborative nature of TSGs, the participants considered these as forums to empower teachers¹⁸. Some of the participants in the interviews reported that they became more reflective, critical and analytical when they thought about and discussed their classroom teaching activities in the TSGs. The findings from this study are supported in the Indonesian context by Evans et al. (2009) who elaborated the aims of TSGs are to help teachers develop their professional competence, to improve their capability in preparing lesson plans, and to discuss teaching and learning issues. This view is also supported by Jalal et al. (2012) who indicates the benefits of TSGs: allow teachers to collaborate, to focus on practical rather than theoretical knowledge, and to allow for ongoing consultation and discussion amongst teachers. Therefore, all the processes that teachers experience in TSGs have the potential to make them feel more empowered.

Despite the many opportunities for collaboration from TSGs, some teachers in these three districts did not attend the TSGs regularly during the period of the study. It is interesting to examine this phenomenon from a cultural perspective. Do EFL teachers not attend the TSGs because they do not like to collaborate with other teachers, or because of other factors? Culturally, Indonesian people like to collaborate and share with other people. One of the cultural heritages in Indonesia is mutual-help and collaboration (Rahim, 2011; Setyonugroho, 2013), which is well known as ‘Gotong Royong’¹⁹. However, some teachers in the interviews found that some of their colleagues resisted discussing their instructional strategies and teaching problems, as well as receiving subsequent feedback. This suggests that teachers’ attitude which led them to sometimes resist sharing their knowledge and learning about teaching. Two of the teachers in the interviews, for example, suggested that TSG members may have refused to lead the peer teaching in the TSG meetings because they did not feel comfortable sharing their knowledge and discussing teaching. The participants’

¹⁸ Teachers’ empowerment refers to a process of growth and development which enables them to optimise not only the teaching-learning situation but also their own potential as educators (Carl, 2009) through sharing information, knowledge and power among them.

¹⁹ Gotong royong is one of the life mottos of Indonesian people, means the habit and character of Indonesian people that like to help and collaborate with other people

comments may imply that some EFL teachers did not attend TSGs because they may not have felt comfortable to sharing practice with other TSG members.

6.4.3 PD content is based on teachers' practical needs

The third major theme to emerge from the findings in relation to the characteristics of good quality PD was the perceived value of PD content that addressed teachers' practical classroom needs. The findings showed that the participants valued PD that was applicable to their daily classroom activities. PD content based on teachers' practical classroom needs aligns with the key characteristic of fostering coherence between teachers' work and their professional goals (Garet et al., 2001).

The findings from my study that showed PD needs to be based on teachers' real needs in classrooms, also concurs with some previous studies (Creemers, Kyriakides, & Antoniou, 2013; Karimi, 2011; Kubitskey & Fishman, 2006). A study by Karimi (2011), for example, pointed out that good quality PD programs are aimed specifically at raising teachers' operational knowledge of classroom practice which in turn boosts teachers' efficacy. Similarly, a study by Creemers et al. (2013) found that effective PD related to teachers' daily teaching practice. The participating teachers in my study reported that they needed PD activities that were suitable for their practical classroom needs (Kubitskey & Fishman, 2006).

The findings of my study indicate that when the content of PD is based on teachers' practical needs, it will aid their better understanding of the lesson content they teach in classroom (Cameron, Mulholland, & Branson, 2013). The participating teachers' statements also implied that teachers are adult learners who bring "a repository of information, consisting of direct experimentation and realities" (Ahedo, 2010, p. 67) to their learning and are thus focused on goals related to their practical classroom needs. Other studies also support this view (e.g. Borko, 2004; Garet et al., 2001; Guskey, 2003). Guskey (2003) mentioned one criterion of effective PD is to consider the context in which teachers work, what Borko (2004) calls a situated perspective on teacher learning and development. Further, McGee (2011) also discusses the importance of

teacher professional learning activities having a practical focus because this will enable teachers to value these activities as connected to their everyday work.

Some of the participating teachers in the interviews mentioned their wish to integrate technology into their teaching practice. They reported that some teachers still find it difficult to integrate technology into their teaching practice and so valued PD in this area. According to the participants, teachers' understanding of how to integrate technology into their practice is important to create PAKEM²⁰, as well as to encourage students to be actively involved during the learning process. The importance for teachers in Indonesia to integrate technology into their teaching practice was also highlighted in a study by Tanang and Abu (2014). They found Indonesian teachers are often challenged to adapt and integrate technology into their teaching practice as a way to improve students' learning and achievement. So, PD providers need to consider providing teachers with the appropriate technological knowledge and skills. Teachers' knowledge and skills about technology will help them to build good relationships with students, find good models of learning, and may contribute to educational reform as a whole (Ali, 2005).

Interestingly, all of the participants in the interviews reported that when the content of PD addressed teachers' classroom practical needs, it enhanced teachers' self-efficacy. The findings from my study suggest that one way to help teachers enhance their self-efficacy is by ensuring that PD content is based on their practical needs. The findings from this study also support the need for educational policy-makers to consider launching quality PD programs aimed specifically at raising teachers' operational knowledge and content standards which in turn appears to boost teachers' efficacy (Karimi, 2011).

The findings from this study strongly suggest a need to rethink traditional approaches to PD, especially in Indonesia, where PD is often a means of filling teachers' heads with new ideas, rather than content based on teachers' practical needs in classrooms. This is

²⁰ PAKEM is the acronym for *Pembelajaran Aktif, Kreatif, Efektif dan Menyenangkan*, which means Active, Creative, Effective and Joyful Learning, commonly referred to as active learning.

important because some teachers in the questionnaires and the interviews reported that they sometimes attended seminars and workshops but the content was not suitable to their classroom needs. They felt PD activities should become a process to increase teachers' professionalism and help them to increase their intellectual activity related to their classroom practices (Murray, 2009). The participating teachers in this study reported on the importance of teachers' reflecting on their practice and knowledge as this seemed more likely to change teachers' beliefs and attitudes, with the expectation that changes in beliefs and attitudes will lead to changes in classroom practices and behaviour (Ross & Bruce, 2007; Tschannen-Moran & McMaster, 2009).

Therefore, TSGs were seen by the participants as a positive approach to PD because the content of TSG meetings mostly addressed teachers' practical classroom needs. Participants in the questionnaires and interviews reported that the content of TSG was determined by TSG members themselves, and this was reflected in the TSG observations (see Section 5.5 for more details). The participants' views are exemplified in the following quote, from the interviews,

We always discussed the meeting topics at the first meeting of each semester by inviting all the TSG members and the teacher's supervisor. We discussed and determined the meeting topics based on the members' suggestion. The meeting topics were based on teachers' classroom practical needs and the topics could be changed when other topics were considered more important to be discussed based on the current condition in the classrooms.
(IT.Ali.NT.RA)

Lieberman and Miller (1990) and Carroll (2005) agree that there is a need to let teachers themselves determine how best to adjust their own teaching based on contextual and personal understandings of their classroom practical needs. Further, PD which is collaborative and based on classroom practice, such as TSGs, provide forums for teachers that enable them to construct new knowledge through a process of interweaving their schemata and valuable experience (Yeh, 2005), where the content is matched to their classroom needs and there is potential to improve their teaching practice.

To sum up, this section has provided some evidence of the importance of taking into account teachers' classroom practical needs when designing and implementing PD for teachers. When PD content is based on teachers' classroom practical needs, the PD activities have greater possibilities to establish an environment that increases the likelihood of achieving success for both the teachers and learners. The findings from this study may also suggest that certain types of PD activities are more likely than others to offer such content necessary to increase teacher knowledge and encourage meaningful changes in their classroom practice.

6.5 Chapter Summary

This chapter has discussed findings within the context of the literature on teacher self-efficacy, professional development for teacher, and the impact of PD (TSGs) on teacher self-efficacy. The chapter was divided into three main sections. The first section discussed the participating teachers' perception of the importance of self-efficacy in relation to their teaching practices. The participants perceived that high efficacy beliefs are important because they can help teachers to maximize their teaching activities. The second section discussed changes to teacher self-efficacy. The participating teachers made the greater changes in instructional strategy compared to classroom management and student engagement. Despite this, they also believed a good understanding of classroom management and student engagement was important, in addition to instructional strategy.

The differences in efficacy beliefs between those teachers who attended the TSGs regularly, sometimes, and never during the period of this study were also explored in section two. The participants who attended the TSGs regularly during the period of this study made the greatest changes in efficacy beliefs compared to those who only attended TSGs 'sometimes' and never. TSGs were viewed by the participants as a good quality form of PD and a forum that can help teachers increase their knowledge and understanding about teaching, as well as enhance their self-efficacy. Finally, it was

found that there was no significant difference between the levels of efficacy beliefs in relation to participants' teaching experience, geographical area and gender.

The last section of this chapter discussed the characteristics of good quality professional development for teachers by comparing the literature and participants perceptions. The participating teachers predominantly viewed good quality PD as (1) facilitating increased teachers' knowledge and understanding about teaching; (2) encouraging collaboration; and (3) getting feedback on their classroom practical needs.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

This chapter presents the conclusion of this study that focused on exploring Indonesian EFL teachers' perceptions of the importance of self-efficacy, characteristics of good quality PD, and the relationship between participation in PD, TSGs, and teacher self-efficacy. The study involved three districts: one from an urban area and two from rural districts in South Sulawesi province of Indonesia. The information from the three research gathering tools (i.e. the initial and follow-up questionnaires, TSG observations, and semi-structured interviews) were analysed and have been discussed in Chapter 5 and 6. Analysis of all themes that emerged from the research gathering tools revealed the ways in which aspects that relate to Indonesian cultural values, educational system and policies, and teacher resources could act as factors that influence Indonesian EFL teachers' perceptions.

In this chapter, a summary of the findings is presented in Section 7.2, followed by the research contributions in Section 7.3. Implications of this study for practice and policy are provided in Section 7.4 and implications for methodology are presented in Section 7.5. The limitations of the study are identified in Section 7.6, and propositions for future research are made in Section 7.7. The chapter concludes with the researcher's final thoughts in Section 7.8.

7.2 Research Summary

The investigation into the perceptions of the importance of self-efficacy, the relationship between participation in PD and TSGs and teacher self-efficacy, and characteristics of good quality PD was governed by three research questions. The conclusions of this study, therefore, are based on the three research questions.

