PEER COACHING IN MALAYSIA: EXPLORING THE IMPLEMENTATION OF A PROFESSIONAL LEARNING COMMUNITIES PROGRAMME FOR ARABIC LANGUAGE SECONDARY SCHOOL TEACHERS

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ABSTRACT

The main aim of this study was to gain a greater understanding of the peer coaching practices in Professional Learning Communities (PLCs) amongst Arabic language secondary school teachers in Malaysia.

The Malaysian Ministry of Education (MOE) made a commendable commitment to transform teaching into the profession of choice as outlined in the Malaysian Education Blueprint 2013 - 2025. A concomitant of this commitment is that it has become evident that the quality of teachers' Continuous Professional Development (CPD) programmes needs to be enhanced in order to enable teachers to achieve their full potential in their chosen profession. One method of improving such programmes is through the use of peer coaching but the implementation of such an approach has, however, been made problematic by the fact that there has been comparatively little research on peer coaching practice in PLCs in Malaysia. Indeed, prior to the research reported in this submission, it has been uncertain if peer coaching practice in Malaysia affects teachers' commitment and self-efficacy in a way that will improve student learning. Furthermore, the nature and level of support from the Principals and State Officers in encouraging teachers to practise peer coaching has also been unclear.

This study sought to address the lack of empirical evidence in this important topic through a mixed method sequential explanatory study. In the first quantitative phase, the assessment measures were through the use of: i) a Peer Observation Scale (POS); ii) an Organisational Commitment Questionnaire (OCQ), and; iii) a Teacher Self-Efficacy Scale (TSES). Data

were collected from 179 Arabic language teachers in two types of secondary schools in Malaysia. All of the descriptive analysis was measured by frequencies and percentages of the responses; inferential analysis measured the comparison between demographic backgrounds using an independent t-test and analysis of Variance; and the correlation between the variables was conducted using Spearman's correlation coefficients. In the qualitative follow-up phase, semi-structured interviews exploring the implementation of peer coaching practice were conducted with 15 teachers, four Principals, and two State Officers in order to deepen understanding of the quantitative results and the data was analysed using the thematic analysis technique.

The findings from the first phase of quantitative analysis revealed a high agreement on peer coaching practice and a significant difference in two types of demographic, which were school location and teachers' position in schools. Although the teachers' commitment to the school's organisation and their self-efficacy demonstrates a high level, the correlation only revealed a weak relationship coefficient between Peer Observation Scale, Organisational Commitment Questionnaire and Teacher Self-Efficacy Scale. Notably, evaluation, workload and time constraints appeared as negative factors in peer coaching practice. In the thematic analysis in the second phase, the nature of peer coaching practice was explored with the suggestions for improvement of the practice. Despite positive acceptance of peer coaching ideas, time constraints, workload, personal attitudes, and an unsupportive environment were highlighted as challenges to implementing peer coaching practice. The school's development strategies and instructional leadership

support emerged as important factors in encouraging the practice of peer coaching amongst teachers.

The current study contributes to knowledge by proposing: i) a research model of peer coaching in Malaysian secondary school teachers, and; ii) a Peer Observation Scale (POS) that consisted of two significant constructs, which are Benefit and Constraint.

ACKNOWLEDGEMENTS

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ABBREVIATIONS

CPD	Continuous Professional Development
EFA	Explanatory factor analysis
EPRD	Education Planning and Research Department
EPU	Economic Planning Unit
GARS	Government-Aided Religious Schools
IAB	Aminuddin Baki Institute
INSET	In-school training
KMO	Kaiser-Meyer-Olkin measure of sampling adequacy
KPLI-KDC	Teacher's Training for the Bachelor Graduates (Part-time Mode)
MEB	Malaysian Education Blueprint 2013-2025
MOE	Ministry of Education
MOHE	Ministry of Higher Education
NRSS	National Religious Secondary Schools
OCQ	Organisational Commitment Questionnaire
PA21	21st Century Learning
PLCs	Professional Learning Communities
POS	Peer Observation Scale
TSES	Teacher Self-efficacy Scale
TEI	Teacher Education Institute
UPSI	Sultan Idris University of Education

GLOSSARY

Bumiputras	The Malay race and other indigenous people in Malaysia
DINI Curriculum	Islamic curriculum based on Arabic Language medium of teaching and learning
e-*Tukar*	Online application by MOE centrally to organise the teacher's placement all around the country
Excellent Teacher	Award for the senior teacher who achieve the criteria listed by the MOE and being inspected by the Federal Schools Inspectorate
Head of Committee	The position in the school held by the teacher that assists Principal to organise teachers' CPD and curriculum
Head of Panel	The position in the school held by the teacher to organise the panel committee meeting regarding lesson plan, assessment, text and workbook
Hut school	Traditional Islamic school that is organised by the Islamic Scholar in the village to teach Islamic teaching. Usually the class is free of charge, and the students from all over the country came and built hut around Guru's house.
IAB	The only teaching Institute serving the training for in-service teachers, especially for the leadership as Principal or the middle leaders in schools.
In-training teacher	The teacher's candidate who still in training and placed at the schools for practical and observation purpose
Islamic Law	The knowledge about jurisprudence of Islamic laws, especially on the basic practice such as praying, fasting and marriage.
Islamic revealed Knowledge	The knowledge regarding the Islamic sources of Quran and Prophet saying.
Jawi	Special traditional Malay writing that imitates the Arabic calligraphy

j-QAF programme	A programme in primary schools for Muslim children to learn about the Arabic language, Islamic teaching, Quran recitation, and religious practices.
Malaya	The previous name of Malaysia before the Independence Day
Malays	The primary race that lives in Malaysia
MEB	The MOE blueprint that consists of 11 education changes plan for development and improvement in all area of education
Normal teacher	Certified teacher who is teaching in schools
Quran	The Islamic sacred book that was revealed by Allah (God) as a guidance in all aspects of life
Senior teacher	The teacher who has been working more than five years and hold any position in school organisation management
TEI	The teacher's institute that trains graduate teacher's candidate to be a certified teacher. Usually the TEI trains technical and knowledge aspect of teaching skills, and specialised for primary schools only.
UPSI	The only university that provides training and learning for Bachelor level in all subjects of curriculum. All of the students in UPSI are going to be teachers at the secondary schools.
Vernacular school	The special type of primary school based on races, Chinese and Tamil (Indian). The schools still follow the National curriculum in addition of Chinese or Tamil language. Usually some of the other subjects also being taught in Chinese and Tamil such as Mathematics.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This thesis is focusing on peer coaching practice as one of the Professional Learning Communities (PLCs) strategies in teachers' Continuous Professional Development (CPD) programmes. Initially, this chapter commences with presenting the basis of the research including the rationale of the research, significance, research objectives, research questions, an overview of the chapters, background of the research, and the conceptual framework.

1.2 Rationale of the research

The 21st century has seen many changes in recruiting high-quality graduates as teachers, especially in shortage areas, and retaining them once in employment is a challenging task for education systems (Schleicher, 2012). Malaysia as a developing country does not want to be left behind in this rapidly changing environment. The Ministry of Education (MOE) outlined the Malaysian Education Blueprint 2013-2025, which stated 11 changes that are to be facilitated by educators all over the country (MOE, 2012a). One of the changes is to transform teaching into the profession of choice. To ensure this change, the quality of teachers' CPD programmes needs to be upgraded in order to enable them to achieve their full potential in the teaching profession.

The CPD programmes include common training requirements like in-service training, PLC, workshops, mentoring, benchmark visits, e-portals and book discussions (MOE, 2014b). Most of the sessions are to be conducted inside schools areas as school-based development programmes. According to Sinkinson (2011), the CPD programmes are structured to improve teachers' ongoing development and include training and re-skilling of teaching practice. Therefore, all teachers as part of the schools' community should play a vital role in self-training and re-skilling their teaching practice, and at the same time collaborating amongst themselves to enhance the value of every single minute in the classroom (Tumin, 2013). This scenario is expected to make a meaningful contribution to the achievement of the Malaysian Education Blueprint 2013-2025.

The division of Teacher Education in the MOE hierarchy is responsible for providing CPD programmes to the teachers. Therefore, the manual of CPD programmes was launched in 2014 by this division team with the aim of upgrading teachers' learning and skills in order to develop teachers' potential, quality and performance in achieving the standard of developed countries in education (MOE, 2014b). There are several activities outlined in the CPD programmes manual, and the main one is to implement PLCs in the schools. Thus, the implementation of PLCs comprehensively spread amongst the schools across the country with an approach of school-based professional development.

According to DuFour (2004) when emphasising the concept of PLCs, the focus should be concentrating on the process of learning and teaching, rather

than what is learned by students. Therefore, DuFour (2004) pointed out how to develop better processes of teaching in collaboration as well as peer coaching. The peer coaching approach is to provide tools for teachers in developing their knowledge of teaching methods through feedback from students and colleagues (Aderibigbe and Ajasa, 2013). Rhodes and Beneicke (2002) stated that a strong teacher's collaboration with coaching, mentoring, and peer networking practices should present fewer problems for staff in the schools that have an established professional development culture. Moreover, Ariffin (2013) insisted that teachers who are always discussing and sharing with peers regarding classroom management and problems faced in classrooms will generate effective teaching methods. As a result, they will develop their teaching approaches, self-efficacy and accomplish their commitment to the school organisations as well as improving student learning.

Due to the limited time constraints to implementing the new concept of PLCs in schools, teachers' acceptance is still in doubt (Keong, Ghani and Abdullah, 2016). Although peer coaching is an activity of PLCs that supports teachers' collaboration and learning from each other (Stoll et al., 2006), the effectiveness of the implementation in a Malaysian environment is still uncertain. There is a lack of findings on peer coaching in secondary schools, as peer coaching is a new strategy introduced to the teachers. The research evidence from Malaysian school teachers is still not adequate to support the influence of peer coaching to the teachers' commitment and self-efficacy. Besides, the enforcement of the PLCs by the MOE on the teachers will also

affect teachers' views and perspectives as they already have large amounts of planning, marking and administration tasks. Therefore, this research investigates the implementation of peer coaching as a PLCs strategy and its impact on organisational commitment and self-efficacy amongst Malaysian secondary school teachers.

1.3   Researcher personal background

This study was influenced by the researcher's interest in teacher development programmes. With experience as a school teacher in a Malaysian secondary school for more than ten years, the researcher was convinced of the necessity for a teachers' continuous improvement programme for himself and his colleagues to maintain up to date knowledge relevant to current educational change. Therefore, the implementation of a PLCs programme that provided opportunities for teachers to develop their knowledge and skills in teaching and learning motivated the researcher to explore this issue further in relation to Arabic language teachers.

Prior to commencing registration for the PhD, the researcher pursued studies for a Masters' degree in Educational Management in one of the local universities that provided him with knowledge of school improvement and instructional leadership. Moreover, the researcher has been involved in preliminary research for a PhD degree in the same university that focused on supervision and group development in PLCs. Having been offered the opportunity of a scholarship to conduct further study in United Kingdom, the researcher extended the experience and knowledge that he had already

explored to implement this research within the context of broader engagements in the UK.

1.4 The significance of the research

The main objective of education in a school is to enhance and increase student learning (Ackoff and Greenberg, 2008). Creating an environment for good student learning is to enhance the quality of teaching which cannot be completed without developing the teachers (Hord, 2008). Teachers' development needs to be up to date as well as the changing paradigm of teaching through decades. Therefore, CPD programmes play an important role in ensuring that teachers' development is in line with the changing direction of education.

1.4.1 The significance of Professional Learning Communities

Currently in Malaysia, the essential strategies in CPD programmes are related to PLCs strategies. These groups target the whole community including teachers, Principals, stakeholders, and students as responsible for enhancing effective schools (Hord, 2008). Moreover, Vescio, Ross and Adams (2008) found that well-developed PLCs in effective schools have a positive impact on teaching practice, professional development, and student learning. According to Stoll et al. (2006 p.223), "*PLCs are learning communities of committed teachers who share and critically interrogate their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way and operating as a collective enterprise*".

Furthermore, the communities work collaboratively by continuously inquiring or developing action research to improve achievement for their students (DuFour et al., 2006; Little and McLaughlin, 1993, and; Rosenholtz, 1989). As the pioneer in learning communities, Hord (1998) set the basis of PLCs when she stated the five major dimensions in a PLCs criterion, which are; i) supportive and shared leadership; ii) collective learning and application of learning; iii) shared values and vision; iv) supportive conditions, and; v) shared personal practices. These five dimensions are described as influential work, which revealed a set of organisational norms, structures, and policies that lead to enhancing the performance of educators and their students (Roy and Hord, 2006).