This study asks the question: *What is the relationship between participation in PD and perceived changes in levels of efficacy beliefs amongst junior secondary EFL teachers in the areas of instructional strategy, classroom management, and student engagement?* The findings of the current study showed that the participating teachers had different perceived levels of efficacy beliefs across the areas of instructional strategy, classroom management and student engagement at the beginning and end of this study as a result of participation in PD. The highest perceived improvement in self-efficacy was on instructional strategy, followed by classroom management and student engagement. The findings of this study also showed that over the course of the study, the greatest change in levels of perceived teachers' self-efficacy was in the area of instructional strategy. Although not the largest gain, the participants highlighted the importance of good understanding of classroom management and student engagement, in addition to instructional strategy. The participants said that these three areas are common topics for teachers when attending PD and had a direct correlation to their self-efficacy and their teaching practices.

In response to the second research question, *What is the relationship between participation in a TSG and perceived changes in levels of EFL teachers' self-efficacy?* the study showed that teachers who frequently participated in the TSGs increased their gain scores more significantly than those who only participated in the TSGs sometimes and never during the period of the study. The findings revealed that participating in the TSGs very frequently had more positive effects on teachers' self-efficacy in all three areas of instructional strategy, classroom management and student engagement than only participating in the TSGs sometimes and never. The greatest change of self-efficacy for the active group was on instructional strategy.

The third research question asked: *What characteristics of PD do junior secondary EFL teachers perceive affect their self-efficacy?* The participants in this study identified three characteristics of good quality PD. Firstly this should increase their knowledge and teaching skills, secondly it encourage them to collaborate with other participants, and thirdly the content should be based on their practical needs. They perceived that collaborative PD is important because it provides opportunities for them to share their knowledge and expertise about teaching to help them to improve their practice.

Furthermore, PD based on teachers' practical needs will provide teachers with learning that is relevant to what they are doing in their classrooms. The participants perceived that one way to help teachers enhance their self-efficacy is by ensuring that PD activities involve these three aspects of good quality PD.

7.3 Research Contributions

This section discusses the main contributions of the current study. These contributions are discussed in terms of: 1) knowledge of teacher self-efficacy; 2) knowledge of teacher professional development; and 3) knowledge of the effect of PD/TSGs on teacher self-efficacy.

7.3.1 Knowledge of teacher self-efficacy

The current study shows three contributions in the field of teacher self-efficacy. First, one of the focuses of this study was the investigation of the importance of self-efficacy for EFL teachers and how PD may affect changes in their perception of self-efficacy. Despite many studies investigating teacher self-efficacy, only one study has investigated teachers' self-efficacy in an Indonesian context (Kamil et al., 2014) and most studies used quantitative approaches. The current study fills this gap by investigating the importance of and changes in self-efficacy of junior secondary EFL teachers in South Sulawesi province of Indonesia. There is a need to investigate how Indonesian junior secondary EFL teachers perceive the importance of self-efficacy in relation to their teaching practice because many researchers have found that teacher self-efficacy affects teachers' teaching practice (Bandura et al., 1996; Gersten et al., 2001). Teacher self-efficacy is linked to teachers' occupational commitment and their willingness to try a variety of teaching approaches (Allinder, 1994; Canrinus et al., 2012; Watson, 2006).

Second, the findings from the current study revealed that the greatest change in levels of all participants' self-efficacy during the five months period of the study was in the area of instructional strategy. This is in contrast to a previous study which also used the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) carried out by Ross and Bruce (2007) that found that the participants made the highest change in their

efficacy beliefs in classroom management. The findings from the current study support the ideas that self-efficacy beliefs are context-specific rather than a generalized expectancy (Bandura, 1999), and therefore teachers form their personal capabilities in light of the requirements of a particular teaching task (Tschannen-Moran et al., 1998). The findings from the current study suggest that the area in which these teachers made the greatest change in self-efficacy was related to the area in which they experienced repeated successes the most. This is supported by the argument that of the four sources self-efficacy (mastery experiences, vicarious experiences, verbal persuasion, and physiological states), mastery experiences are considered as the most important source of self-efficacy (Bandura, 1999).

Lastly, the current study adapted the Teacher Sense of Efficacy Scale (TSES) by Tschannen-Moran and Hoy (2001). The TSES captures the three areas of instructional strategy, classroom management, and student engagement that represent the richness of teachers' work lives and the requirements of good teaching practice (Tschannen-Moran & Hoy, 2001). The findings from the current study showed the TSES was a suitable measure to identify the effect of PD on the perceived levels and changes in teacher self-efficacy because the TSES covers a wide range of teachers' classroom activities.

7.3.2 Knowledge of teacher professional development

The findings from the current study provide three contributions in the field of teacher professional development. First, the results of the current study show that factors surrounding the teaching context are interrelated threads woven to form participants' perceptions. So the EFL teachers' perceptions of good quality PD were influenced by their past and current experiences in teaching and attending PD. In addition, there is also an indication that the participants' perceptions of good quality PD were influenced by the Indonesian culture, educational system and policies, and teaching resources. This study also suggests that perceptions about good quality PD activities might not be equally valid if used in different international and educational contexts. For example, a study by Garet et al. (2001) conducted in USA found six key features of effective PD, consisting of three core features (content focus, active learning, and coherence), and

three structural features (collective participation, form of activity and duration of activity) (see Section 2.4.3). Garet et al.'s classification of the key features of effective PD are supported by others research (e.g. Desimone et al., 2002; Penuel et al., 2007; Quick et al., 2009). However, the participants in the current study perceived good quality PD to predominantly consist of three aims: increasing teachers' knowledge and teaching skills, facilitating collaboration and being based on teachers' practical needs. This suggests that not all the core and structural features of effective PD by Garet et al. (2001) appear to be so important. Therefore, a notable implication from the research is that a 'one size fits all' approach to good quality PD is not possible or applicable in the implementation of PD for junior secondary EFL teachers in South Sulawesi province of Indonesia. So, teacher PD has to be relevant to the cultural, social and educational context.

Second, the results support the need to implement collaboration and practice focused PD for junior secondary EFL teachers in Indonesia. Through confirming that these teachers valued opportunities for collaboration and PD content that met teachers' practical needs, the participants situated their perceptions about professional learning that helped them experience in meaningful learning activities. In this sense, there are two notable points. Firstly, the importance of PD involving collaboration as a process of sharing knowledge and expertise among teachers is considered important in the Indonesian context. The findings from this study stress the need and the potential for developing a culture of collaboration among teachers (Birchak et al., 1998; Wenger, 1999), which is important for teachers in Indonesia. Secondly, the need to take into account teachers' classroom practical needs when determining the content of PD is supported by this study. This means that teachers' practical needs at a local level should become key aspects of consideration in determining the content of PD (Corcoran, 1995; Diaz-Maggioli, 2003). This consideration could eliminate some of the problems of traditional PD implementation in Indonesia, where the content of PD is not always relevant to teachers' practical needs in the classroom. Understanding teachers' perceptions of effective PD and the factors that influence these perceptions are essential foundations for the implementation of effective PD for junior secondary EFL teachers in Indonesia.

Finally, the current study has identified the benefits teachers may get from TSGs as a form of PD. The participants perceived TSGs as good form of PD that provided them with the opportunities to share their knowledge and expertise as the content of TSG meetings was mostly based on teachers' practical needs. The findings of the study enrich the existing literature about the benefits teachers get when involved in professional learning communities (Birchak et al., 1998; Brunelle, 2005). So far, very few studies, if any, have investigated Indonesian EFL teachers' perceptions of the benefits they get when involved in collaborative forms of PD.

7.3.3 Knowledge of the relationship between participation in PD and TSGs on teacher self-efficacy

The results of the current study also make contributions to the literature regarding PD (TSGs) with positive effects on teacher self-efficacy. This study provides the aspects that need to be included in PD (TSG) activities that can enhance teachers' self-efficacy in the Indonesian context. The effects of PD (TSGs) on junior high school English teachers' self-efficacy are mediated by firstly teachers' opportunities to increase their knowledge and understanding about content knowledge and pedagogical content knowledge, secondly by teachers collaborating with their colleagues, and thirdly by the content of PD (TSGs) being based on teachers' practical classroom needs. The three aspects become key points in designing and implementing good quality PD (TSGs) in Indonesia. PD activities that involve these three aspects were believed by the participants to be able to help them to increase their capabilities and enhance their self-efficacy. PD (TSGs) approaches in Indonesia, and possibly other countries in Southeast Asia, could be useful where culturally learning is predominantly understood within the context of collectivism that focuses upon the interdependence between personal attainment and values of social relationships (Nguyen, 2014). Collaboration appears to be necessary for effective PD in Indonesia. This study also suggests that PD providers need to adopt or adapt a suitable PD model that fits their specific context rather than following a particular international model.

An original contribution of this study is the investigation into the relationship between participation in PD and in particular TSGs, and changes in perceived levels of junior secondary EFL teachers' self-efficacy in an Indonesian context. There is a growing body of research that has investigated the benefit of a TSG approach to PD on teacher's knowledge and understanding about teaching. Furthermore, there is a growing body of research that has investigated the effect of teacher self-efficacy on teacher practice. However, there is no previous study that has investigated the relationship between EFL teachers' participation in TSGs, as a form of PD, and changes in perceived levels of self-efficacy.

7.4 Implications for practice and policy in Indonesia

The findings from this study can be used to suggest changes to PD policy and practice in Indonesia. The research findings can enable professional development providers and the Indonesian government to provide teachers with more positive and good quality to professional learning. This study suggests that PD for teachers in the age of school reform in Indonesia needs to provide teachers with time to talk and work collaboratively. The need to give teachers time is important to the success of teachers' learning, to make more time for each other to share questions as well as new ideas regarding classroom behaviours and learning. This is important as during more traditional seminars and workshops, they did not seem to give sufficient time to get and give feedback, as well as to collaborate with other participants, and combat isolation. The limited time for feedback, as well collaboration with other participants often resulted from the short duration of many traditional seminars and workshops and/or because these activities were designed to only have one-way communication.

This study also suggests the need to involve teachers in the process of planning, designing, and implementing PD activities in order to maximize its success and benefits. Some of the participants in this study reported that on some occasions when they attended traditional PD activities, the content was not related to their teaching needs. Therefore, they suggested evaluating every PD activity so the organizer would know its usefulness in helping teachers improve their teaching practice. The participants

said that by evaluating PD activities, teachers' own needs and wants can be identified and catered for. Teachers' involvement in the decision-making processes about what they need to learn, in what ways they prefer to learn and how they will use what they learn would enable them to have personal investment in the programme (Richards, 1991), and may therefore make them more committed to implement what they learn from PD activities. This implies teacher's involvement in the PD process rather than having externally imposed PD activities (Karavas-Doukas, 1998; Sandholtz, 2002). Involving teachers in the process of designing and evaluating PD activities could bring about more meaningful, effective and long term educational reform.

The research also revealed that to be effective, TSGs as communities of practice require groups of teachers who can meet on a regular basis, have common interests, engage in effective communication processes, recognize and value the expertise of all members and be prepared to work collaboratively to continually improve their teaching practice. Teachers through TSGs need to routinely incorporate team building activities amongst themselves. Teambuilding efforts could be based on social interactions among teachers through sharing processes that are more open with each other.

7.5 Limitations of the Study

Like any research endeavour, this study has some limitations. The limitations included the sample size, selection of the participants, the relatively short time period of the study, and the participants' correct understanding of the definition of self-efficacy.

Although this study tried to invite all junior secondary EFL teachers in three districts in the target areas and had a high response rate (72% in the Q1 and 63.7% in the Q2), the findings do not represent the entire population of junior secondary EFL teachers in South Sulawesi province of Indonesia or of course in Indonesia. As has been indicated in Chapter One, since 1999 the government of Indonesia has shifted from a centralized to decentralized system, including in the education sectors. The decentralised education system allows local governments at provincial and/or district levels to manage their own education matters in order to accommodate local wisdom. The decentralised education

system might potentially give rise to dissimilar education policies implemented between one district and another, and this potentially limits the generalizability of the findings from this study. However, involving teachers with different teaching experience (very experienced teachers, experienced teachers, and novice teachers) and from different geographical areas (urban and rural districts) enabled the researcher to capture voices from different educational and geographical contexts. In addition, employing mixed methods for data collection aimed to obtain richer insights into the implementation of PD for teachers and its effect on teachers' self-efficacy and their teaching practice.

Another limitation of this study is that the participants who were involved in the interviews were only those teachers who attended the TSGs actively during the period of this study. The perceptions of the benefits teachers may get from TSGs from those who only attended TSGs 'sometimes' and 'never' also need to be investigated. Although the participants were asked about the reason for their level of participation in the TSGs in the questionnaires, the findings failed to get in-depth views through interviews from those who only attended the TSGs 'sometimes' and 'never'. In this regard, the selection of the participants who were involved in the interviews is a limitation.

Further, the sources of data from the findings are teachers' perceptions of change in their efficacy beliefs and their perceptions of effective PD. The researcher did not examine teachers' classroom practices. There is a possibility that teachers' perceptions of their self-efficacy may change and direct link to affect PD had on their actual teaching practices is not clear. However, this study did not set out to measure these factors but to find out the relationship between participation in PD and teacher self-efficacy.

Practical considerations in conducting the research also potentially created some limitations. The time spent in the field was relatively short during over which teachers utilized TSGs as sharing forums among them. Although this study was conducted over five months, the researcher was only able to observe each of the TSGs three times. Despite the limited time to observe the TSG meetings, it is important to note that the TSG observations were done to see what and how the teachers conducted the TSGs in

terms of content focus, active learning and collective participation. Thus, the TSG observations were intended to double-check what the teachers said in the questionnaires and the interviews, and how they conducted the TSG meetings.

Lastly, the findings from my study revealed that although a definition of self-efficacy was provided to the participants, the way some of the participants understood and commented about self-efficacy could have been in general terms, such as self-confidence. The participants' understanding of self-efficacy might not be those identified by the researcher, and this might create some bias in classifying what the participants perceived of the importance of self-efficacy in relation to their teaching practice. Recognising that there is no way my findings can identify the way the participants perceived self-efficacy because there is not a specific word to differentiate between this and self-esteem and self-worth in the Indonesian language, I took the meaning to be self-efficacy as long as it was related to a particular aspect of teachers' teaching practice.

7.6 Suggestions for Future Research

This study presents a first step towards investigating teachers' perceptions of good quality PD and the relationship between participation in TSGs on teachers' self-efficacy in one specific context in Indonesia and provides a starting point for complementary research. The study captures teachers' complex understandings of good quality PD and the effect of EFL TSGs on teachers' self-efficacy. Investigating teachers' perceptions in other subject areas like Mathematics, Biology, Chemistry and History could add further information. These sources of data would enable a greater perspective and reflect a wider picture of quality PD and the relationship between participation in TSGs and changes in perceived levels of teachers' self-efficacy. Focus group interviews could also confirm and support participants' self-reported data.

The current study has focused on junior secondary EFL teachers in three districts. Replication of the questionnaires with a larger population of teachers, and other school levels (elementary school teachers and senior secondary school teachers) might allow

wider comparisons and enrich the findings. This could provide insights about whether factors like teaching experience, gender and geographical area significantly affect the level of teachers' self-efficacy in other areas. Involving larger numbers of participants is important because, so far it is suspected that the lack of statistically significant difference in junior secondary EFL teachers' self-efficacy based on demographic aspects resulted from the small sample involved in the current study. In addition, this could also provide insights about whether teachers from other districts and different subjects taught, perceive characteristics of good quality PD and the relationship between participation in PD/TSGs and changes in perceived levels of teachers' self-efficacy in the same way as the participants in this study.

Finally, this study has tried to investigate in-depth perceptions from those teachers who attended the TSGs regularly through the interviews about the importance of self-efficacy, characteristics of good quality PD and the impact of PD and TSGs on teachers' self-efficacy. Getting in-depth perceptions from those who only attended TSGs 'sometimes' and 'never' through future interviews might give different perspectives in terms of the benefits teachers may get when attending TSGs and the reasons why they did not use TSGs optimally as sharing forums.

7.7 Final thoughts

This study began with my curiosity about what PD contributes to meaningful learning experiences for teachers. This is based on the fact that although there are many PD activities for teachers in Indonesia, most of these activities are in traditional forms. Questions arise about the benefits of PD activities when teachers perceive they are unable to implement knowledge and skills they learn from these activities in their classrooms (Hendayana, Supriatna, & Imansyah, 2007). This study therefore has helped me to gain an in-depth insight into what junior secondary EFL teachers in one area of Indonesia perceive to be good quality PD.

One of the contributions of this study is to understand what aspects of PD, and particularly TSGs, will enhance teachers' self-efficacy in the Indonesian context. This research shows that quality PD activities that affect EFL teachers' self-efficacy beliefs

are those activities that: facilitates increased teachers' knowledge and teaching skills; encourages collaboration; and are based on teachers' practical classroom needs. These three aspects are essential for school principals, government policy makers and PD providers to understand, as attempts are made to increase the quality of PD activities for teachers in Indonesia. Teachers should be provided with opportunities to experience meaningful professional learning experiences and feel that they are supported in their profession. Having meaningful learning experiences and feeling supported will enhance EFL teachers' self-efficacy, which should help them to optimise their teaching practice.

On a personal note, the study has contributed to my own understanding of the need for collaboration among teachers as a process of sharing knowledge and expertise for professional learning which is strongly influenced by Indonesian cultural values of collaboration. In the Indonesian context, where the education curriculum often changes to suit the demands of education reform, collaboration can be seen as a good way for teachers to share and update their knowledge and understanding about current issues in education. In addition, the study also has given me an insight into the importance of high self-efficacy beliefs for teachers. These understandings will be invaluable in my own practice when I return to my profession as an EFL teacher in Indonesia. These understandings can be shared with other teachers in my daily teaching activities and through my involvement in TSG meetings.

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APPENDICES

Appendix A: MUHEC Approval



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

8 August 2013

Bachtiar
7 Moerangi Street
West End
PALMERSTON NORTH 4410

Dear Bachtiar

Re: HEC: Southern B Application – 13/51
Teacher study groups: Impact of professional development model on enhancing secondary English language teachers sense of efficacy in Indonesia

Thank you for your letter dated 6 August 2013.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

A handwritten signature in black ink, appearing to read 'N. Matthews'.

Dr Nathan Matthews, Chair
Massey University Human Ethics Committee: Southern B

cc Dr Alyson McGee
Institute of Education
PN500

Dr Peter Rawlins
Institute of Education
PN500

A/Prof Sally Hansen, HoI
Institute of Education
PN500

Mrs Roseanne MacGillivray
Institute of Education
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Massey University Human Ethics Committee
Accredited by the Health Research Council
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Appendix B: Request Letter to Education Department

[LETTER HEAD]

South Sulawesi, 13th of August 2013



Provinsi Sulawesi Selatan

Dear the Head of Education Department,

My name is Bachtiar. I am currently a doctoral (PhD) student at the Institute of Education, Massey University, New Zealand. I would like to conduct a research project titled *Teacher Study Groups: Impact of Professional Development Model on Enhancing Secondary EFL Teachers' Self-Efficacy in Indonesia*. The project would be carried out towards junior secondary EFL teachers in your district

The purpose of this study is to investigate *how* teacher study groups (TSGs) as part of a collaborative model of professional development (PD) help teachers of English to enhance their self-efficacy. This research will assess the significance of study groups from the perspectives of teachers' sharing practical experiences, collaborative learning and networking. I will collect data from August to December 2013. The data will be collected by using questionnaires from all junior secondary English language teachers, by observing the teacher study group for four times, and by interviewing six teachers from the teacher study group's members.

I expect that the information obtained from my research would be beneficial to the teachers to help them increase their teaching practices. The finding from this study may also be used by PD providers to develop PD programs and study groups for teachers, particularly EFL teachers, who will play an important role in enhancing the quality of teaching and learning in schools in Indonesia. I am attaching an information sheet

prepared for participants in this research. It explains how the research will be conducted. If you need more information or have any questions, please feel free to contact me at the address below.

Teachers' participation in this study is completely voluntary, and will in no way affect their position in their profession. Should they choose to participate, all information will be kept confidential and no individual will be identifiable from the final report. Their responses will be considered only in conjunction with other participants. Should any information obtained be published in a scholarly journal, confidentiality will be protected.

I would like to thank you for considering my request.

Yours sincerely,

BACHTIAR

Name and contact details of researcher and supervisors:

Researcher

Bachtiar
Jl. Jend. Sudirman No. 467
Kec. Lapadde, Kota Parepare,
Provinsi Sulawesi Selatan
Mobile Phone: +6282187934517
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Supervisors

1). Dr. Alyson McGee (a.McGee@massey.ac.nz)
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Palmerston North 4442
New Zealand

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 13/51. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 80877;
Email: humanethicsouthb@massey.ac.nz.

[LETTER HEAD]

Sulawesi Selatan, 13 Agustus 2013


Provinsi Sulawesi Selatan

Kepada Yth. Kepala Dinas Pendidikan,

Nama saya Bachtiar. Saya sedang menempuh pendidikan S3 di Institute of Education, Massey University, New Zealand. Saya berencana melakukan penelitian terkait dengan disertasi saya yang berjudul *Teacher Study Groups: Impact of Professional Development Model on Enhancing Secondary EFL Teachers' Self-Efficacy in Indonesia*. Penelitian ini akan dilakukan terhadap guru Bahasa Inggris di Kota Parepare.