1.4.2 The significance of Peer Coaching

The dimension of shared personal practices in PLCs is at the core of peers helping peers, which focus on the review of a teacher's classroom practices by colleagues (Louis and Kruse, 1995). The practices supporting this dimension of PLCs includes reciprocal peer observation and feedback, review of lessons, examination of student work, analysis of data, problem-solving, and joint development of lessons and units (Roy and Hord, 2006). Robbins (2015) categorised all of these sharing personal practices as fundamental in terms of peer coaching. Therefore, peer coaching plays an important role in PLCs related to improving school effectiveness (Sigurðardóttir, 2010).

Peer coaching is a process where a team of teachers regularly observe each other to provide suggestions, assistance, and support (Ackland, 1991 cited in Bowman and McCormick, 2000). It is also defined as a collaboration to improve teaching quality amongst teachers through discussion, monitoring, setting missions and visions as well as student performance (Hord and Cowan, 1999). According to Hasbrouck (1997), peer coaching is a systematic strategy to monitor other teachers' practices by using an observation cycle of pre-conference, class monitoring and post-conference. It is also one of the strategic tools to improve curriculum implementation and teachers' skills and efforts, which adds to school effectiveness.

Consequently, this research investigates the implementation of peer coaching as an aspect of PLCs amongst teachers and the effects on organisational commitment and self-efficacy. It is located within the context of CPD programmes in a panel of Arabic language subject teachers in Religious Secondary schools in two northern states of Malaysia. Such an investigation is timely in light of doubts being raised about teachers in terms of practising the PLCs strategies, which are a new approach to educational reforms presently imposed by the MOE in the Malaysian Education Blueprint (MOE, 2014b). As an integral part of peer coaching, the support of the State Education Officers and Principals is critical in taking responsibility for their success. Hence, the research also explores the supportiveness of education State Officers who have the responsibility for teachers' development as well as Principals of the schools who act as instructional leaders in the school organisations.

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1.5   Research objectives

Fundamentally, the major concern in this research is the investigation of Arabic language teachers' perception and practice of peer coaching in Malaysian secondary schools. Besides, the research also seeks to investigate the challenges faced by teachers and the school organisation in introducing peer coaching as an element of educational change.

In detail, there are four main objectives highlighted in this research, which are:

i)   to investigate the use of peer coaching practice as an element of educational change in a Malaysian context;

ii)   to investigate the use of peer coaching practice as a means of improving teacher's commitment and self-efficacy to engage in PLCs in an extensive perspective;

iii)   to explore the role of State Officer and school Principal as instructional leaders in order to support the peer coaching practice in the school, and

iv)   to consider the exploration of any potential challenges for peer coaching practice in schools.

1.6 Research questions

Four primary research questions are underlined in the interest of the research objective, which are:

i) How do teachers use the peer-coaching practice as an element of educational change in school?

ii) How significant is the effectiveness of peer coaching practice on teacher's commitment and self-efficacy to engage in PLCs?

iii) How do State Officer and Principal support the implementation of peer coaching practice as an element of PLCs in the school?

iv) What are the challenges faced by teachers in implementing peer coaching practice in the schools?

1.7 Background of the research

Malaysia is situated in Southeast Asia. It comprises the Peninsula of Malaysia and the Borneo Island in the East, which are separated by the South China Sea. Peninsula Malaysia is neighbouring Thailand in the North, and Singapore in the South, whilst Borneo Island is surrounded by Indonesia, the Philippines, and Brunei. There are thirteen states and three federal territories over the whole country (see Figure 1.1). The total population of Malaysia exceeds 32 million people, and Kuala Lumpur is the capital city. Initially, the Malays, a large ethnic group living in the Malay Archipelago for centuries, founded the country. Nowadays, Malays/*Bumiputras* make up 67.4% of the population, whilst Chinese 24.6%, Indian 7.3%, and others 0.7% (Department of Statistics Malaysia, 2019). Islam is the main religion of the country,

although members of other religions are free to practise their religion such as Buddhism, Hinduism, Christianity and many others. Therefore, Malaysia developed as a multi-ethnic and multi-cultural country, and these factors influence the culture and play a vital role in politics and education.

Figure 1.1: Map of Malaysia

1.7.1 History of Education in Malaysia

More than one hundred years ago, the educational system in Malaysia was significantly affected by the British system because of the British colonial rule until Independence Day in the year of 1957. The Barnes Report in 1951, aimed at developing a national education system, is the clear evidence of the restructuring of the educational system in Malaya (previous name of Malaysia). However, all ethnic groups in the country, due to ethnic

sensitivities, did not universally accept the report, and it was considered a failure. Later, in 1956, the Razak Report was published, and its recommendations provided the foundation for the development of the country's National Education Policy (NEP). The country's educational philosophy has been clearly defined in the NEP as formulated in 1988 (MOE, 2012b, p. 8):

> *"Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonic, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards and who are responsible and capable of achieving the high level of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society, and the nation at large."*

Regarding the national education philosophy, Malaysia practises a centralised curriculum development system. The Curriculum Development Centre (CDC) is the central agency under the MOE and is responsible for initiating curriculum development at pre-school, primary school, and secondary school. The curriculum promotes national unity using the Malay language as a medium of instruction.

Before the foundation of the modern education system in Malaysia, the Malays attended "*hut schools*" and Islamic schools. With the growing number of other ethnic groups, mainly consisting of Chinese and Indians, the government began to establish vernacular schools. The Malays lived in rural

areas, and most of them were planters, whilst the Chinese lived in urban areas and were involved in business and trading. Indians tended to live in the rubber estates. The Malays mostly were attracted to the national schools that used the Malay language as a teaching medium, and traditional religious schools medium due to their firm belief and faith in the religion of Islam. At the same time, the Arabic language was also being taught in traditional religious schools in order to understand religious sources.

1.7.2 Education system in Malaysia

In the late 20th century, education in Malaysia was exposed to a swift development that led to many changes regarding the educational policy to suit the demands of the economy (Yahaya, 2003). Previously, MOE was the ministry that had responsibility for Malaysian education at all levels. Since 27 March 2004, a significant development occurred with the establishment of the Ministry of Higher Education (MOHE). Education then came under the responsibilities of two ministers, the MOE and MOHE respectively. The MOE handles matters related to pre-school, primary school, secondary school, and post-secondary school, whilst MOHE determines the policies and direction of higher education in Malaysia. However, beginning 15 March 2013, these two ministries were again merged into a single MOE due to a limited budget and the economic crisis (MOE, 2015a).

1.7.3 Schools in Malaysia

The Malaysian educational system includes education from the age of five, known as pre-school. The educational system features from a non-

compulsory kindergarten education or pre-school to post-secondary education, which is free. Primary and secondary education in Malaysia makes up 11 years of government education. This encompasses six years for primary education and a period of five years for secondary, including three years of lower secondary schools and two years of upper secondary.

In the national secondary schools, the medium of instruction is the Malay language, except for subjects including English and Arabic languages. At the end of the lower secondary school, students are assessed by Form 3 Assessments. At the end of upper secondary school, there is a national examination called Malaysian Certificate of Education. The Malaysian Examination Syndicate sets all the three examinations mentioned above. If a student performs well in this examination and fulfils all the criteria needed to pursue his or her studies at the tertiary level, then he or she may opt to study at the pre-university or matriculation centres for up to one to two years. However, upon completion of secondary education, students can still take advantage of a further two years of post-secondary education known as Form 6. Again, at the end of Form 6, there is a national examination known as Malaysian Higher School Certificate, which is managed by the Malaysian Examination Council. If a student opts for Form 6, this means that he or she has undergone 13 years of school education. All these necessary examinations are clearly illustrated in Table 1.1.

Table 1.1: Mainstream examinations conducted at secondary schools in Malaysia

Years in school	Examination	Administration body
Form 3 (15 years old)	Form 3 Assessments	
Form 5 (17 years old)	Malaysian Certificate of Education	
Form 6 (19 years old)	Malaysian Higher School Certificate	Malaysian Examination Council

1.7.4   Types of secondary schools' organisation

This research is focusing on the population of teachers in some types of Malaysian secondary schools. There are twelve types of secondary schools managed by the MOE. Figure 1.2 shows types of secondary schools under MOE, which are; regular, national religious, government-aided religious, technical, vocational college, vocational, fully boarding schools, arts, sports, special model, caring guidance, and special education. Each type of school presents unique features that are all different.
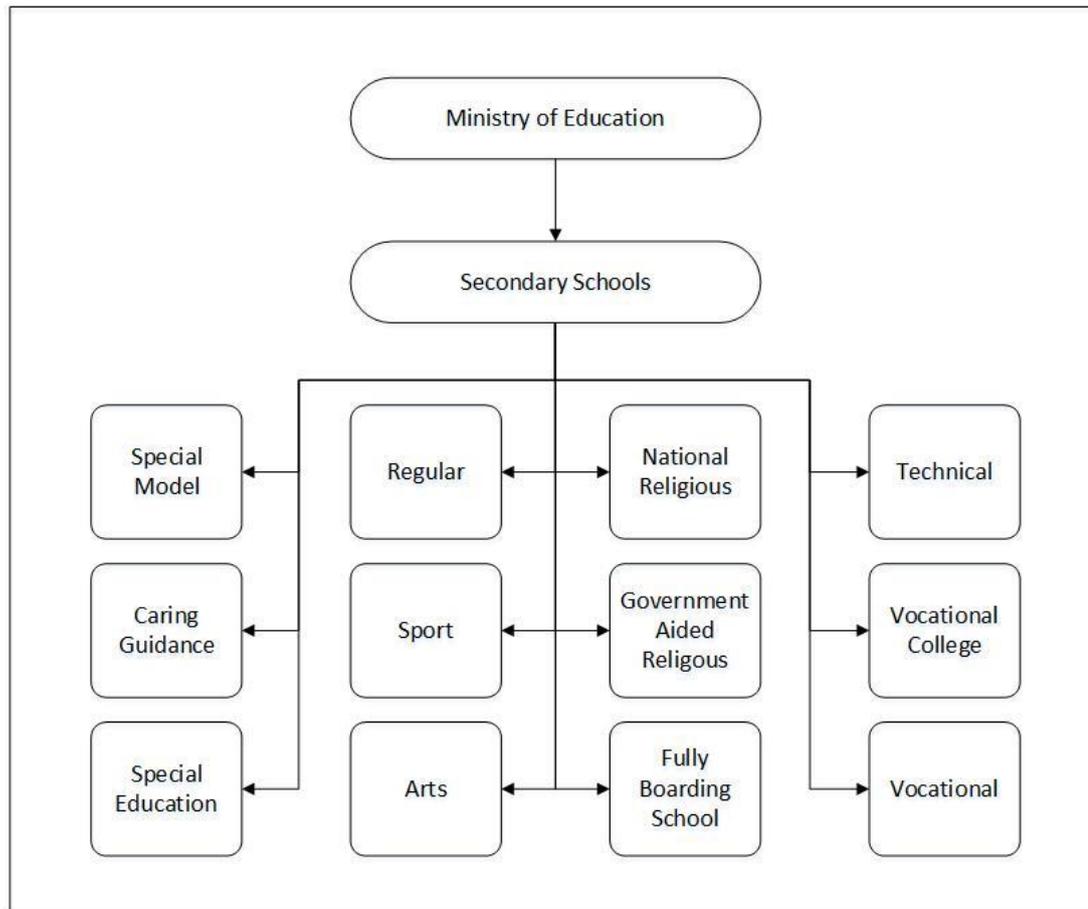
Figure 1.2: Types of secondary schools under MOE management (MOE, 2014a)

Overall, there are 2,376 schools under the MOE (MOE, 2014a). Amongst these type of schools, regular schools are the biggest in population whilst the others are separated according to specialisms. Table 1.2 demonstrates the number of schools classified by type.

Table 1.2: Number of schools classified by type under MOE (MOE, 2014a, p. 14)

No.	Type	Number of Schools	Percentage
1	Regular	1970	82.8
2	Fully Boarding School	68	2.9
3	National Religious	57	2.4
4	Government Aided Religious	168	7.1
5	Special Model	11	0.5
6	Vocational College	72	3.0
7	Vocational	8	0.3
8	Technical	9	0.4
9	Arts	3	0.1
10	Sport	4	0.2
11	Special Education	5	0.2
12	Caring Guidance School	1	0.1
	Total	2,376	100.0

This study only focuses on Arabic language teachers as the research population. The Arabic language subject is offered in four types of secondary schools, which are; regular school, fully boarding school, National Religious Secondary School (NRSS), and Government Aided Religious School (GARS). From these schools, two of them, NRSS and GARS are managed fully under the Islamic Education Division (IED), MOE. Hence, the Arabic language is compulsory in both types of school whilst it is optional in the other two schools, regular school and fully boarding school. Attached in Table 1.3 is the number of schools offering Arabic language in the curriculum.

Table 1.3: Number of school offering Arabic language subject in curriculum
(MOE, 2014a, p. 15)

No.	Type of school	Offer	Schools	Student
1	Regular	Optional	529	62,458
2	Fully Boarding	Optional	13	6.318
3	National Religious	Compulsory	57	27,702
4	Government Aided Religious	Compulsory	168	81,648
Total			767	171,814

The term 'religious' in Malaysian education is referring to the religion of Islam that is recognised in the Malaysian Federal Constitution as the official religion for the country (Federal Constitution, 2010). Moreover, religious education encompasses Islamic education, *Malay Jawi* handwriting text, and Arabic language. Previously, these types of religious education were only offered in Islamic private and state schools. Therefore, NRSS were founded in 1977 to accommodate students' need for religious schools. The unique feature of NRSS compared to other non-religious government schools is that it offers three different streams, which students may choose to specialise in; science and religion, humanities and religion, or technical and religion streams (Hamidin, Mamat and Ahmad, 2014).

Meanwhile, GARS is the previous Islamic private and states schools that only engaged officially in MOE commencing in the year 2006. Although GARS have only been organised under the MOE management for less than ten years, the total number of GARS is increasing at a faster rate than NRSS (Bibi Abdullah and Kassim, 2012). The government aid from the MOE

regarding GARS includes the per capita grant for the students, teachers' education and development, school's physical and financial funds, and curriculum assessments (Umar et al., 2012).

In all of the NRSS and GARS, the Principal is the leader who monitors the progress of the organisation. This responsibility is delegated to three Principal assistants who focus on curriculum and management, student affairs and co-curriculum respectively. In curriculum management, the secretary's post holds as the person-in-charge who assists in curriculum management. Typically, there are six Heads of committee controlling every single area of the curriculum. They are head of humanism, language, science and mathematics, technical and vocational, Islamic education, and examination unit. Figure 1.3 explains how an organisation in NRSS operates in the curriculum terms of management. According to the schools' curriculum organisation, Islamic education is a primary focus in all streams and the Arabic language stands to be the third compulsory language for the students in NRSS and GARS (Hamid, 2018).
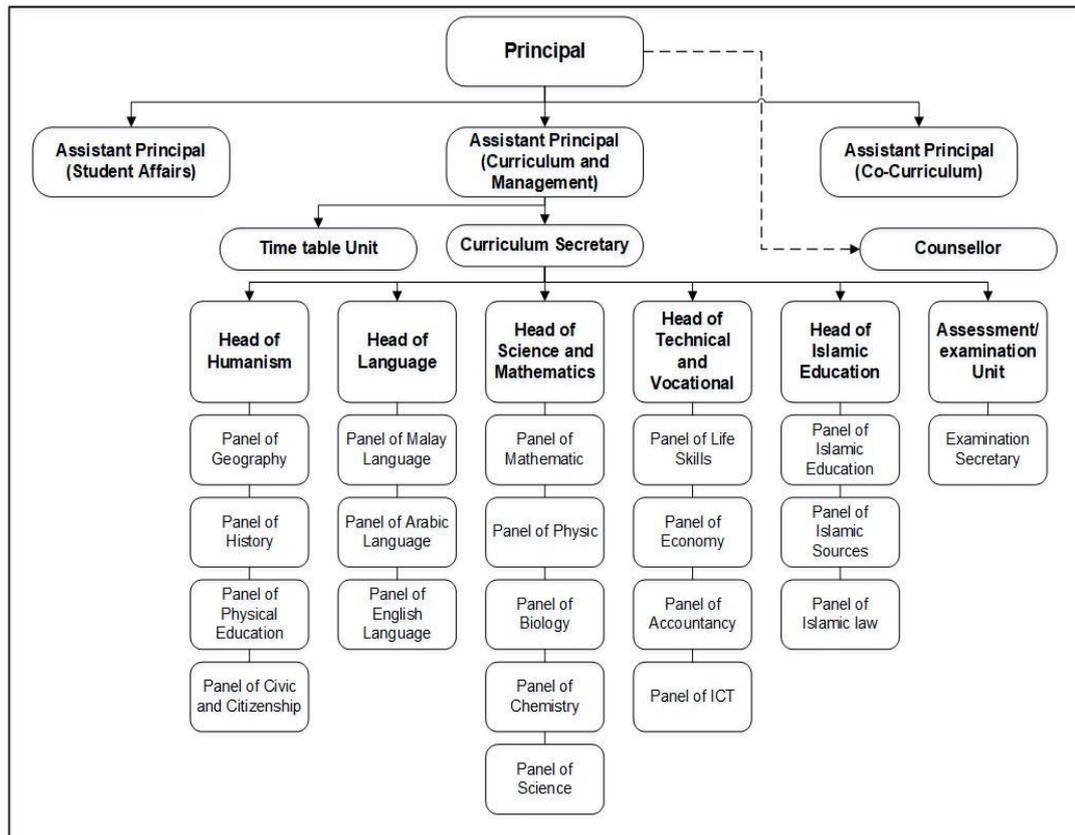
Figure 1.3: School's curriculum management hierarchy in NRSS and GARS

1.7.5 Arabic language in Malaysian schools

Although the Arabic language is a foreign language in the Malaysian culture, it is synonymous with the Islamic foundation that is structured amongst Malays and Muslims in Malaysia. The importance of mastering this language is not just a religious basis for understanding the *Quran*, but the Arabic language is becoming one of the increasing number of languages spoken all over the world. For the student's future and career, it is an advantage to learn this language besides English as an international language around the world.

In Malaysian education, the Arabic language is offered to the students in primary schools. In 2005, the MOE launched a j-QAF programme in selected

primary schools emphasising on the Islamic education, Al Quran recitation and Arabic language from the early stage, students of seven years old (JAPIM, 2004). Gradually, the j-QAF programme was applied to all of the national primary schools in the country. Despite acquiring the Arabic language, the j-QAF programme realised the need to achieve the educational philosophy 'to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonic, based on a firm belief in and devotion to God' (MOE, 2012b, p.8).

The progress of Arabic language learning is continuing in secondary schools such as NRSS and GARS, that offer other subjects. In these types of secondary schools, the Arabic language plays a vital role in the mainstream curriculum until it is now recognised as one of the offered subjects in SPM/MCE examination. Figure 1.4 demonstrates Arabic language learning in Malaysian schools. Moreover, in the GARS, some of the Islamic education subjects (Dini Curriculum) such as Islamic Reveal Knowledge and Islamic Laws, are also being taught entirely in the Arabic language. Students, who are excellent in Arabic language, have the opportunity to further their study in Islamic studies, either in the local university or at university abroad such as in the Arabic countries. Thus, the quality of the Arabic language teachers should be maintained and developed from time to time in ensuring students' learning and improvement.
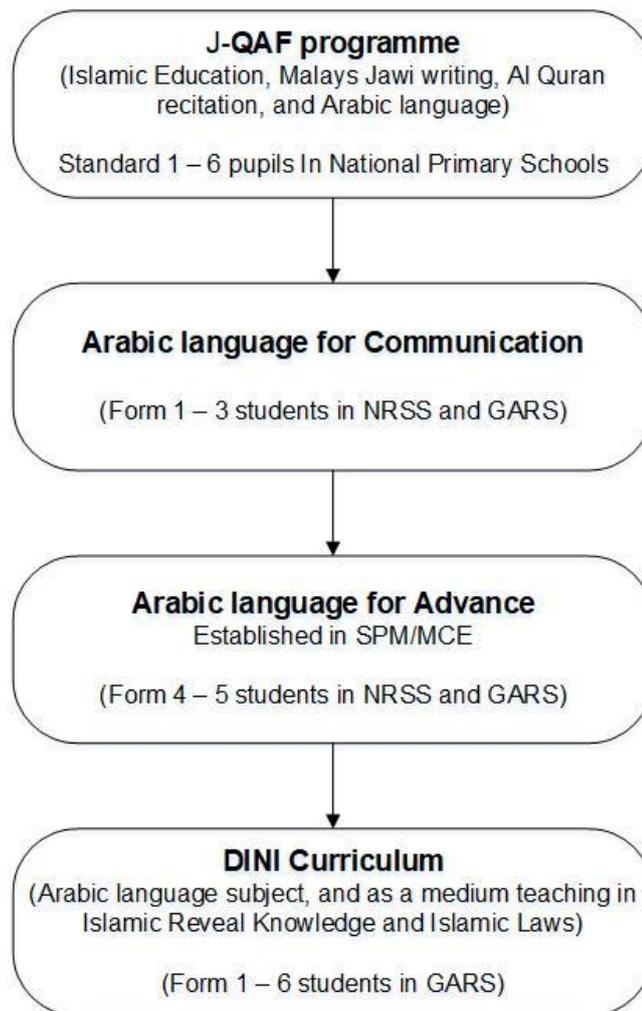
Figure 1.4: Arabic language education in Malaysian schools

1.7.6   Professional development amongst Arabic language teachers

In the Malaysian context, a teacher will complete his/her official training in Teachers Education Institutes (TEI) or Sultan Idris University of Education (UPSI) before becoming a certified teacher. The training offers one to four year programmes depending on the background of the study and cohorts. Afterwards, the certified teacher will be placed at school by the MOE for a probation period of three years. Then, if the candidate survives the probation

and interview organised by the MOE, then he/she will be offered a job as a government servant in the MOE, working in a school as a teacher.

The in-service teachers who are working in the schools can be distinguished in three phases, which are; in-training, normal, and senior teachers. In-training teachers refers to the teachers who are still studying in TEI but positioned in the schools as one of the practical modules of their learning. Usually, in-training teachers are full-time students in the TEI or UPSI. However, there are some experienced teachers in GARS who still do not have certification and they are offered a part-time teacher's training in TEI to achieve official certified teacher. Meanwhile, 'normal teachers' refers to the certified and qualified teachers that have been offered a post as a fully government servant in the MOE. Usually the normal teachers work in the schools within one to five years before achieving the offer as a government servant and do not hold any position in school curriculum organisations.

Senior teachers are the experienced teachers who have served more than five years in the schools and hold the position in the school curriculum organisation. Some of the teachers are appointed by the Principal as Head Panel and Head of Committee. Every school has only one Head of every panel and one Head of committee of every curriculum area. The Head Panel's task is to organise the subject committee regarding the preparation of curriculum syllabus, lesson plans, text and workbooks, and students' assessment. Whilst the Head of Committee acts to arrange the teachers' training and workshop, school events, teachers' evaluation and assessment, and meeting with the Principals.

Some of the senior teachers have been recognised for this excellence in their teaching skills by being awarded the title of Excellent Teachers by the MOE. According to the MOE (2006, p. 4), there are six indicators that define Excellent Teacher, which are: i) personality; ii) knowledge and skills; iii) work outcomes; iv) communication; v) potential, and; vi) contribution to the national educational improvement. The candidates of Excellent Teachers will be assessed by the Federal Schools Inspectorate and awarded the significant incentives for their performance. The Excellent Teacher plays a role as peer support to their colleague and contributes to the school and student achievement. Table 1.4 demonstrates the summary of the Malaysian secondary school teachers' phases.

Table 1.4: Summary of teacher's phases in Malaysian secondary school

Phase	Time of service	Position	Role in school
In-training	One to three years	Basic	Currently in-training in TEI
Normal	More than three years	Intermediate	Subject teacher
Senior	More than five years	Head of Panel	Organise subject committee
		Head of Committee	Organise teacher's development
		Excellent Teacher	Peer support for improvement

Meanwhile, in order to improve their knowledge and skills in teaching professionalism, teachers are encouraged to engage in CPD programmes.

According to the MOE (2014c), all of the teachers need to be involved in CPD training for not less than seven days or 40 hours every year. This training can be organised in different ways such as self-learning, in-service training, or courses and workshop. Part of CPD programmes conducted as a school-based programme is PLCs that consist of shared personal practice as one of the dimensions to improve teachers. Peer coaching that is established in the shared personal practice is expected to assist teachers in developing their skills and knowledge.

Consequently, this research explores how peer coaching practice is implemented amongst Arabic language teachers as teamwork in their panel in the school. Moreover, this research also discovers teachers' expectation and perception of peer coaching practice as a tool of developmental change. At the same time, the research observes the significant correlation and effectiveness of teachers' perception of peer coaching practice with their commitment and self-efficacy to ensure student learning. The strategies and challenges in implementing peer coaching are also discovered in the research with the recommendations and views from Principals and State Officers as instructional leaders to support the peer coaching practice in the schools.