Tujuan dari penelitian ini adalah untuk mengetahui bagaimana Musyawarah Guru Bhs. Inggris SMP (MGMP), sebagai bagian dari model kolaborasi dari pengembangan profesional guru Bhs. Inggris membantu guru-guru dalam meningkatkan self-efficacy mereka. Penelitian ini akan mencoba melihat signifikansi MGMP dari perspektif tukar pengalaman, pembelajaran secara kolaborasi, dan jaringan diantara guru-guru Bhs. Inggris SMP. Saya akan melakukan pengumpulan data dari bulan Agustus 2013 sampai Januari 2014. Data tersebut akan diperoleh melalui questioner yang akan diberikan kepada semua guru-guru Bhs. Inggris SMP, observasi terhadap MGMP sebanyak 4 kali, dan interviu 6 guru yang aktif ikut di kegiatan MGMP.

Sangat diharapkan informasi yang didapatkan dari penelitian ini akan memberikan mamfaat terhadap guru-guru tersebut untuk membantu mereka meningkatkan capaian pengajarannya. Temuan dari studi ini juga sangat memungkinkan digunakan oleh penyelenggara pengembangan profesional untuk mendesign dan melaksanakan kegiatan pengembangan profesional dan MGMP, khususnya bagi guru-guru Bhs. Inggris sebagai bagian dari upaya meningkatkan kualitas pengajaran di Indonesia. Terlampir lembar

informasi yang akan diberikan kepada para responden. Lembar informasi tersebut menjelaskan tentang proses penelitian akan dilakukan. Jika bapak membutuhkan informasi lebih lanjut atau ada hal yang perlu ditanyakan, silahkan hubungi saya sesuai alamat yang tertera dibawah.

Keikutsertaan guru-guru dalam penelitian ini murni sukarela, dan tidak akan mempengaruhi/mengancam posisi mereka. Jika mereka menjadi responden, maka semua informasi yang diberikan akan terjaga kerahasiannya dan tidak ada orang yang bisa mengidentifikasi mereka dari laporan akhir studi ini. Informasi yang mereka berikan hanya akan digunakan keperluan penelitian ini. Jika ada informasi yang akan di publikasi lewat tulisan ilmiah di jurnal atau dalam bentuk artikel, maka kerahasiannya akan dijamin.

Atas perhatian dan kerjasamanya, diucapkan terima kasih.

Salam hormat,

BACHTIAR

Nama dan kontak peneliti dan supervisor:

Peneliti

Bachtiar
Jl. Jend. Sudirman No. 467
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Provinsi Sulawesi Selatan
Mobile Phone: +6282187934517
Home Phone: +624213311100
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Supervisor

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Committee Approval Statement

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Email: humanethicsouthb@massey.ac.nz.

Appendix C: Participants' Information Sheet for the Questionnaires

[LETTER HEAD]

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

Dear Teacher,

My name is Bachtiar. I am currently a doctoral (PhD) student at the Institute of Education, Massey University, New Zealand. I am conducting my doctoral research titled *Teacher Study Groups: Impact of Professional Development Model on Enhancing Secondary EFL Teachers' Self-efficacy in Indonesia*.

Project Description

This information sheet is to give you information about my study, and invite you to help me with my study as a research participant.

The purpose of this study is to investigate *how* teacher study groups (TSGs) as part of a collaborative model of professional development (PD) help English language teachers to enhance their self-efficacy. This research will assess the significance of study groups from the perspectives of teachers' sharing practical experiences, collaborative learning and networking.

This research will give you an opportunity to reflect on your experiences as a junior secondary English language teacher. The information you provide will give insight about your perceptions related with professional development (teacher study groups) you have followed. The finding from this study may also be used by professional development providers to develop and implement professional development programs and study groups for teachers, particularly English language teachers, that will play an important role in enhancing the quality of teaching and learning in schools in Indonesia.

Level of your participation

There are three levels that you may involve in this project.

1. I will distribute an initial questionnaire and a follow-up questionnaire to all junior secondary English language teachers in this district. Completing the questionnaire should take a maximum of 45 minutes. If you agree to participate in the survey, you should return the questionnaire you have filled out to me using the stamped addressed envelope that I have sent you together with the questionnaire.
2. I will observe your teacher study group for four times to see the actual process during the teacher study group meetings, not to evaluate your knowledge and skills, as well as your teaching practice. If you participate actively in the teacher study group, then you will be a prospective participant for teacher study group observations. I will sit in the back of your teacher study group meeting classroom and make some notes on the process of meetings. The teacher study group's observations will involve no time commitment from other than your normal teacher study group' meetings.
3. If you follow the teacher study group meetings actively during the study, you will be a prospective participant for interview. I will ask teachers (participants' interview) about their perception of the effect of professional development, particularly teacher study group, on teachers' self-efficacy and teaching practice. The interview will involve 6 teachers from your teacher study groups (18 teachers from three teacher study groups). Each interview should be approximately 30 minutes. With teachers' permission, I will record the interview and make a transcription of the recording.

Participants' Rights

Your participation will be confidential. It means your identity will be only known by me as the researcher. All data will be stored with my supervisors for a period of five years, at which time it will be destroyed. The information you provide will only be used for the purpose of this research and pseudonym will be used in any publications so your participation will remain confidential.

If you decide to participate, you have the right to:

- a) decline to answer any particular question;
- b) withdraw from the study any time;
- c) ask any questions about the study at any time during your participation;
- d) provide information on the understanding that your name will not be used unless you give permission to the researcher;
- e) be given access to a summary of the findings when it is concluded;
- f) ask for the recorder to be turned off at any time during the interview.

I appreciate your valuable time and assistance, and hope that you will consider participating in this research. If you have any questions or concerns regarding this study, please feel free to contact me or my supervisors.

Yours sincerely,

BACHTIAR

Name and contact details of researcher and supervisors:

Researcher

Bachtiar
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Committee Approval Statement

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[LETTER HEAD]

Lembar Informasi Partisipan untuk Kuesioner

Judul Penelitian: Teacher Study Groups: Impact of Professional Development Model on Enhancing Junior Secondary EFL Teachers' Self-Efficacy in Indonesia.

Peneliti: Bachtiar, mahasiswa S3 pada Institute of Education, College of Humanities and Social Science, Massey University, New Zealand.

Deskripsi Penelitian dan Undangan sebagai Responden

Lembar informasi ini diberikan untuk memberikan gambaran tentang penelitian saya, dan sekaligus mengharapkan partisipasi bapak/ibu sebagai responden dalam penelitian saya ini.

Tujuan dari penelitian ini adalah untuk mengetahui persepsi guru-guru Bhs. Inggris terhadap dampak dari kegiatan pengembangan profesional (professional development), termasuk kegiatan MGMP, terhadap self-efficacy dan praktek mengajar mereka. Penelitian ini akan mencoba melihat signifikansi kegiatan professional development (MGMP) dari perspektif tukar pengalaman, pembelajaran secara kolaborasi, dan networking diantara guru-guru Bhs. Inggris SMP di Indonesia.

Penelitian ini akan memungkinkan bapak/ibu merefleksikan pengalaman anda sebagai guru Bhs. Inggris SMP. Informasi yang bapak/ibu berikan akan merefleksikan tentang persepsi bapak/ibu mengenai kegiatan professional development (MGMP) yang telah bapak/ibu ikuti. Temuan dari penelitian ini akan menyajikan informasi berkelas internasional yang juga memungkinkan digunakan oleh penyelenggara professional development di Indonesia untuk mengembangkan dan melaksanakan kegiatan-kegiatan pengembangan profesional bagi guru, khususnya bagi guru Bhs. Inggris, yang akan memainkan peranan penting dalam meningkatkan kualitas pengajaran di Indonesia. Penelitian ini juga akan menambah wahana literatur tentang bagaimana guru bahasa Inggris SMP di Indonesia melakukan kegiatan MGMP.

Mengingat bapak/ibu adalah guru Bhs. Inggris SMP, maka bersama ini saya ingin mengundang bapak/ibu untuk berpartisipasi dalam penelitian ini. Saya akan

mendistribusikan kuesioner awal dan kuesioner lanjutan kepada seluruh guru Bhs. Inggris SMP di kabupaten ini. Dibutuhkan waktu \pm 45 menit untuk mengisi kuesioner tersebut. Sangat diharapkan bapak/ibu bersedia terlibat dalam penelitian ini, dengan mengisi kuesioner terlampir dan mengembalikannya kepada saya dengan menggunakan amplop yang sudah berstempel.

Informasi dan kerahasiaan (identitas) bapak/ibu

Data yang terkumpul dan telah dianalisa akan menjadi bagian disertasi S3 saya yang akan disimpan di perpustakaan Massey University of New Zealand, dan Departemen Pendidikan Provinsi Sulawesi Selatan. Identitas bapak/ibu akan dijamin kerahasiannya dan informasi yang bapak/ibu berikan dalam setiap tahap penelitian ini TIDAK akan diberikan kepada pihak lain termasuk kepada ketua MGMP bapak/ibu. Hanya peneliti (saya) dan supervisor saya yang akan memiliki akses terhadap data tersebut. Semua data berupa rekaman, transkrip, dan catatan akan dimusnahkan dalam tiga tahun pasca penelitian ini. Informasi yang bapak/ibu berikan hanya akan digunakan untuk keperluan studi, publikasi dan presentasi saya. Saya dapat mengirimkan ringkasan hasil penelitian jika bapak/ibu inginkan. Hasil penelitian ini kemungkinan akan dipublikasikan dalam jurnal atau dipresentasikan pada konferensi akademik.

Hak-hak Responden

Keterlibatan bapak/ibu dalam penelitian ini bersifat sukarela. Jika bapak/ibu bersedia berpartisipasi, maka bapak/ibu berhak untuk:

- tidak menjawab sebagian pertanyaan;
- bertanya tentang penelitian ini selama keikut sertaannya;
- tidak digunakan identitas yang sebenarnya, kecuali atas persetujuan bapak/ibu;
- mendapatkan ringkasan hasil penelitian ketika studi telah selesai dilakukan jika bapak/ibu menginginkannya;

Atas perhatian dan kerjasamanya diucapkan banyak terima kasih. Semoga bapak/ibu bersedia berpartisipasi dalam penelitian ini. Jika bapak/ibu mempunyai pertanyaan atau ada hal yang ingin diklarifikasi, silahkan menghubungi saya atau supervisor saya.