1.8   Conceptual framework of study

In this research, peer coaching practice is observed as a tool of PLCs strategy in CPD programmes for teachers' development. As suggested by Glickman, Gordon and Ross-Gordon (2017), organisational commitment and

self-efficacy are highlighted as schools' and teachers' goals in order to improve student learning. Meanwhile, instructional leadership is conceptualised as a necessary part of supporting peer coaching practice, whilst the variable of challenges underlines the obstructive factors of peer coaching practices. Figure 1.5 shows the framework that conceptualised the research.
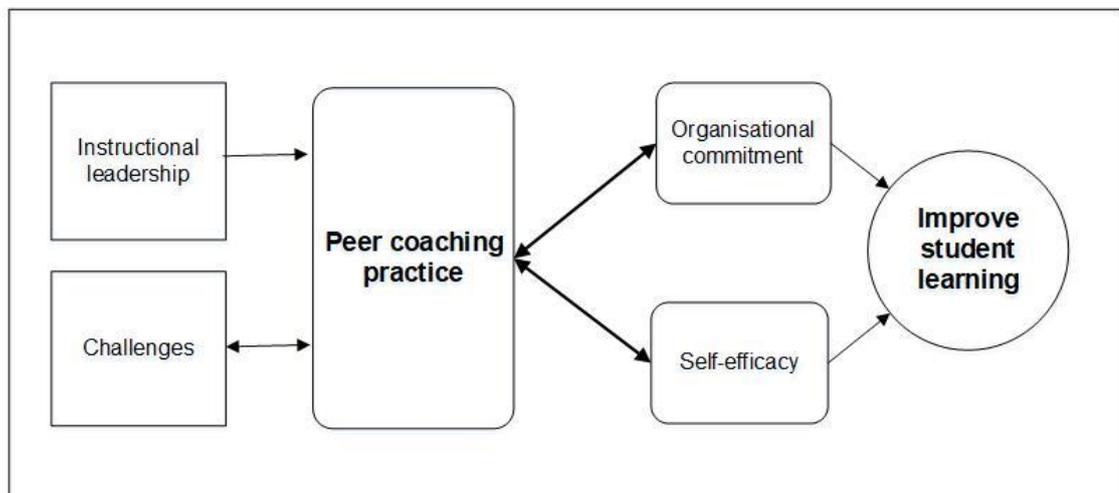
Figure 1.5: Framework of current research

1.9   Chapters overview

This thesis consists of seven chapters. Detailed descriptions of the content of each chapter follow:

Chapter 1: Introduction to the education system in Malaysia and research background.

Chapter 2 details the background literature review of the concept of PLCs and peer coaching. Teachers' CPD programmes are discussed in detail of the historical background, principles, and approaches. Moreover, peer

observation as the coaching fundamental is also reviewed followed by the instructional leadership, organisational commitment and self-efficacy.

Chapter 3 explains the methodology. It includes the research framework and research design, which are presented comprehensively together with the philosophical research approach, research methods, data collection procedures, and data analysis. The ethical consideration and research challenges are also included at the end of Chapter 3.

Chapter 4 presents the quantitative data analysis of the surveys conducted. The results are from the tests conducted through the descriptive and inferential analysis presented in this chapter. Moreover, Chapter 4 also focuses on the potential issues that emerged from the quantitative findings that will be merged with Chapter 5.

Chapter 5 presents the qualitative findings of the research from the semi-structured interviews. Chapter 5 reviews the themes that emerged in the qualitative findings regarding the research questions and literature. The themes are highlighted as part of the research model to improve peer coaching practice.

Chapter 6 discusses the significant themes drawn from the quantitative and qualitative analysis of the research regarding the research questions and objectives.

Chapter 7 summaries the research findings with a conclusion and recommendations for future study.

1.10   Summary of the chapter

In this introductory chapter, the contextual information background and fundamentals of the research have been discussed in detail. This includes the research significance, research objective, and the research questions that piloted the research direction. In the following chapter, the literature of the research will be reviewed to inform research structure.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This study is located within the context of PLCs in Malaysian schools. The focus of this study is on the process of the development of CPD, PLCs as a collaboration tool, models of PLCs, and the implementation of PLCs in Malaysian schools' environment. A critical review of the literature was undertaken to gain a greater understanding of the principles, history, approaches of peer coaching, peer coaching models in education, methods of peer observation as coaching fundamentals and the challenges of peer coaching implementations in the Malaysian education system. As part of the investigation, the instructional leadership context, teacher commitment to the school organisation and teacher self-efficacy will also be addressed.

2.2 Professional Learning Communities

2.2.1 Professional Learning Communities as Learning Organisation

Early research on PLCs demonstrated that it was by the work on the notion of the development of a 'learning organisation' initiated by Senge (1990). Senge discovered that the success of corporate organisations depended on the sharing of a vision and a mission with all members, so they can support each other in the institution and unite to problem solve issues (Bass and Avolio, 1994). Senge (1990) posited five key areas for a learning framework,

which are: system thinking, personal mastery, shared vision, mental models, and team learning. These five key areas support long term sustainable sources of competition that encourage all members in an organisation to learn faster and more effectively than other organisations (Senge, 1990).

Furthermore, Drew and Smith (1995) described the learning organisation concept as a group of continuous learning members in a social system that generate, retain, and leverage individuals and groups in order to improve the performance of the organisation. Moreover, Mumford (1996) alluded to the advantages of creating learning environments in an organisation such as: promising the long-term success; ensuring powerful practices to grow creativity and innovation environment; and, attracting other communities with the strong belief in success to join and learn with the organisation. Additionally, Buckler (1996, p. 32) developed a learning process model focusing on business management organisation that consisted of three major aspects: i) focus to plot a course for learning effort; ii) an environment which facilitates learning; iii) and techniques which enable learning to be efficient. Figure 2.1 demonstrates learning process model by Buckler (1996, p. 32).
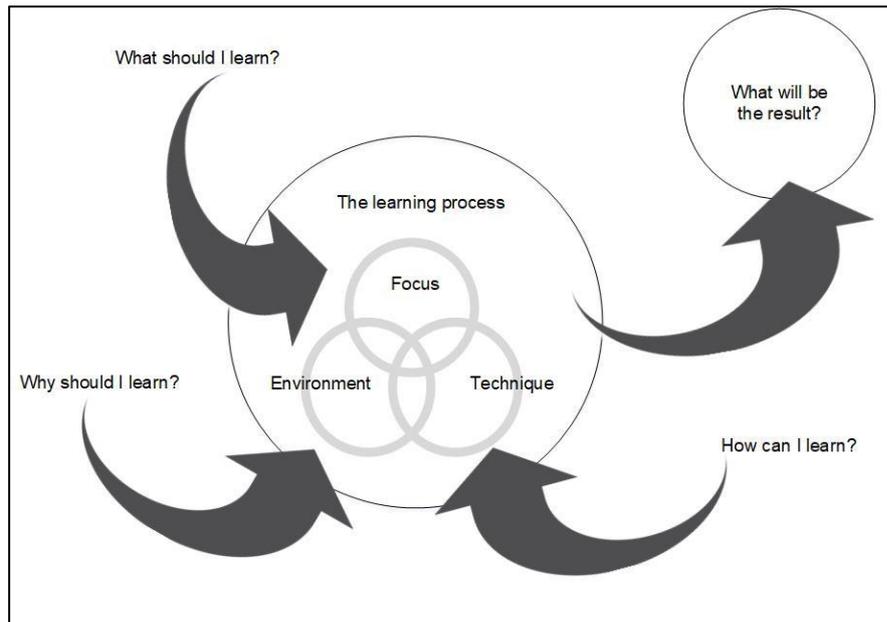
Figure 2.1: Learning as a process by Buckler (1996, p. 32)

According to Buckler (1996), techniques and approaches in the process of learning varied between the relative merits of the taught and the discovery methods of learning. However, Rausch (1996) challenged the argument by stating that the sequence and interplay between the taught and discovery is equally important. As an educationist, Rausch (1996) preferred taught elements in the form of sharply focused questions or guidelines based on a sound framework or model of the subject area (Teare and Dealtry, 1998). In the meantime, educational institutions and educators who were influenced by the idea of learning organisations, began to adapt their approaches on educational management, principally in planning and implementing national schools' reforms (Hord, 1997). Educational researchers labelled learning organisations in the school context as learning communities, where; i) people continually increased their capacity to generate their truly desired results; ii)

new and expansive patterns of thinking were nurtured; iii) collective aspiration is set free; and, iv) people are continually learning how to learn together (Hord, 1997, p. 19).

Learning communities in the schools refer to the multiple constituencies at all stages including teachers, staff, Principals, parents, and students who collaboratively and continually work together (Kruse, Louis and Bryk, 1994). Furthermore, Astuto et al. (1993) described a professional community of learners as one in which the educators in a school and its administrators continuously see and share learning and then act on what they learn. The activities of continuous inquiry and improvement in a community enhances teachers' and school administrators' effectiveness that contribute to the student learning improvement (Astuto et al., 1993). The growth of the learning organisation concept in the educational world demonstrated that school members are actively promoting themselves in their profession through their learning practice (Abdullah and Ghani, 2014). This is reflected by Hord (1997) and Hipp and Huffman (2003) who promoted the importance of lifelong learning amongst teachers.

Whilst Senge's learning organisation model focused on competition and profit in the corporate sector, the learning communities in the educational sector focused on teachers' performance and student achievement (Hord, 1997; Marsick and Watkins, 2003). Therefore, Hord (1997) took the initiative to submit a new model, which was to convey a message and a clear signal to the leaders and educators about the appearance of the culture of lifelong learning in schools. The model of learning communities by Hord (1997)

implemented five dimensions: i) shared and supportive leadership; ii) shared values, norms, mission and vision; iii) collective learning and application; iv) shared personal practices; and v) supportive conditions. Meanwhile, Reichstetter (2006, p 1) defined the efforts to facilitate PLCs in an educational environment, as: i) supportive leadership; ii) collective challenging and reflecting on instructional practices; and iii) team decisions on essential learning outcomes based on results of common formative student assessments.

2.2.2 Professional Development as Professional Learning Communities

The idea of improving teachers through professional development is widely accepted in an educational environment (Kennedy, 2016). In the past decades, the belief that high-quality professional development influenced teachers' and students' achievement, and contributed to the reform movement in improving teachers' learning, has changed (Borko, 2004; Darling-Hammond, Wei and Andree, 2010; Desimone, 2009; Smith, 2010; and, Yoon et al., 2007). According to Fullan (2000), successful educational change needs to be explained in order to highlight the problems and possibilities through some deliberate means. Fullan (2001) clarified that professional development was not about workshops or courses, rather it is at its heart the development of habits of learning that are far more likely to be powerful if they present themselves day after day. Meanwhile, Brabham et al. (2016) suggested that professional development should be research based and must engage teachers as adult learners in the pedagogical approaches

that will be used with the students, and must provide teachers with the opportunity to collaborate with colleagues and other experts to improve their practice.

Furthermore, Steyn (2013) stated that there was an extensive international attention on teachers' CPD, which focused on various actions such as; i) implementing new and revised curricula; ii) developing the learning in schools within complex teaching environments; and, iii) improving the overall performance of an education establishment. Cordingley (2003) supported this argument by concluding that collaborative CPD could have a positive impact on teachers and pupils. Cordingley (2003, p. 10) also listed the positive changes in teacher behaviour, which included; i) greater confidence; ii) enhanced belief amongst teachers in their strength to change pupil's learning; iii) developing networks of collaboration, sharing classroom observation, and; iv) greater commitment to changing practice and trying new things. Meanwhile, the positive impact on students included enhanced motivation and improvements in performance (Cordingley, 2003). All of the findings related to research conducted by Joyce, Calhoun and Hopkins (1999) which reported the massive impact that has been created on students' learning through CPD amongst teachers.

Recently, Kennedy (2016, p. 27) summarised the various type of professional development models into four areas, including: i) programme design features; ii) focus on content knowledge; iii) collective participation, programme intensity, and; iv) the use of educational coaches. From the collective participant programme design, PLCs emphasised a rationale for

teachers' professional design (Kennedy, 2016). Subsequently, PLCs have most of the features that were illustrated by Hord (1998) such as building their own trust of collaboration, and mutual benefit amongst teachers, which support the positive environment of the workplace. Moreover, Cordingley (2003, p. 3) identified the key features supporting the positive impact of CPD, which are; i) the use of external expertise linked to school-based activity; ii) observation; iii) feedback; iv) emphasis on peer support rather than leadership by supervisors; v) scope for teacher participants to identify their own CPD focus; vi) process to encourage, extend and structure professional dialogue, and; vii) processes for sustaining CPD over time to enable teachers to embed the practices in their own classroom settings.

The professional development strategy of PLCs was increased as a result of the developments in the understanding of teacher knowledge and learning (Cochran-Smith and Lytle, 1999; Munby, Russel and Martin, 2001). PLCs assist teachers to monitor their own professional growth by collaboratively resolving the dilemmas they face in their classrooms and improving their instructional practice through site-based inquiry (DuFour, 2004; Fullan, 2000; Hord and Sommers, 2008). Most descriptions of PLCs included common components such as; i) teachers sharing a common purpose for how students learn; ii) teachers working collaboratively towards that purpose, and; iii) teachers all agreeing that they work as a team in order to see students learn (Blankstein, 2004, p.54). This focused approach of PLCs is more meaningful and effective than traditional approaches to professional development (Schmoker, 2004a). However, Kennedy (2016) argued that PLCs varied in

their effectiveness and one of them, using video-based lesson analysis, had a negative impact on student learning when engaged with pre-service teachers' reflections according to their ability to raise important elements of teaching in productive ways.

Brabham et al. (2016) insisted that the effective PLCs support learning, develop new knowledge and the training is ongoing and long-term. In order for PLCs to function, Jaquith (2013) suggested the need for leaders to create a culture that promotes collegiality and collaborative learning. According to Fullan (2006) PLCs are in fact about establishing lasting new collaborative cultures, which focus on building the capacity for continuous improvement and are intended to be a new way of working and learning. Supporting this argument, Hargreaves and O'Connor (2017) emphasised that the indirect and long term professional collaboration culture influence provides positive effects on teachers and students.

As a result, teachers will develop their professional expertise effectively and take the opportunities to share the new knowledge in leadership roles as well as link with other professional aspects of the educational development (Brabham et al., 2016). According to Phillips (2003), when teachers use their own critical thinking skills to examine their classroom practices and determine whether they are pushing students to think at higher levels than what normally happens, there exists a reasonable amount of knowledge on the effective use of PLCs.

Although PLCs promote teachers to improve their practices, the change for many teachers can be very difficult (Brabham et al, 2016). According to

Marzano, Waters and McNulty (2005), teachers are in a profession where change is common and does not last long, thus they do not always want to accept the need for that change. However, Darling-Hammond (1995) noted that the change in schools occurs when teachers have an environment that allows them to work together in ways that promote student achievement. In order for teachers to utilise PLCs that produce the desired results for students, they need to work together and support one another to implement needed instructional changes.

2.2.3 Models of Professional Learning Communities

According to Hord (2008), the idea of school's improving by developing PLCs is currently popular. DuFour and DuFour (2010) described PLCs as a special concept of education reforms, which focused on education structure as a whole system. Furthermore, the contextual changes of PLCs align with the most powerful levers for changing people's behaviour (DuFour and DuFour, 2010). The reformation of the change upon a teacher's development brings more opportunity to teachers in creating their own decisions and programmes based on their own environment. Working as a dynamic group, school communities can move forward to enhance their teachers' ability and professionalism in teaching as well as to deliver a better education to their students (Fullan, 2001). Meanwhile, Stoll et al. (2006) argued that the idea of PLCs is not a new one, but has emerged from a variety of sources such as: i) notions of enquiry; ii) reflection and self-evaluating schools; iii) school-based curriculum development movement; iv) projects of thinking schools; v)

problem solving school; vi) creative school, and; vii) self-reviewing or self-evaluating school.

However, Hord (1997) was recognised as the pioneer in using the term PLCs in her model, which implemented five dimensions: i) shared and supportive leadership; ii) shared values, norms, mission and vision; iii) collective learning and application; iv) shared personal practices, and; v) supportive conditions. In research on communities of practice, Wenger (1998) developed three dimensions which are; i) purpose (joint enterprise and values renegotiated by members over time); ii) function (mutual engagement binding long term members and newcomers into a social entity and commitment to shared idea), and; iii) capability (shared repertoire of communal resources including artefacts produced over time).

Later, DuFour (2004) promoted his big ideas that represent the core principles of PLCs, which are; i) ensuring that students learn; ii) a culture of collaboration, and; iii) a focus on results. Consequently, DuFour et al. (2006, p. 5) differentiated themes of PLCs which depended on the challenges as; i) focus on results rather than focus on activities; ii) collective capacity rather than individual development; iii) collaborative culture rather than teacher isolation; iv) assessment for learning rather than assessment of learning; v) widespread leadership rather than charismatic leader, and; vi) self-efficacy rather than dependency.

Although arguing the use of the term PLCs, Stoll et al. (2006, p. 231) supported the creation and development of PLCs by describing four main headings for teachers' CPD programmes, which are; i) focusing on learning

processes; ii) making the best of human and social resources; iii) managing structural resources, and; iv) interacting with and drawing on external agents. In addition, the CPD programmes critically need to focus on building teachers' capacity, which is a complex blend of motivation, skill, positive learning, organisational conditions and culture, and infrastructure of support (Stoll et al., 2006).

At the same time, Reichstetter (2006, p. 2) listed seven themes, which should be embedded in PLCs, which were: i) shared mission, vision, values, and goals; ii) commitment to continuous improvement; iii) collaborative culture; iv) collective inquiry; v) supportive and shared leadership; vi) supportive conditions, and; vii) result orientation. Similarly, Hipp et al. (2008, p. 175) studied previous models of PLCs and integrated the PLC model by suggesting seven dimensions of PLCs, which are: i) shared and supportive leadership; ii) shared value and vision; iii) collective learning and application; iv) shared personal practice; v) supportive conditions-relationships; vi) supportive conditions-structures, and; vii) external factors. In order to ensure the idea of PLCs remains and is sustained, the researcher must consider the evolution of emerging similarities and differences in schools (Hipp et al., 2008).

Moreover, Fullan (2008) offers a model of PLCs, which is inspired by inside and outside the community of staff who contribute to schools' effectiveness and his change theory to produce a plan that not only includes the internal school administrator and teacher interactions, but also the external relationships and support needed from central officials, parents and

community members. Fullan (2008) also found the complex interaction of these elements in many schools and eventually in all situations contributes to student learning and ultimately school improvement. To conclude, Table 2.1 demonstrates the models of PLCs designed by the researchers according to the themes and dimensions.

Table 2.1: Dimensions of PLCs model according to the literature research

Hord (1997)	DuFour (2004)	Stoll et al. (2006)	Reichstetter (2006)	Hipp et al. (2008)	Fullan (2008)
shared and supportive leadership	widespread leadership	interacting with and drawing on external agents	supportive and shared leadership	shared and supportive leaders	external relationships and support from central office, parents and community
shared values, norms, mission and vision	assessment for learning	focusing on learning processes	shared mission, vision, values, and goals	shared value and vision	internal school administrator and teacher interactions
collective learning and application	collective capacity	managing structural resources	collective inquiry	collective learning and application	
shared personal practices	collaborative culture	making the best of human and social resources	collaborative culture	shared personal practice	
supportive condition	self-efficacy		supportive conditions	supportive conditions-relationships	
	focus on result		result orientation	supportive conditions-structures	
			commitment to continuous improvement	external factors	

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2.2.4   Teacher collaboration in Professional Learning Communities

The term teacher collaboration is strongly significant in teacher education improvement (Yuan and Zhang, 2016). Collaboration can be defined as a means of aligning people's actions to get something done (Rubin, 2009 p.16). Meanwhile, Hall and Wallace (1993, p.103) stated that collaboration is a way of working where two or more people combine their resources to achieve specific goals over time. According to Brown, Hanft and Browne (1993) and Johnson (2003), collaboration can prompt teachers to improve their instructional practices through their engagement in collegial discourse. Jao and McDougall (2016) insisted that the most apt definition of collaboration is to bring people together for a common purpose. In their findings, Glazier et al. (2016) suggested that collaboration is a well-used term in the field of education, and identified as promising practice for student and teacher learning.

In response to the research on teacher isolation and its potential disadvantage to teachers and students, reforms that support the idea of teacher collaboration have increased (Hargreaves, 2007). Supportively, Johnson (2003) insisted that the positive impact of teacher collaboration in developing collegiality, trust, and openness amongst themselves leads to teachers' heightened commitment to their practice. Fullan (2006) observed that teacher collaboration could encourage educational innovation and professional learning, leading to high levels of student achievement. In contrast, a deficiency of engagement with others denies teachers

opportunities for critical feedback and mutual understanding, resulting in a sense of professional isolation and even burnout (Fullan, 2006).

In collaborative cultures, each individual engages with others in common work that results in a benefit to everyone who is involved in the practice (Stoll et al. 2006). Hord and Tobia (2012) agreed that to foster a collaborative culture amongst teachers, the one-way discussion and benefit should not be happening. Therefore, Voogt, Pieters and Handelzalts (2016) recommended teachers to collaborate in a team that consists of a nature of supportive, leadership and external conditions. According to Yuan and Zhang (2016), research has shown that collaboration can vary in teachers' daily practice, such as peer coaching (Louis, Marks and Kruse, 1996) and action research (Burns, 2009). Wherever it takes place, collaboration provides teachers with an open and safe platform where they can freely exchange their ideas, share useful teaching resources, and find ways to improve their teaching effectiveness (Stoll et al. 2006).

Regardless of the positive effect on professional development amongst teachers, collaboration comes in various shapes and sizes, leading to radically different ends (Glazier et al., 2016). In their research, Glazier et al. (2016) found that not all collaboration is created equally as some teachers mentioned a complete lack of collaboration in contrived collegiality. According to Hargreaves and Dawe (1990), contrived collegiality consists of administratively contrived interactions amongst teachers where they meet and work to implement the curricula and teaching strategies developed by others. Likewise, Wells and Feun (2009) argued that teacher collaboration

only tends to be superficial and brief in their teamwork as a result of the preference to practise in isolation. Moreover, Lindahl (2011) suggested that teachers' strong individualistic thinking, lack of support and resources are the cause of the circumstance. However, Glazier et al. (2016) insisted that teachers must be challenged to build their own positive collaboration by negotiating with the others in focusing on teachers' professionalism especially for preservice teachers.

Recently, the growth of PLCs in the educational context demonstrates the increased emphasis on teacher collaboration as the means of influential professional development (Barber and Moursehead, 2009). This situation is supported by the whole idea of PLCs that contains a constant creation of new knowledge within the organisation, and the aim of putting it into practice by using collaborative enquiry and reflection (Stoll and Louis, 2007). Furthermore, PLCs assist teachers to plan their own professional development collaboratively by resolving the problems they face in their classrooms, and improving their instructional practice through site-based inquiry (DuFour, 2004; Fullan, 2001, and; Hord and Sommers, 2008). Meanwhile, Mindich and Lieberman (2012) found that the successful PLCs are comprised of teachers from the same school who have autonomy to choose their own learning outcomes and have gone through training on how to collaborate. Therefore, the agreement of collaboration in PLCs is a key to a rewarding career that will attract and retain highly skilled professionals, resulting in higher-impact teaching, and deeper student learning (Darling-Hammond et al., 2012).

2.2.5 Professional Learning Communities in Malaysian Education

In the Malaysian context, PLCs programmes officially started to be implemented amongst teachers beginning in the year of 2011 (MOE, 2014b). The implementation now encompasses all schools across the country. In supporting the PLCs notions, the MOE (2015b) accredited PLCs in the Malaysian Education Development Blueprint 2013-2015 as an educational reform to encourage collaboration amongst teachers in order to improve the quality of teaching and learning practices. In the meantime, the MOE (2015b) also suggested the sorts of activities that can be implemented, such as the sharing of knowledge and expertise, teamwork and cooperation. According to Abdullah and Ghani (2014), the PLCs programme in Malaysian schools is committed to change the context and culture of schools and districts. Furthermore, Abdullah (2009) found that Malaysian schools were classified as high-readiness in implementing PLCs dimensions. Therefore, the MOE authorised the implementation of PLCs programme in improving the quality of education as one of the changes in the blueprint (MOE, 2014b).

Although the implementation of PLCs has emerged in a number of schools across the country, the research on PLCs' effectiveness and practices in Malaysian schools is still limited (Abdullah, 2009; Abdullah and Ghani, 2014; Ghani and Crow, 2013; Ishak and Ghani, 2013; Ismail, Baharom and Abdullah, 2014; Ismail, Yen and Abdullah, 2015; Keong, Ghani and Abdullah, 2016; and, Mohamad, et al., 2015). The Malaysian research in PLCs implementation focused on various aspects such as the practice amongst the

different type of schools, the school leaders' perspective, and the correlation between the PLCs and the teachers' self-efficacy.

Abdullah (2009) observed the growing integration of five dimensions in PLCs within Malaysian secondary schools. It is an apparent indicator that Principals, who promoted shared leadership amongst teachers, encouraged them to create learning communities in the schools (Abdullah, 2009). However, amongst the five dimensions of PLCs investigated, the dimension of shared personal practice was the least indicated by the teachers (Abdullah, 2009). Meanwhile, Ishak and Ghani (2013) found a high level of PLCs practice in the high performing schools in Malaysia. As a result, the collective learning is suggested to be practised comprehensively in order to solve the problems faced by the teachers (Ishak and Ghani, 2013). Ghani and Crow (2013) explored the understanding and perception of Excellent Principals toward PLCs that suggested four supported elements, which are: i) servant leadership; ii) strong commitment to school's achievement; iii) the construction of community through collective, and; iv) individual practice sharing.

According to the research conducted by Ismail, Baharom and Abdullah (2014), the high level of PLCs practice was found in two different types of academic performance schools, which are the high and low performing secondary schools. However, only the dimension of shared personal practice in PLCs did not demonstrate a significant difference between these two types of schools (Ismail, Baharom and Abdullah, 2014). The findings also

elucidated that high performing schools practised PLCs at a higher level than low performing schools (Ismail, Baharom and Abdullah, 2014).