Salam hormat,

BACHTIAR

Name and contact details of researcher and supervisors:

Researcher

Bachtiar
Jl. Jend. Sudirman No. 467
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Home Phone: +624213311100
greatiar@yahoo.co.nz

Supervisors

1). Dr. Alyson McGee (a.McGee@massey.ac.nz)
2) Dr. Peter Rawlins (P.Rawlins@massey.ac.nz)
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Ph. +64 6 3569099, ext 85901
Palmerston North 4442
New Zealand

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 13/51. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Email: humanethicsouthb@massey.ac.nz

Appendix D: Information Sheet to the TSG Members

[LETTER HEAD]

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

INFORMATION SHEET – TEACHER STUDY GROUP'S MEMBERS

Dear the teacher study group members,

My name is Bachtiar. I am currently a doctoral (PhD) student at the Institute of Education, Massey University, New Zealand. I am conducting my doctoral research titled *Teacher Study Groups: Impact of Professional Development Model on Enhancing Secondary English Language Teachers' Self-efficacy in Indonesia*.

This information sheet is to give you information about my study, and invite you as the teacher study group (TSG) members to help me with my study as research participants for TSG observations.

The purpose of this study is to investigate *how* teacher study groups, as part of a collaborative model of professional development (PD), help teachers of English to enhance their self-efficacy. This research will assess the significance of study groups from the perspectives of teachers' sharing practical experiences, collaborative learning and networking.

The result of this research may help you to develop your TSG based on participants' perceptions. The research findings may also be used by PD providers to develop PD programs and study groups for teachers, particularly EFL teachers, who will play an important role in enhancing the quality of teaching and learning in schools in Indonesia.

Since your TSG is considered fulfil the selection criteria for TSG observations, I would like to invite you to participate in my research. If you agree to participate in this

research, you are hoped to return the consent form to me. However, you do not want to have to be involved in my research if you do not want to. I believe that this research will have no risks of harm to you as a result of participation.

Project Procedure

To do this research, I would like to:

- visit your TSG meetings 4 times to see what and how you and other teachers conduct the TSG and will report of practice corresponded to what actually happen. The notes from TSG observations will provide me with the basis for creating interview questions for participants. TSG observations will also help me to confirm the result from questionnaires and interviews, as well as to see and get data objectively.
- select and invite six teachers among you (TSG members) to be involved in an interview at your convenience time. The interview should be approximately 30 minutes.

After finishing the data collection process, the information will be then analyzed and written up as my doctoral thesis, as well as it will be published in related journals. The summary of the study results will also be sent to you.

Participants' Rights

Your TSG participation will be confidential. It means your TSG identity will be pseudonym. You and other TGS members are under no obligation to accept this invitation. If you and other TSG members decide to participate, you have the right to:

- withdraw from the study any time;
- ask any questions about the study at any time during your participation;
- provide information on the understanding that your TSG name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

I appreciate your valuable time and assistance, and hope that you will allow me to observe your teacher study group. If you have any questions or concerns regarding this study, please feel free to contact me or my supervisors.

Yours sincerely,

BACHTIAR

Name and contact details of researcher and supervisors:

Researcher

Bachtiar
Jl. Jend. Sudirman No. 467
Kec. Lapadde, Kota Parepare,
Provinsi Sulawesi Selatan
Mobile Phone: +6282187934517
Home Phone: +624213311100
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Supervisors

1). Dr. Alyson McGee (a.McGee@massey.ac.nz)
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Committee Approval Statement

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[LETTER HEAD]

**TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT
MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH
LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA**

LEMBAR INFORMASI – ANGGOTA MGMP

Nama saya Bachtiar. Saya adalah mahasiswa S3 di Institute of Education, Massey University, New Zealand. Saya sedang melakukan penelitian untuk disertasi S3 saya dengan judul "*Teacher Study Groups: Impact of Professional Development Model on Enhancing Secondary EFL Teachers' Self-efficacy in Indonesia*".

Deskripsi Penelitian dan Undangan sebagai Responden

Lembar informasi ini diberikan untuk memberikan gambaran tentang penelitian saya, dan sekaligus mengharapkan partisipasi dari teman-teman guru Bhs. Inggris yang tergabung dalam MGMP sebagai responden dalam observasi MGMP.

Tujuan penelitian ini ada untuk mengetahui bagaimana MGMP, sebagai bagian model kolaborasi dari pengembangan profesional membantu para guru Bhs. Inggris meningkatkan kepercayaan diri mereka tentang kompetensi yang mereka miliki. Penelitian ini ada melihat signifikansi MGMP dari sudut pandang sharing pengalaman, kerjasama dan jaringan diantara guru-guru Bhs. Inggris.

Hasil dari penelitian ini mungkin akan bisa membantu bapak/ibu dalam meningkatkan hasil capaian dari kegiatan-kegiatan MGMP. Temuan dari studi ini juga memungkinkan digunakan oleh penyelenggara pengembangan profesional untuk mengembangkan dan melaksanakan kegiatan-kegiatan profesional dan MGMP bagi guru, khususnya bagi guru Bhs. Inggris, yang akan memainkan peranan penting dalam meningkatkan kualitas pengajaran di Indonesia.

Mengingat MGMP bapak/ibu memenuhi persyaratan sebagai MGMP untuk observasi, maka bersama ini saya mengharapkan kesediaan bapak/ibu anggota MGMP untuk berpartisipasi dalam penelitian saya. Jika anggota MGMP bersedia, maka dimohon

kesediannya untuk mengembalikan 'the consent form' kepada saya. Perlu di ingat bahwa keikutsertaan bapak/ibu dalam penelitian ini adalah suka rela (tidak ada paksaan). Saya percaya bahwa keikutsertaan bapak/ibu anggota MGMP dalam penelitian ini tidak akan memberikan dampak negative bagi karir bapak/ibu dan bagi MGMP karena semua informasi yang diberikan/didapat dijamin kerahasiannya.

Prosedur Proyek

Untuk melakukan observasi MGMP, maka saya akan:

- ikut dalam pertemuan MGMP bapak/ibu sebanyak 4 kali untuk mengetahui apa dan bagaimana bapak/ibu melaksanakan MGMP, jadi untuk melaporkan apa yang sebenarnya (proses) terjadi. Catatan dari observasi akan memberikan informasi kepada saya untuk menyusun pertanyaan-pertanyaan untuk interview. Catatan-catatan dari observasi MGMP juga akan digunakan untuk mencocokkan hasil yang diperoleh dari questionnaire dan interview yang memungkinkan saya mendapatkan data secara objektif.
- menyeleksi dan mengharapkan partisipasi 6 orang dari bapak/ibu (anggota MGMP) untuk menjadi responden dalam wawancara semi-struktur yang akan disesuaikan dengan waktu luang bapak/ibu. Wawancara tersebut akan berlangsung \pm 30 menit.

Setelah menyelesaikan pengumpulan data, informasi yang didapat akan dianalisa dan ditulis dalam bentuk disertasi saya, sekaligus akan dipublikasikan di jurnal terkait. Ringkasan hasil studi saya akan dikirimkan kepada bapak/ibu.

Hak-hak Responden

Partisipasi MGMP bapak/ibu dalam penelitian ini terjamin kerahasiannya. Itu berarti bahwa identitas MGMP bapak/ibu tidak akan diketahui oleh siapa pun, kecuali oleh saya selaku peneliti. Tidak ada kewajiban bagi bapak/ibu untuk mesti ikut mesti memenuhi undangan menjadi peserta MGMP berkaitan dengan penelitian saya ini. Jika bapak dan anggota MGMP lainnya bersedia ikut dalam observasi ini, maka bapak/ibu berhak untuk:

- mengundurkan diri dari studi ini kapan saja;
- bertanya tentang penelitian ini selama keikutsertaannya;

- tidak digunakan identitas MGMP bpaka/ibu yang sebenarnya, kecuali atas persetujuan bapak/ibu;
- mendapatkan ringkasan hasil penelitian ketika studi telah selesai dilakukan;

Atas perhatian dan kerjasamanya diucapkan banyak terima kasih, dan semoga bapak/ibu bersedia jika saya akan melakukan observasi terhadap MGMP bapak/ibu. Jika bapak/ibu punya pertanyaan atau hal yang ingin diklarifikasi terkait dengan studi ini, silahkan menghubungi saya atau supervisor saya.

Salam hormat,

BACHTIAR

Name and contact details of researcher and supervisors:

Researcher

Bachtiar
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Supervisors

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 Massey University
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 Ph. +64 6 3569099, ext 85901
 Palmerston North 4442
 New Zealand

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application ___/___ (insert application number). If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews,
 Email: humanethicsouthb@massey.ac.nz

Appendix E: Consent Form for TSG Observations

[LETTER HEAD]

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

CONSENT FORM FOR TSG OBSERVATIONS

I have read the Information Sheet and have had the details of the study explained to me. I understand the information from TSG observations will be kept in the utmost confidentiality and will only be used for this specific study. My questions, as a TSG member, have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Please tick / your choice below:

I agree to participate in the TSG observations of this study under the conditions set out in the Information Sheet.

Yes No

I understand that all research notes will be used only by Bachtiar for this research project, publications and presentation arising from this research.

Yes No

Signature: _____ **Date:** _____

Full Name – printed _____

[LETTER HEAD]

**TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT
MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE
TEACHERS' SELF-EFFICACY IN INDONESIA**

KONSEN FORM BAGI PESERTA MGMP

Saya sudah membaca lembar informasi dan telah mendapatkan penjelasan tentang penelitian ini secara detail. Saya mengerti bahwa informasi yang didapat dari observasi MGMP akan dijaga kerahasiannya dan hanya akan digunakan untuk keperluan studi ini. Semua pertanyaan saya terkait dengan penelitian ini telah dijelaskan secara lengkap, dan saya berhak untuk bertanya lebih lanjut jika dianggap ada yang perlu diklarifikasi.

Tolong centang pilihan jawaban bapak/ibu dibawah ini:

Saya setuju untuk berpartisipasi dalam observasi MGMP ini sesuai dengan informasi yang tertera di lembar informasi.

Ya Tidak

I understand that all research notes will be used only by Bachtiar for this research project, publications and presentation arising from this research.

Saya mengerti bahwa semua catatan dari observasi MGMP ini hanya akan digunakan oleh bapak Bachtiar untuk keperluan studi, publikasi, dan presentasi yang berkaitan dengan penelitian ini.

Ya Tidak

Tanda tangan: _____ **Tanggal:** _____

Nama lengkap: _____

Appendix F: Participant Consent Form for Interview

[LETTER HEAD]

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

PARTICIPANT CONSENT FORM FOR INTERVIEW

I have read the Information Sheet and have had the details of the study explained to me. I understand the information I share will be kept in the utmost confidentiality and will only be used for this specific study. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Please tick / your choice below:

I agree to participate in this study under the conditions set out in the Information Sheet.