Meanwhile, Abdullah and Ghani (2014) insisted that teachers in Malaysian secondary schools could learn actively in school improvement and enhance the learning performance of their students. They also found that Principals who provided support and guided teachers towards the practice of PLCs in their respective schools was an important element (Abdullah and Ghani, 2014). Nevertheless, they observed the characteristic of personal learning practice is at a moderate level, because of a lack of peer observations practices amongst teachers (Abdullah and Ghani, 2014).

Mohamad et al. (2015) indicated the significant attributes of the PLCs that are embraced in the Malaysian religious secondary schools. They found that the moderate levels in shared personal practice dimensions of PLCs resulted from the lack of support from the senior teachers and less appreciation of the schools' vision and mission (Mohamad et al., 2015). Ismail, Yen and Abdullah (2015) investigated the relationship and influence between PLCs and teacher self-efficacy in secondary schools. Although there were a high level of PLCs practices and teachers' self-efficacy, the findings only showed the low correlation coefficient between these variables (Ismail, Yen and Abdullah, 2015). As a result, PLCs practices only have low impact on the improvement of teacher's self-efficacy in the research population (Ismail, Yen and Abdullah, 2015). According to Keong, Ghani and Abdullah (2016), all PLC dimensions were highly implemented in a Chinese primary school, which is one of the high performing schools in Malaysia. Yet, the dimension of shared

personal practice is still the lowest score compared to other dimensions of PLCs (Keong, Ghani and Abdullah, 2016).

In general, although the previous studies found that all the Malaysian school teachers were highly committed to practise PLCs programmes, the dimension of shared personal practice and knowledge such as peer coaching and peer observation showed the least dimensions to be practised amongst the others (Abdullah, 2009; Abdullah and Ghani, 2014; Keong, Ghani and Abdullah, 2016, and; Mohamad et al., 2015).

2.3   Peer Coaching

According to Lei (2016), the idea of peer coaching is related to the collaboration between two or more colleagues who are engaged in the same position and tasks, sharing their own objectives, views and experiences in certain practices. Moreover, Robbins (2015) described peer coaching as a confidential and non-evaluative process involving two or more professional colleagues to work together in various aspects of practice. Included in the practices of peer coaching are: i) reflection of current practice; ii) developing and articulating curriculum; iii) creating informal assessment to measure student learning; iv) implementing new instructional strategy; v) planning lessons collaboratively; vi) expanding, refining and building new skills; vii) sharing ideas; viii) teaching one another; ix) conducting classroom research; and, x) solving problems in the workplace (Robbins, 2015, p. 9).

The use of peer coaching as a method of CPD has been explored across many areas of practice, such as health, business, and education (Zhang, Liu

and Wang, 2016). In the educational environment, peer coaching practice involves a teacher observing another colleague, then using the results of that observation collaboratively to set an informal goal for developing or improving instructional skills, strategies and techniques (Gersten, Morvant and Brengelman, 1995; Hudson et al., 1994). Meanwhile, Zepeda (2015) identified peer coaching practice as a strategy where one or more teachers form a partnership with one another and includes observing, recording, and providing feedback of teaching behaviours.

2.3.1   Principles of peer coaching

All peer coaching models are formed using the basic principles of trust, confidentiality, non-evaluation and good communication (Bowman and McCormick, 2010; Cordingley, 2003; Robbins, 2015; Showers and Joyce, 1996; and, Zepeda, 2015). However, Hooker (2013) stressed that these components must be considered and nurtured if peer coaching is to be beneficial for those involved.

According to Robbins (2015), when teachers work collaboratively amongst themselves, the trust must be developed to provide respect in each other and a *fear-free* environment to supporting formal peer coaching in the classroom. Bowman and McCormick (2010) supported the process of building trust amongst teachers in establishing strong professional relationships. This mutual respect and beneficial effect provide a positive improvement not only for the teachers themselves, but also for influencing student learning in positive ways (Cordingley, 2003).

In order to establish trust and respect in peer coaching practice, the feedback materials such as recording sources and the outcomes should be kept confidentially only amongst the teachers who are involved in the practice (Robbins, 2015). Peer coaching is a confidential process through which instructors share their expertise and provide one another with feedback, support, and assistance for the purpose of enhancing learning by refining present skills, learning new skills, and/or solving classroom-related problems (Dalton and Moir, 1992). Moreover, Ladyshewsky (2017) suggested the trust and confidential relationship with the appropriate coaching techniques in peer coaching practice would increase the individuals' improvement. Despite the confidential approach, Levene and Frank (1993) suggested that successful peer coaching programmes should be voluntary and used for developmental purposes rather than judgemental. Supportively, Dellapenna (2017) emphasised that a voluntary peer coaching model has the potential to be a powerful professional learning opportunity that creates an improvement culture within a school. One of the elements of being voluntary is to be able to choose your own observer who is suitable and convenient to engage in a mutually supportive relationship with the teachers.

Another principle of peer coaching practice, that involves the observation of another teacher's teaching, is a non-evaluation of supervision (Ostovar-Nameghi and Sheikhahmadi, 2016). This kind of non-judgemental environment of a partnership between teachers built around collaborative and reflective dialogues supports the positive feedback and focuses on the teacher's improvement (Scott and Miner, 2008). Even though, Joyce and

Showers (2002) argued that the feedback session could become evaluative, the primary activity of peer coaching is still a collaborative planning and developmental process. Hooker (2013) suggested that the non-evaluatory nature of peer coaching is a unique feature of the model and it is common to all peer coaching models. To support the argument of a non-evaluative idea, Ostovar-Nameghi and Sheikhahmadi (2016) insisted that peer coaching focuses more on CPD practice to encourage people in developing their knowledge and skills of working with others.

Zepeda (2015) believed that positive conversations are developed through a constructive nature of reflection or dialogue, supporting the peer coaching practice. At the same time, Robbins (2015) highlighted the successful conferencing that requires both relationship skills, including the ability to build trust and technical expertise such as knowing how to develop and pose proper questions, and how to listen effectively. Furthermore, the professional dialogue in peer coaching, regarding the feedback on the observation would reduce isolation and encourage teachers to generate their own solutions to the problems (Galbraith and Anstrom, 1995). However, Robertson (2005) emphasised the importance to mastering the skills of reflective interviewing amongst the teachers to enabling them to reflect their partners critically in the discussions. Although it is a hard skill to master, without the ability to be an active listener, peer coaches are unable to formulate the reflective questions needed to empower their partner to find solutions (Robertson, 2005). Furthermore, Scott and Miner (2008) asserted that reflective critiques allowed

honest evaluation of teaching and learning, established new and higher standards, and facilitated continuous improvement amongst teachers.

2.3.2   History of peer coaching

At the beginning of teachers' development training in the 1970s, research revealed that only ten percent of the participants implemented what they had learned (Showers and Joyce, 1996). The reasons for this poor implementation can be at least in part, attributed to the lack of studies on how people learn and how schools successfully distribute innovation (Showers and Joyce, 1996). Therefore, Joyce and Showers (1982) conducted studies focused on classroom implementation and analysis of teaching, especially student feedback in regular seminars and training situations. The outcomes of the studies showed the importance of careful implementation of strategies and concluded that the aspirant teachers should form small peer coaching groups that would share the learning process (Joyce and Showers, 1982). The results were paralleled by the findings of Bush (1984) which reported that when coaching is added to a professional development programme, the implementations rate jumped to 95 percent (Elder and Padover, 2011).

According to Lofthouse et al., (2010), most coaching programmes are strongly influenced by clinical supervision, psychotherapy and counselling (Goldhammer, Anderson and Krajewski, 1993; Watkins, 1997). Meanwhile, Vygotsky's theories (1978) which supported active learning development by interaction and discussion between individuals also contributed to the peer coaching practice (Bowman and McCormick, 2010, and; Cox et al., 2014). As

a supporter of the socio-constructivism approach, Vygotsky (1978a, p. 86) believed that students are capable of performing at higher intellectual levels when asked to work in collaborative situations "with more capable peers" than when asked to work individually. At that point, Vygotsky (1978a) introduced Zone of Proximal Development (ZPD) to give a new concept of student learning, beginning with what the student can learn on his own until what he can learn collaborating with peers.

Meanwhile, Zhang and Pang (2016) argued that the concept of peer coaching was derived from Goldhammer's clinical supervision, which insisted on a cycle of observation. According to Sullivan (1980), the desired clinical supervision by Goldhammer (1969) was essentially teacher-initiated and consistent with liberated and self-supporting actions (Fullan, Hord and Frank, 2014). Moreover, Glickman, Gordon and Ross-Gordon (2017) highlighted the peer coaching practice as one of the strategies in their model of supervision with the developmental approach. However, Shower and Joyce (1996) revealed that some of the teachers experienced bad clinical supervision when they were evaluated in the feedback session, which contrasted with the concept of peer coaching.

Gradually, peer coaching began as a strategy to improve the degree of implementation of new curriculum and instructional skills (Showers and Joyce, 1996). At the same time, Joyce and Showers (1982) suggested the usefulness of peer coaching in helping teachers to develop and sustain the use of expertise with new teaching techniques (Swafford, 1998). The studies on peer coaching commenced by focusing on the improvement of teachers'

development from being alone and isolated in expanding their repertoires to have a coaching relationship with shared aspects of teaching, planning together, pooled experiences, training in new skills and strategies more regularly, and applying them more properly (Showers and Joyce, 1996). At that time, the modelling practice under simulated conditions and practice in the classroom combined with feedback was the most productive training design (Showers and Joyce, 1996). Meanwhile, Bush (1984, p. 1) identified "five levels of training including; i) presentations of theoretical base; ii) modelling; iii) practice in controlled situations; iv) feedback, and; v) coaching in the dimension of training on how staff development was operating".

The evolution of peer coaching has improved progressively as it spread globally in teachers' CPD, mostly in US and European countries (Lofthouse et al., 2010). There was strong evidence from the studies in Holland (Veenman and Denessen, 2001) and the United Kingdom (Cordingley, et al., 2015; Leat, Lofthouse and Wilcock, 2006; and, Roberts and Henderson, 2005), that provided the positive impact of peer coaching on teachers' CPD and building supportive environments. However, there was also evidence that most of the difficulties in enacting coaching arose from making the process work as part of school improvement systems, which was interpreted as a clash of cultures (Lofthouse et al., 2010). Nonetheless, the difficulties posed by peer coaching practice created changes in the idea with the inclusion of new strategies and skills and there is an interesting trend to apply conversational (Strong, Zeman and Foskett, 2006) and content analysis (Bergen and While, 2000) to coaching interactions (Lofthouse et al., 2010).

Furthermore, Lofthouse et al., (2010) reported that coaching processes in teachers' CPD has to contend with issues such as; misunderstanding about the purpose of coaching, school 'busyness', coaching accountability, and school culture and structures. According to Stoll et al. (2007), in the over tested school environment, PLCs as teachers' CPD are becoming instruments of technocratic surveillance and oppression. Moreover, Bottery (2003) argued that school leaders failed to convey the meaning of learning communities when involved powers and forces created a low-trust culture of unhappiness amongst teachers. In her observation, Wong (2006) asserted that many studies utilised the concept of deskilling to portray how teachers are being marginalised in a low-trust culture of society. Moreover, Apple (1986) defined deskilling as a process when the employees lose control over their own labour.

However, Hargreaves (1992) challenged the concept of deskilling amongst teachers by arguing that teachers are adopting a wide range of strategies to cope with their problems. To support this argument, Osborn et al. (1997) described teachers as creative mediators who are able to use their own strategies and skills to accommodate educational reforms and to resist or contest imposed regulations. Therefore, the implementation of peer coaching in teachers' CPD must be constructed in such a way as to be an evolutionary professional tool, although coaching may also be seen as a tool of revolutionary change (Lofthouse et al., 2010).

Previously, in order to enhance peer coaching practice, Showers and Joyce (1996) assumed that the coach needs to have more expertise in the content area, and thus paired teachers with an outside consultant or an expert peer which was influenced by supervisory practices and feedback. Thus, in order to improve peer coaching practice, the sort of peer coaching models generated vary according to who serves as the coach and the needs of the teachers being developed (Benedetti and Reed, 1998).

Robbins (2015) revised peer coaching evolving from face to face coaching to the new era of technology, where teachers communicate with each other through the internet or social media. This way of coaching also evolved into a higher level when networking and discussing between teachers occur in the virtual page developed by the programmers. Zhang, Liu and Wang (2016) supported the argument when suggesting the development of teachers' Technological Pedagogical Content Knowledge (TPACK) may help to improve the effect of peer coaching practice. Technological advances have made some innovations in making peer coaching go 'virtual' in some contexts such as through video conference, Skype, or blog with the observed teacher (Zepeda, 2015). However, Ladyshewsky and Pettapiece (2015) found that the increasing use of technology in education does not necessarily mean that learners will use it appropriately, even if they are adept at learning online or use the technology in their daily lives. Although peer video review process in advanced technology can help teachers to overcome fears of vulnerability and embrace the benefits of a professional community, the support from

school leaders is essential to encourage teachers in sharing sessions (Cassada and Kassner, 2018).