Yes No

I agree to the interview being sound recorded.

Yes No

I wish to have my recordings returned to me.

Yes No

Signature: _____

Date: _____

Full Name – printed _____

[LETTER HEAD]

**TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT
MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE
TEACHERS' SELF-EFFICACY IN INDONESIA**

KONSEN FORM BAGI PARTISIPAN UNTUK INTERVIEW

Saya sudah membaca lembar informasi dan telah mendapatkan penjelasan tentang penelitian ini secara detail. Saya mengerti bahwa informasi yang saya berikan akan dijaga kerahasiannya dan hanya akan digunakan untuk keperluan studi ini. Semua pertanyaan saya terkait dengan penelitian ini telah dijelaskan secara lengkap, dan saya berhak untuk bertanya lebih lanjut jika dianggap ada yang perlu diklarifikasi.

Tolong centang pilihan jawaban bapak/ibu dibawah ini:

Saya setuju untuk berpartisipasi dalam penelitian ini sesuai dengan informasi yang tertera di lembar informasi.

Ya Tidak

Saya setuju jika wawancara di rekam.

Ya Tidak

Saya ingin hasil rekaman wawancara saya dikembalikan kepada saya untuk validasi.

Ya Tidak

Tanda tangan: _____ **Tanggal:** _____

Nama lengkap: _____

Appendix G: Authority for the Release of Transcripts

[LETTER HEAD]

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and validate the transcript of the interview(s) conducted with me.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research as long as pseudonym will be used.

Signature: _____ **Date:** _____

Full Name – printed _____

Appendix H: Questionnaire

TEACHER STUDY GROUPS: IMPACT OF PROFESSIONAL DEVELOPMENT MODEL ON ENHANCING JUNIOR SECONDARY ENGLISH LANGUAGE TEACHERS' SELF-EFFICACY IN INDONESIA

INTRODUCTION

This research study is about your perception of the effect of professional development (PD) on your self-efficacy and teaching practice. Please answer the questionnaire and try to be **as objective as possible**. Thanks for your cooperation.

Special terms used in this questionnaire are as follows:

- ☞ **Professional development** is a process and activities designed to enhance the professional knowledge, skills, and attitude of educators to help improving students' learning outcomes. Professional development involves seminar, workshop, conference, teacher study group, training, coaching, mentoring, observation of colleagues, courses (on-site/on-line), etc.
- ☞ **Teacher self-efficacy** refers to a teacher's belief in his/her ability to perform specific tasks or process in teaching practices.

SECTION A: PERSONAL INFORMATION

1. Name
2. Gender male female
3. Type of school Public School Private School
4. Location of school (District)
5. Years of teaching experience

SECTION B: Teachers Sense of Efficacy Scale (TSES)

Direction: The TSES below is designed to help me understand more about teachers' beliefs about their self-efficacy. Please indicate on **how well you believe you are able to ...?** about each of the statements below by circling the number that best describes your opinion when teaching English language.

| No | Items | Not at all | Poorly | Adequately | Well | Very well |
|-----------|---|-------------------|---------------|-------------------|-------------|------------------|
| 1. | How well are you able to implement alternative English language teaching strategies in your classroom? | 1 | 2 | 3 | 4 | 5 |
| 2. | How well are you able to provide an alternative explanation or example when students are confused about English language? | 1 | 2 | 3 | 4 | 5 |
| 3. | How well are you able to craft good questions about English language for your students? | 1 | 2 | 3 | 4 | 5 |
| 4. | How well are you able to use a variety of English language assessment strategies? | 1 | 2 | 3 | 4 | 5 |
| 5. | How well are you able to prevent disruptive behaviour during English language class? | 1 | 2 | 3 | 4 | 5 |
| 6. | How well are you able to respond to a student who is disruptive or noisy during English language class? | 1 | 2 | 3 | 4 | 5 |
| 7. | How well are you able to establish a classroom management system for teaching English language with your students? | 1 | 2 | 3 | 4 | 5 |
| 8. | How well do the routines you establish keep activities running smoothly during English language class? | 1 | 2 | 3 | 4 | 5 |
| 9. | How well are you able to ensure students believe they can do well in English language? | 1 | 2 | 3 | 4 | 5 |
| 10 | How well are you able to help your students understand that learning English language is important? | 1 | 2 | 3 | 4 | 5 |
| 11 | How well are you able to involve families in helping their children do well in English language? | 1 | 2 | 3 | 4 | 5 |
| 12 | How well are you able to help students who have difficulties in English language? | 1 | 2 | 3 | 4 | 5 |

SECTION C: PD (TSG) ON TEACHER SELF-EFFICACY AND TEACHING PRACTICE

Please answer the following questions based on your experience in professional development (teacher study groups) activities. Using an additional sheet (if necessary).

1. Which of the following types of professional development activities have you been engaged in? *(Please tick all that applies).*

| | | | |
|-------------------------------------|--------------------------|---------------------------|--------------------------|
| Seminars | <input type="checkbox"/> | Workshops | <input type="checkbox"/> |
| Teacher study groups | <input type="checkbox"/> | Conferences/symposiums | <input type="checkbox"/> |
| Mentoring | <input type="checkbox"/> | Observing colleagues | <input type="checkbox"/> |
| Research/enquiry | <input type="checkbox"/> | Courses (on-site/on-line) | <input type="checkbox"/> |
| Coaching | <input type="checkbox"/> | None | <input type="checkbox"/> |
| Other <i>(please specify)</i> _____ | | | |

2. Please indicate the quality of the following types of professional development (PD) you have participated in. *(Please tick one)*

| | Good | Average | Poor | n/a |
|------------------------|-------------|----------------|-------------|------------|
| Workshops | | | | |
| Seminars | | | | |
| Teacher study groups | | | | |
| Mentoring | | | | |
| Research/enquiry | | | | |
| Conferences | | | | |
| Observing colleagues | | | | |
| Coaching | | | | |
| Courses (face to face) | | | | |
| Courses (on-line) | | | | |

Other *(please specify)* _____

Please add any further comments: _____

3. Did any of the professional development activities you have participated in cause you to change any of the following aspects of your teaching practice?

- | | | | |
|---------------------------|------------------------------|------------------------------------|-----------------------------|
| a. Instructional strategy | <input type="checkbox"/> Yes | <input type="checkbox"/> Sometimes | <input type="checkbox"/> No |
| b. Classroom management | <input type="checkbox"/> Yes | <input type="checkbox"/> Sometimes | <input type="checkbox"/> No |
| c. Student engagement | <input type="checkbox"/> Yes | <input type="checkbox"/> Sometimes | <input type="checkbox"/> No |

If **Yes** or **Sometimes**, please explain what aspect you have changed.

a. Instructional strategy _____

b. Classroom management _____

c. Student engagement _____

4. In your opinion, why is self-efficacy important for English language teachers?

5. Do you currently participate in the teacher study group? (Please tick one)

Yes Why? _____

Sometimes Why? _____

No Why? _____

6. If you have participated or currently participate in the teacher study group, what aspects in the teacher study group do you find most affect your self-efficacy?

7. In your opinion, **how well** do you believe that the teacher study group has provided opportunities for you to:

| | Not at all | Poorly | Adequately | Well | Very well |
|---|-----------------------|---------------|-------------------|-------------|------------------|
| a. increase your understanding of content focus ²¹ | 1 | 2 | 3 | 4 | 5 |
| b. Pedagogical content knowledge | 1 | 2 | 3 | 4 | 5 |
| c. participate actively during the meeting? | 1 | 2 | 3 | 4 | 5 |

²¹ Refers to teaching content that teachers teach, how students learn that content and how to present and convey that content

| | | | | | |
|---|---|---|---|---|---|
| d. collaborate with other participants? | 1 | 2 | 3 | 4 | 5 |
| e. get feedback on practice? | 1 | 2 | 3 | 4 | 5 |

Please add any further comments: _____

8. In your opinion, **how important** does the teacher study group has provided opportunities for you to:

| | Not Very important | Not important | Neutral | Important | Very important |
|--|--------------------|---------------|---------|-----------|----------------|
| c. increase your understanding of content focus? | 1 | 2 | 3 | 4 | 5 |
| d. Pedagogical content knowledge | 1 | 2 | 3 | 4 | 5 |
| e. participate actively during the meeting? | 1 | 2 | 3 | 4 | 5 |
| f. collaborate with other participants? | 1 | 2 | 3 | 4 | 5 |
| g. get feedback on practice? | 1 | 2 | 3 | 4 | 5 |

Please add any further comments: _____

9. In your opinion, **how well** does the teacher study group help you to enhance your self-efficacy?

| Not at all | Poorly | Adequately | Well | Very well |
|-------------------|---------------|-------------------|-------------|------------------|
| 1 | 2 | 3 | 4 | 5 |

Please give reasons for your choice: _____

10. Apart from the above questions, please add any comments/suggestions about TSG or other aspects in your area.

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Appendix I: Teacher Interview Protocol

| | |
|-------------------------|-------------------------------|
| Interviewee: | Intended duration: mins |
| School: | Interview begins: |
| D a t e: | Interview finishes: |
| Location: | Actual duration: mins |
| Qualification(s): | Years of experience: |

Goal: to stimulate a conversation with teachers that allows them to talk and voice their perspectives.

Categories:

1. Professional development

- a. Briefly describe the district-wide professional development activities that you have participated in.
- b. How have professional development experiences affected you throughout your career?
- c. What characteristics must be present in quality professional development activities/experiences?

2. Teacher study groups (TSGs)

- a. In your opinion, what is the strength and weaknesses of teacher study group compare to other professional development activities, such as seminar and workshop?
- b. How do the teacher study group processes fit with what you *do* as a teacher? How do the teacher study group processes fit with what you *want* to do as a teacher?
- c. In your opinion, has teacher study group provided you the opportunities to:
 - increase your content knowledge?
 - increase your pedagogical content knowledge?
 - participate actively during the meeting?
 - collaborate with other participants?
 - get feedback on your classroom practice?

3. Teacher study groups (TSGs) on teacher self-efficacy

- a. In your opinion, has the teacher study group helped you to enhance your self-efficacy?
- b. If yes, what aspects in the teacher study group do you find most affect your self-efficacy?

4. Teacher self-efficacy on teaching practice

- a. How do you think your perceptions of self-efficacy affect your teaching performance?
- b. What factors might hinder your change in practice?
- c. What skills or strategies have you used to help your student increase their achievement?

Appendix J: Observation Sheet

Date : Time :

Topic of Meeting : Venue:

Part 1: What specific learning objectives and activities planned for this study group meeting session?