2.3.3 Peer coaching approach for teachers' improvement

Previous studies on peer coaching practice demonstrates positive influences in teachers' learning and student achievements (Aderibigbe and Ajasa, 2013; Becker, n.d.; Lee and Choi, 2013; Lei, 2016; and, Prince, Snowden and Matthews, 2010). Hasbrouck (1997, p. 252) listed the number of peer coaching benefits such as; i) reducing isolation amongst teachers; ii) enhancing collaboration and sharing of ideas, successful practices, and assistance; (iii) creating a process for addressing instructional concerns; (iv) transferring new learning into practice; (v) promoting teachers as researchers; and (vi) encouraging reflective practice.

As a tool for teachers' development, peer coaching practice is found to promote an articulate, reflective and collaborative work culture (Aderibigbe and Ajasa, 2013, and; Lei, 2016). These findings are meaningful in facilitating and sustaining teachers' CPD, promoting teachers' leadership, and contributing to educational improvement (Lei, 2016). Moreover, teachers who are involved in peer coaching practice are also described as becoming more confident and motivated in their practice (Prince, Snowden and Matthews, 2010). Dellapenna (2017) supported the argument when she insisted that peer coaching allows professional learning to be self-directed, which can lead to an increase in motivation and improve teaching practices. This self-direction or self-leadership emphasised the creation of positive elements

tasks and increased intrinsic motivational qualities amongst the teachers (Carr et al., 2017). Focused on beginning teachers, Frazier (2006) reported that mentoring and coaching was found to be beneficial in their early years of teaching; they were provided with adequate support, are motivated, have positive discussions and have constant guidance from a well-matched mentor.

Furthermore, peer coaching enhances teachers' learning by creating a learning environment that allowed teachers to work together in order to foster each other's professional development and deal with the problems they face in their daily life (Zwart et al., 2007). Moreover, teachers' ability to analyse their classes and improve student-learning progress will be increased by practising peer coaching (Becker, n.d.). Similarly, Bowman and McCormick (2010) believed that peer coaching provides a learning opportunity, which encourages teachers to improve and share their professional skills, knowledge and understanding.

As one of the essential professional development processes, good peer coaching is important in their CPD. Moss (2015) addressed the professional development needs amongst teachers created from the peer coaching practice as the opportunities to improve teaching skills and knowledge. Hornberger (2002) revealed almost half of the participants of teachers in his research changed the way they structured and delivered their lessons after being involved in peer coaching practice that fulfilled their professional learning needs. In another perspective, peer coaching offers a way to foster the professional needs amongst teachers by reducing their isolation in

schools (Bowman and McCormick, 2010). Likewise, Renner (2015) underlined the considerable potential of peer coaching as an option to overcome the issues of isolation, seeking helps from others, offering assistance to colleagues and constructive problem solving.

Peer coaching practice provides the sharing environment where teachers could exchange their expertise and knowledge through discussion and feedback sessions (Vacilotto and Cummings, 2007). Findings from a study carried out with pre-service teachers, indicated that peer coaching fostered the exchange of teaching methods and materials, refined the development of teaching skills, and encouraged participants to reflect upon their own teaching methods and styles (Vacilotto and Cummings, 2007). Meanwhile, Lee and Choi (2013) investigated the ability of peer coaching to be a viable tool to initiate and sustain teachers' reflection in exchanging their practice by reiterating and accepting the idea, extending and confronting the argument, and adjusting and re-aiming the findings and practices.

Renner (2015) asserted that peer coaching practice develops new ideas and strategies when more experienced or confident teachers apply more complex activities like classroom observation, videotape analysis or study groups, where they can reflect on their teaching practice. The support of coaching from senior mentors was identified as the critical source to build self-evaluation practices, share new ideas and reconsider goals and visions amongst teachers (Sardar and Galdames, 2018). Similarly, Moss (2015) found the majority of participants of teachers in the study expressed a

newfound awareness of their own personal strengths and an acceptance of new ideas and strategies through collaboration.

2.3.4 Models of peer coaching

The peer coaching practice in Malaysian schools is based on the models introduced by the prominent researchers in peer coaching (Gosling, 2002; Robbins, 2015; Showers and Joyce, 1982; and, Zepeda, 2015), According to Zepeda (2015), peer coaching is a multi-faceted model that can be practised as a strategy in instructional supervision and professional learning such as peer observation and action research. Joyce and Showers (1982) presented peer coaching as the most efficient component related to the effectiveness on the teacher's training component. Therefore, Table 2.2 demonstrates the finding of Joyce and Showers (2002) in term of training component and attainment of outcomes amongst the students. The study on the theory is the lowest contribution to teacher's knowledge (10%) and skill (5%), whilst the demonstration approach contributed 30% of teacher's knowledge and 20% of their skills. However, both types of training on the theory and the demonstration did not influence teachers to transfer the concept of learning to their teaching. Although the practice demonstrates the increasing of teacher's knowledge (60%) and skill (60%), only 5% of teachers transfer the learning in their own practice. Nevertheless, peer coaching practice encourages teachers to gain knowledge (95%) and skill (95%) and at the same time, they implement the knowledge and skill in their teaching repertoire.

Table 2.2: Joyce and Showers (2002, p. 78) finding on how the training component related to the effectiveness on the teacher

Component	Knowledge (thorough) % of teacher who understand concept	Skill (strong) % of teacher who apply the concept	Transfer (executive implementation) % of teacher who make the concept part of their teaching repertoire
Study of theory	10%	5%	0
Demonstrations	30%	20%	0
Practice	60%	60%	5
Peer coaching	95%	95%	95%

Robbins (2015) initiated two stages of peer coaching model for the teachers' improvement, which are collaboration work and formal observation. The first stage of collaboration work is the informal peer coaching practice that develops trust, confidentiality and readiness in a convenience school culture, whilst the second stage of formal observation indicates the formal classroom observation that includes lesson co-teaching, collaborating, advising, mentoring, mirroring, and providing PLCs resources (Robbins, 2015). Figure 2.2 shows the concept of peer coaching suggested by Robbins (2015, p. 24). Moreover, the MOE (2014b) recommended Malaysian school teachers to implement the two stages concept of peer coaching in order to improve their teaching skills.
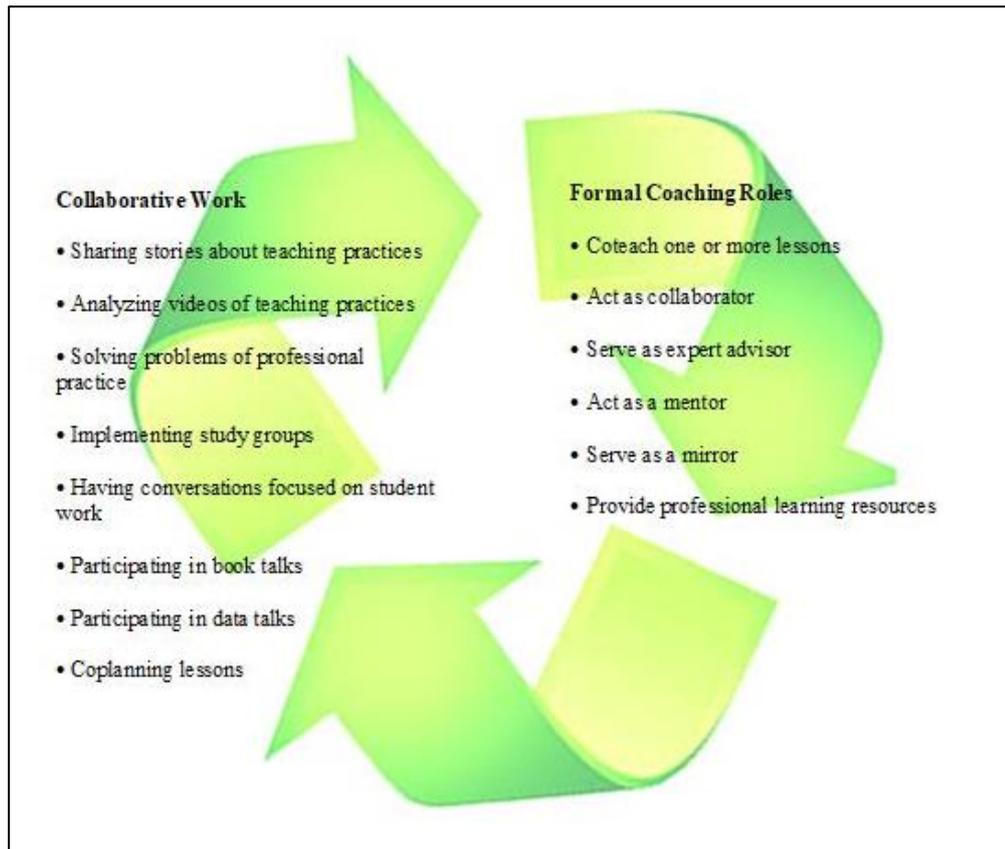
Figure 2.2: Concept of peer coaching by Robbins (2015, p. 24)

According to Zepeda (2015), coaching occurs at two levels: in the classroom with a coach observing a teacher, and in the feedback session. Marzano, Frontier and Livingston (2011) insisted that peer coaching involves a teacher observing another teacher colleague, then using the results of that observation to set an informal goal collaboratively for developing or improving instructional skills, strategies and techniques. Therefore, the classroom observation is the vital component in the peer coaching practice. By implementing a peer observation project (POP) that derived primarily from the field of instructional supervision, Zepeda (2015) proposed a peer coaching classroom observation cycle as demonstrated in Figure 2.3. Despite using three basic phases of the clinical supervisory model (pre-

observation conversation, classroom observation, and post-observation conversation), peer coaching classroom observation cycle extended a follow up as part of the process.
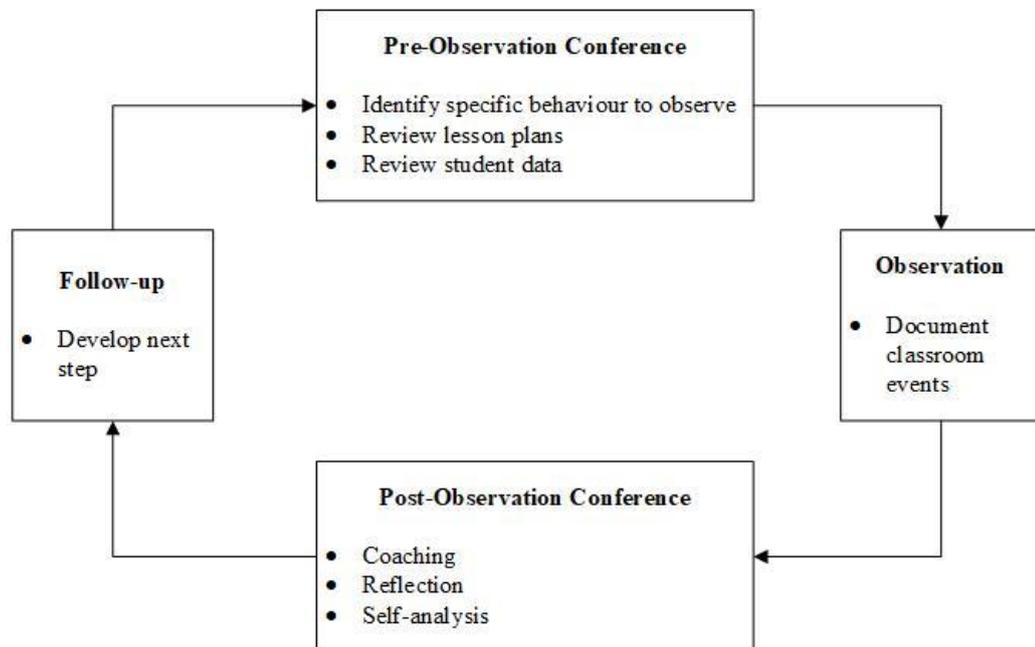
Figure 2.3: Peer coaching classroom observation cycle (Zepeda, 2015, p. 70)

In focusing more in-depth on the observation task in peer coaching, Gosling (2005) categorised peer observation into three models, which are an evaluation, development and peer review models. Table 2.3 indicates the different characteristics of these three models of peer observation. The evaluation and development models of observation involved the expert and senior teachers in evaluating and assessing teachers' competencies; whilst the peer review model is a non-judgemental process that focuses on mutual reflection between teachers (Gosling, 2002). In view of the fact that peer coaching involves a voluntarily and non-judgemental environment, then only

the peer review model from Gosling (2002) is equivalent with the principles of peer coaching practice (Rice, 2012, and; Scott and Miner, 2008). In the Malaysian school context, teachers are encouraged to practice peer coaching by implementing Gosling's peer review model in their CPD programmes (MOE, 2014b).