Observe activities performed by individual, groups, group leader/coordinator which are related to the learning objectives of the meeting session?

Part 2: Preparing and Organizing the TSG Meetings

| Item | Statement | Well | Adequately | Poor |
|------|---|------|------------|------|
| 1 | Preparing meeting aids prior to the meetings | | | |
| 2 | Preparing meeting plans (aims, objectives) | | | |
| 3 | Preparing the time allocation of the meetings | | | |

Part 3

Categories/Activities

Content focus

A. What topic that has been selected in relation to the objective of the session?

B. How do they select/choose the topic?

C. What skills are being developed in relation to the topic?

Active learning

- A. How do the individual and group perform the learning opportunities?

- B. How does activities encourages participants to suggest ideas and topics?

Collaborative participation

- A. How do they view all participants as having equal status or fostering respect for one another?

- B. How do the tasks/activities/topics create opportunities for participants to work with peers?

Feedback on practice

- A. What feedback is provided to participants (as part of reflection on problems, concepts, ideas)?

- B. How do they organize the materials/topics to suit with participants' level and needs?

Part 3

Reflection of TSG process in general:

Appendix K: Summary of the Interview Process

| No | Participants' name ¹ | Date of interviews | Date of member check |
|----|---------------------------------|--------------------------------|--------------------------------|
| 1 | Zul | 10 th December 2013 | 26 th December 2013 |
| 2 | Rifki | 11 th December 2013 | 29 th December 2013 |
| 3 | Adel | 11 th December 2013 | 5 th January 2014 |
| 4 | Reski | 12 th December 2013 | 16 th January 2014 |
| 5 | Fatia | 14 th December 2013 | 9 th January 2014 |
| 6 | Kamil | 14 th December 2013 | 24 th January 2014 |
| 7 | Nurul | 15 th December 2013 | 20 th January 2014 |
| 8 | Icha | 16 th December 2013 | 30 th January 2014 |
| 9 | Maryam | 17 th December 2013 | 4 th February 2014 |
| 10 | Nugi | 17 th December 2013 | 8 th February 2014 |
| 11 | Diana | 18 th December 2013 | 22 nd February 2014 |
| 12 | Ali | 18 th December 2013 | 26 th February 2014 |
| 13 | Diva | 20 th December 2013 | 11 th February 2014 |
| 14 | Saleh | 20 th December 2013 | 29 th February 2014 |
| 15 | Sultan | 21 th December 2013 | 15 th February 2014 |
| 16 | Ahmad | 22 nd December 2013 | 19 th February 2014 |
| 17 | Fira | 23 rd December 2013 | 3 rd March 2014 |
| 18 | Jihan | 24 th December 2013 | 6 th March 2014 |

Note: ¹) Pseudonym.

Appendix L: One-way ANOVA Results for the TSES Sub-scales

Descriptives

TSES Sub-scale

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|------------------------|-----|------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Instructional Strategy | 104 | 1.34 | .961 | .094 | 1.15 | 1.52 | 0 | 4 |
| Classroom Management | 104 | 1.01 | .898 | .088 | .84 | 1.18 | -1 | 3 |
| Student Engagement | 104 | .94 | .890 | .087 | .77 | 1.12 | 0 | 5 |
| Total | 312 | 1.10 | .930 | .053 | .99 | 1.20 | -1 | 5 |

Test of Homogeneity of Variances

TSES Sub-scale

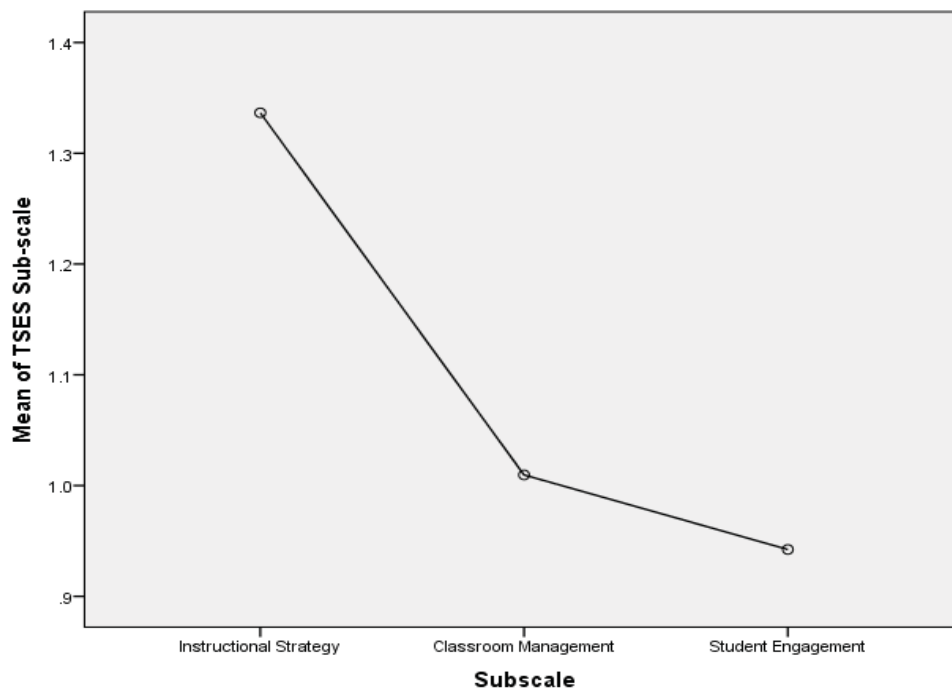
| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 3.886 | 2 | 309 | .022 |

ANOVA

TSES Sub-scale

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 9.250 | 2 | 4.625 | 5.499 | .004 |
| Within Groups | 259.865 | 309 | .841 | | |
| Total | 269.115 | 311 | | | |

Means Plots



Appendix M: One-way ANOVA Results Based on Attendance in TSGs

Descriptives

GainScore

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|------------|-----|------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Active | 50 | 4.22 | 1.217 | .172 | 3.87 | 4.57 | 1 | 7 |
| Sometimes | 30 | 3.13 | .629 | .115 | 2.90 | 3.37 | 2 | 5 |
| Not Active | 24 | 1.54 | .658 | .134 | 1.26 | 1.82 | 0 | 3 |
| Total | 104 | 3.29 | 1.432 | .140 | 3.01 | 3.57 | 0 | 7 |

Test of Homogeneity of Variances

GainScore

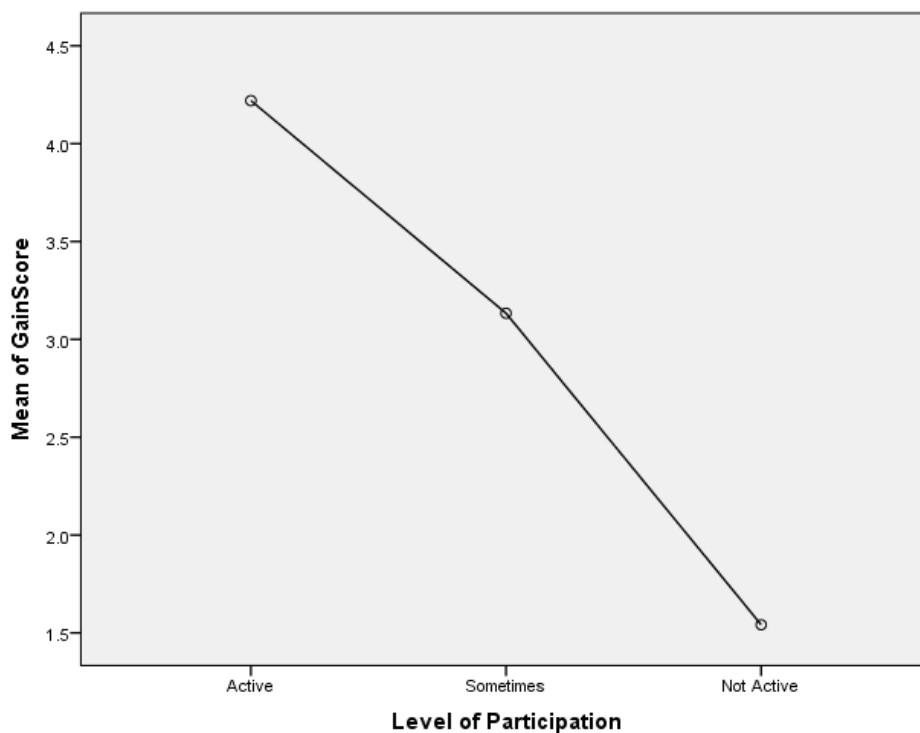
| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 5.627 | 2 | 101 | .005 |

ANOVA

GainScore

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 117.341 | 2 | 58.671 | 63.036 | .000 |
| Within Groups | 94.005 | 101 | .931 | | |
| Total | 211.346 | 103 | | | |

Means Plots



Appendix N: Factorial ANOVA Results between Level of Participation in the TSGs and Teaching experience

Dependent Variable: Gain Score

| | Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|----------|----------------|----|-------------|------|------|---------------------|
| Contrast | .228 | 2 | .114 | .112 | .895 | .002 |
| Error | 96.901 | 95 | 1.020 | | | |

The F tests the effect of Teaching Experience. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Between-Subjects Factors

| | Value Label | N |
|------------------------|--------------------|----|
| Level of Participation | 1 Active Group | 45 |
| | 2 Sometimes Group | 34 |
| | 3 Non-active Group | 25 |
| Teaching Experience | 1 VET | 42 |
| | 2 ET | 44 |
| | 3 NT | 18 |

Descriptive Statistics

Dependent Variable: Gain Score

| Level of Participation | Teaching Experience | Mean | Std. Deviation | N |
|------------------------|---------------------|------|----------------|-----|
| Active Group | VET | 4.19 | 1.424 | 16 |
| | ET | 4.19 | 1.123 | 21 |
| | NT | 4.50 | 1.195 | 8 |
| | Total | 4.24 | 1.228 | 45 |
| Sometimes Group | VET | 3.50 | .941 | 14 |
| | ET | 3.13 | .743 | 15 |
| | NT | 3.00 | .000 | 5 |
| | Total | 3.26 | .790 | 34 |
| Non-active Group | VET | 1.58 | .793 | 12 |
| | ET | 1.63 | .518 | 8 |
| | NT | 1.60 | .894 | 5 |
| | Total | 1.60 | .707 | 25 |
| Total | VET | 3.21 | 1.539 | 42 |
| | ET | 3.36 | 1.313 | 44 |
| | NT | 3.28 | 1.526 | 18 |
| | Total | 3.29 | 1.432 | 104 |

Levene's Test of Equality of Error Variances^a

Dependent Variable: Gain Score

| F | df1 | df2 | Sig. |
|-------|-----|-----|------|
| 1.699 | 8 | 95 | .109 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

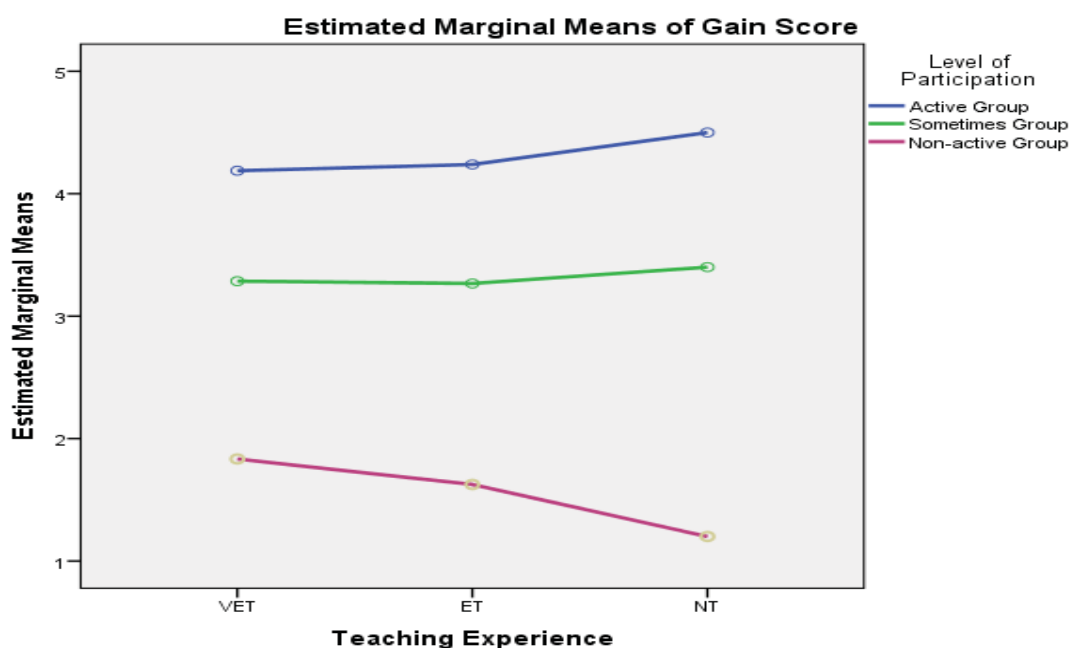
a. Design: Intercept + Participation + TeacExper + Participation * TeacExper

Tests of Between-Subjects Effects

Dependent Variable: Gain Score

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-------------------------------------|-------------------------|-----|-------------|---------|------|---------------------|
| Corrected Model | 112.950 ^a | 8 | 14.119 | 16.441 | .000 | .581 |
| Intercept | 772.503 | 1 | 772.503 | 899.590 | .000 | .904 |
| Participation | 106.225 | 2 | 53.112 | 61.850 | .000 | .566 |
| Teaching experience | .092 | 2 | .046 | .054 | .948 | .001 |
| Participation * Teaching experience | 1.987 | 4 | .497 | .578 | .679 | .024 |
| Error | 81.579 | 95 | .859 | | | |
| Total | 1339.000 | 104 | | | | |
| Corrected Total | 194.529 | 103 | | | | |

a. R Squared = .581 (Adjusted R Squared = .545)



Appendix O: Factorial ANOVA Results between Level of Participation in the TSGs and Gender

Univariate Tests

Dependent Variable: Gain Score

| | Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|----------|----------------|----|-------------|------|------|---------------------|
| Contrast | .122 | 1 | .122 | .126 | .723 | .001 |
| Error | 94.316 | 98 | .962 | | | |

The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Between-Subjects Factors

| | | Value Label | N |
|------------------------|---|------------------|----|
| Level of Participation | 1 | Active Group | 45 |
| | 2 | Sometimes Group | 34 |
| | 3 | Non-active Group | 25 |
| Gender | 1 | Male | 35 |
| | 2 | Female | 69 |

Level of Participation * Gender

Dependent Variable: Gain Score

| Level of Participation | Gender | Mean | Std. Error | 95% Confidence Interval | |
|------------------------|--------|-------|------------|-------------------------|-------------|
| | | | | Lower Bound | Upper Bound |
| Active Group | Male | 4.625 | .245 | 4.138 | 5.112 |
| | Female | 4.034 | .182 | 3.673 | 4.396 |
| Sometimes Group | Male | 3.300 | .310 | 2.684 | 3.916 |
| | Female | 3.250 | .200 | 2.853 | 3.647 |
| Non-active Group | Male | 1.333 | .327 | .684 | 1.982 |
| | Female | 1.750 | .245 | 1.263 | 2.237 |

Levene's Test of Equality of Error Variances^a

Dependent Variable: Gain Score

| F | df1 | df2 | Sig. |
|-------|-----|-----|------|
| 1.535 | 5 | 98 | .186 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

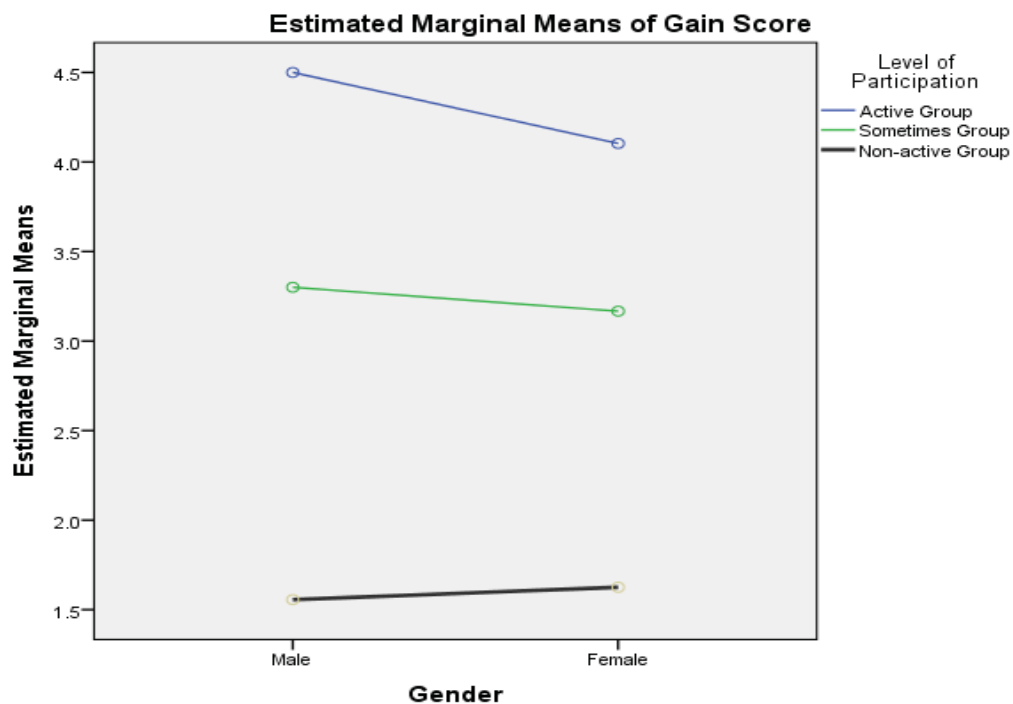
a. Design: Intercept + Participation + Gender + Participation * Gender

Tests of Between-Subjects Effects

Dependent Variable: Gain Score

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|------------------------|-------------------------|-----|-------------|---------|------|---------------------|
| Corrected Model | 117.031 ^a | 5 | 23.406 | 24.320 | .000 | .554 |
| Intercept | 811.688 | 1 | 811.688 | 843.397 | .000 | .896 |
| Participation | 114.969 | 2 | 57.484 | 59.730 | .000 | .549 |
| Gender | .122 | 1 | .122 | .126 | .723 | .001 |
| Participation * Gender | 3.907 | 2 | 1.953 | 2.030 | .137 | .040 |
| Error | 94.316 | 98 | .962 | | | |
| Total | 1336.000 | 104 | | | | |
| Corrected Total | 211.346 | 103 | | | | |

a. R Squared = .554 (Adjusted R Squared = .531)



Appendix P: Factorial ANOVA Results between Level of Participation in the TSGs and Teaching Location

District Categories

Dependent Variable: Gain Score

| District Categories | Mean | Std. Error | 95% Confidence Interval | |
|---------------------|-------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| Urban | 3.137 | .144 | 2.852 | 3.423 |
| Rural | 2.909 | .128 | 2.654 | 3.163 |

Between-Subjects Factors

| | Value | Label | N |
|------------------------|-------|------------------|----|
| Level of Participation | 1 | Active Group | 45 |
| | 2 | Sometimes Group | 34 |
| | 3 | Non-active Group | 25 |
| District Categories | 1 | Urban | 45 |
| | 2 | Rural | 59 |

Descriptive Statistics

Dependent Variable: Gain Score

| Level of Participation | District Categories | Mean | Std. Deviation | N |
|------------------------|---------------------|------|----------------|-----|
| Active Group | Urban | 4.06 | 1.144 | 17 |
| | Rural | 4.36 | 1.026 | 28 |
| | Total | 4.24 | 1.069 | 45 |
| Sometimes Group | Urban | 3.53 | .800 | 17 |
| | Rural | 2.94 | .429 | 17 |
| | Total | 3.24 | .699 | 34 |
| Non-active Group | Urban | 1.82 | .405 | 11 |
| | Rural | 1.43 | .514 | 14 |
| | Total | 1.60 | .500 | 25 |
| Total | Urban | 3.31 | 1.240 | 45 |
| | Rural | 3.25 | 1.421 | 59 |
| | Total | 3.28 | 1.340 | 104 |

Tests of Between-Subjects Effects

Dependent Variable: Gain Score

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------------------|-------------------------|-----|-------------|----------|------|
| Corrected Model | 117.302 ^a | 5 | 23.460 | 34.005 | .000 |
| Intercept | 877.963 | 1 | 877.963 | 1272.576 | .000 |
| Participation | 104.033 | 2 | 52.016 | 75.396 | .000 |
| DistrictCat | 1.233 | 1 | 1.233 | 1.787 | .184 |
| Participation * DistrictCat | 4.104 | 2 | 2.052 | 2.974 | .056 |
| Error | 67.611 | 98 | .690 | | |
| Total | 1303.000 | 104 | | | |
| Corrected Total | 184.913 | 103 | | | |

a. R Squared = .634 (Adjusted R Squared = .616)