Table 2.3: Models of Peer Observation of Teaching (Gosling, 2002, p.5)

Characteristic	Evaluation Model	Development Model	Peer Review Model
Who does it & to whom?	Senior staff observe other staff	Educational developers observe practitioners; or expert teachers observe others in department	teachers observe each other
Purpose	Identify under-performance, confirm probation, appraisal, promotion, quality assurance, assessment	Demonstrate competency/improve teaching competencies; assessment	engagement in discussion about teaching; self and mutual reflection
Outcome	Report/judgement	report/action plan; pass/fail PGCert	Analysis, discussion, wider experience of teaching methods
Status of evidence	authority	expert diagnosis	peer shared perception
Relationship of observer to observed	power	expertise	equality/mutuality
Confidentiality	Between manager, observer and staff observed	Between observer and the observed, examiner	Between observer and the observed - shared within learning set
Judgement	Pass/fail, score, quality assessment, worthy/unworthy	How to improve; pass/fail	Non-judgemental, constructive feedback
What is observed?	Teaching performance	Teaching performance, class, learning materials,	Teaching performance, class, learning materials,
Who benefits?	Institution	The observed	Mutual between peers
Conditions for success	Embedded management processes	Effective central unit	Teaching is valued, discussed

Although Glickman (2002) recommended to put experienced teachers with beginning teachers, superior teachers with adequate ones, or adequate teachers with the struggling ones in peer coaching practice, the implementation would tend to emerge as expert coaching than peer coaching in the classroom observation. Therefore, this research focuses on the peer observation as a vital element of peer coaching practice in order to enhance the benefit of PLCs amongst teachers.

2.3.5 Peer observation as a coaching fundamental

According to Zepeda (2015), peer observation plays a fundamental part in numerous professional development models including lesson study, peer coaching, cognitive coaching, critical friend groups, and other system improvement strategies such as learning walks, instructional rounds, and walk-throughs. Therefore, the MOE (2012a) highlighted the commitment to upgrade the quality of CPD in the Malaysian Education Blueprint by providing school based training using a network of peers including teacher coaches, senior teachers, and Principals to disseminate best practice.

Torku et al. (2017) described those teachers who shared a common ground of classrooms observing amongst themselves and having discussions to improve their teaching practice in peer observation programmes. Robbins (2015) defined peer observation as a formal coaching, which intended to develop reflective practice and decision making, refine and expand the repertoire of teaching strategies, enhance understanding of instruction,

curriculum and assessment, and provide enriched learning environments for students characterised by interesting and engaging work.

Peer observation practice is perceived firmly as a quality development tool to improve and deliver the curriculum in an atmosphere of trust, security and developmental intent (Hitchins and Pashley, 2000). Furthermore, McGrath and Monsen (2015) listed at least eight personal contributions from the peer observation practice to the teachers, schools, and students, which are; building networking, leadership and mentoring amongst teachers, providing formal CPD and evidence of teaching, preparing on curriculum change, and acknowledging teachers by promotions and awards. Figure 2.4 demonstrates the peer observation's significant contribution to the process of learning.
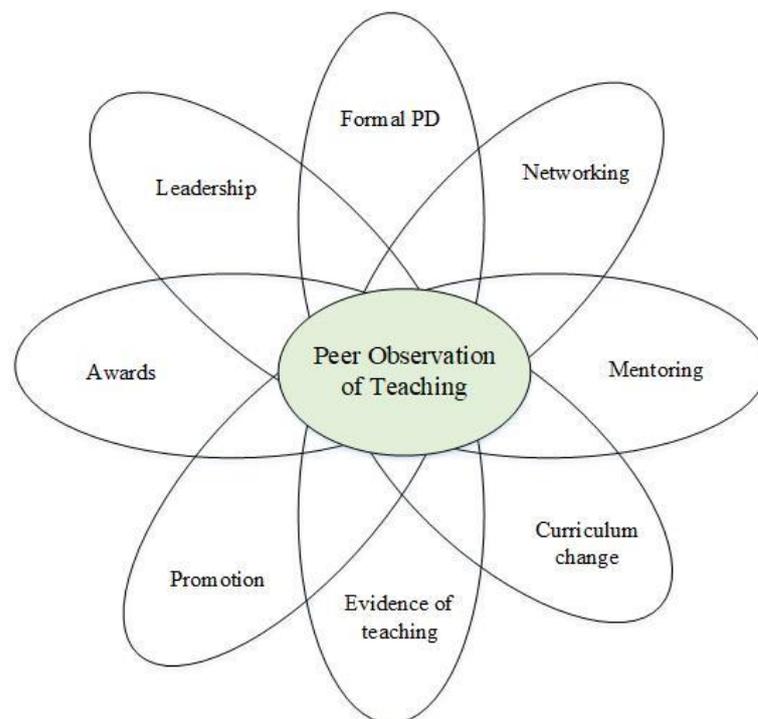
Figure 2.4: Significant contribution of peer observation (McGrath and Monsen., 2015, p. 4)

With the same essence of collaborative work and clinical supervision process in peer coaching practice, peer observation delivers a universal model to provide teachers' learning (McGrath and Monsen, 2015). Previously, Martin and Double (1998) developed a cyclical model of peer observation as demonstrated in Figure 2.5. The model commences with the pre-observation meeting, the classroom observation, and feedback meeting after the observation. The process is repeated to expose more experience for analysis and highlight areas, which need to be informed by pedagogical knowledge, whilst at the same time refining the sophistication of the collaboration (Martin and Double, 1998).

Pre-observation Meeting

Share with the observer:
- Intentions of the session (learning outcomes)
  - Knowledge
  - Understanding
  - Skills
  - Values
- Chosen teaching strategy
- Handouts
- How will you judge success (Performance indicators)
- Agree a recording system e.g. timed notes, check list, etc.
- What you hope to gain from the observation

The Observation

Be unobtrusive
Observe teacher AND students
Share atmosphere but do not get involved in dialogue
Be aware of body language
Do not use the time to catch up on paper work!
Use an agreed system of recording
Remember to write observation notes not a critical report
Record specific evidence and brief evaluative comments
Always use positive language
Refer to student behaviour
Underline points of particular significance
End on positive note.

Feedback Meeting

- Comfortable and private environment
- Adequate time allocation with no distractions
- Teacher gives his/her appraisal of the session first
- Take time to talk about and compliment good practice
- Discuss critical aspects in a positive manner
- Refer to actual evidence
- Observer is able to talk only about the specifics of that session, teacher may draw generalities
- Set development targets
- End positively

Figure 2.5: A process model for peer observation and collaborative reflection on teaching (Martin and Double, 1988, p. 165)

Although Hitchens (2014) insisted that no uniformly model of peer observation has been accepted, McGrath and Monsen (2015, p. 6) presented a core model of peer observation that combined a process through phases of reflection, peer briefing, observation and debriefing, and finally planning and implementing changes as demonstrated in Figure 2.6. The conversation and collaboration between teacher and observer became closer and focused on the context of reflection and feedback after going through the observation (McGrath and Monsen, 2015).
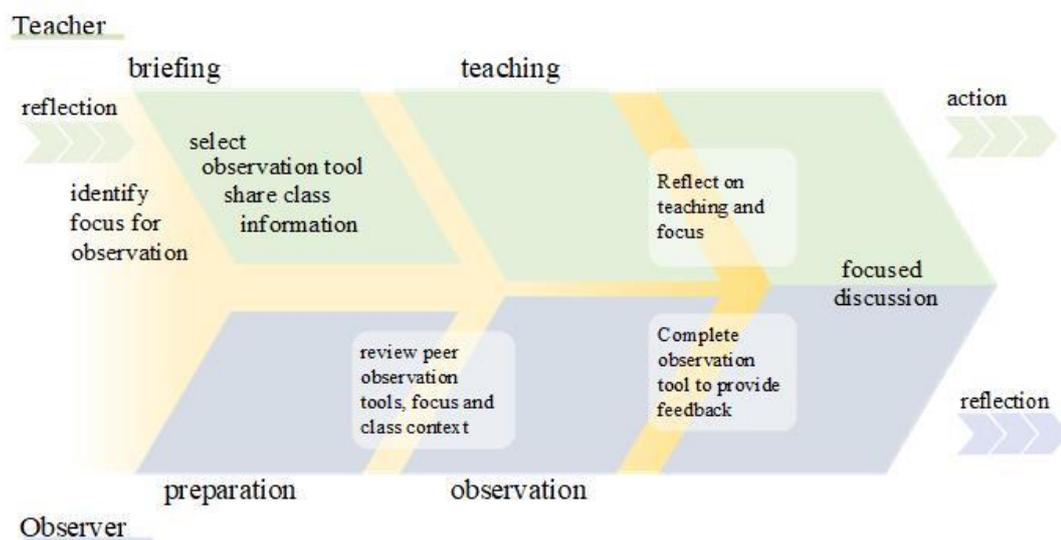
Figure 2.6: Core model of peer observation (McGrath and Monsen, 2015, p. 6)

Previous research of peer observation in the school context demonstrated the positive acceptance amongst teachers in order to enhance teacher's CPD. Megawati (2018) found that the role of peer observation practice amongst pre-service teachers is highly significant with building confidence and supporting a learning environment to achieve better performance in teaching. In a language education research, Santos (2016) found that the

teachers perceived the peer observation could be potentially interesting in generating excitement amongst themselves. Furthermore, Santos (2016) discovered that there are certain elements of teacher's performance that only colleagues in the same or closely related disciplines can accurately assess. However, Clark (2017) argued that teachers preferred informal peer observation that influenced their professional growth. In order to implement the peer observation approach in the schools, Rajab (2015) insisted that teachers still did not have appropriate skills in observing and giving feedback. Therefore, a training in observations skills and feedback conversations is required in terms of altering teachers' attitudes and mentality towards peer observation (Rajab, 2015).

In the Malaysian context, peer observation is prevalent in teachers CPD in ways such as lesson study (Ansawi and Pang, 2017, and; Mon, Dali and Sam, 2016) and action research (Othman and Chia, 2014). Mon, Dali and Sam (2016) found that the model of lesson study enhances teachers' reflective practice through discussion and peer observation. Meanwhile, Ansawi and Pang (2017) observed the significant relationship between lesson study and PLCs in promoting collaborative learning and reflective practices through peer coaching and observation. However, Zakaria, Saidin and Mohamad (2016) discovered that novice teachers did not have appropriate support in structured professional development programmes such as lesson study group, peer coaching, peer observation and narrative inquiry. The essential of peer observation amongst novice teachers

contributes to their self-efficacy in developing their skills and knowledge in teaching (Jafar, Hasan and Yusoff, 2017).

2.3.6   Challenges of peer coaching implementation

Essentially, a number of factors restrict peer coaching practice implementation in schools which, some argue, is influenced by the development of a neoliberalist approach to educational policies which focuses on markets, privatisation, deregulation and the private versus public good in education reform (Ball, 2004). According to this line of argument, the Neoliberalist approach aimed to redistribute wealth upwards to the ruling elites, transform educational systems to focus on economic mandates, and breakdown education as a public sector monopoly in order to become open to strategic investment by for-profit firms (Robertson, 2008). More recently, Savage (2017) supported such an analysis by observing the lack of support for school improvement because of the neoliberalism policy of educational reform.

The most common challenges faced by teachers in order to implement peer coaching practice is the time constraints (Adshead, White and Stephenson, 2006; Arday, 2015; Bryan; 2014; Cahill, 2018; Donaldson, 2015; Donegan, Ostrosky and Fowler, 2000; Hooker, 2013; Robertson, 2005; Todd, 2017; and, Wong and Nicotera, 2003). The normal practice of peer coaching that involves a pre observation meeting, classroom observation, and feedback discussion takes precious time for teachers (Donegan, Ostrosky and Fowler, 2000). The teachers found it difficult to maintain the peer coaching meeting

in such limited time (Hooker, 2013). Meanwhile Moss (2015) insisted the failure of scheduling the priorities of peer coaching practice in schools resulted in the lack of peer coaching implementation amongst teachers.

Lack of time for peer coaching practice also could be caused by the onerous workload on the teachers (Sellen, 2016). Moreover, Rajab (2015) found that teachers were overwhelmed by the amount of administrative work that was not related to their teaching instructional practice. The teachers who were pressurised by the abundant workload, felt stress and anxiety, as a result, they refused to give commitment to the peer coaching (Moss, 2015). Moreover, Haep, Behnke and Steins (2016) found that Principals concentrate less on the teachers' stress and strains regarding the practice of classroom observation. In different situations, Cahill (2018) observed that teachers felt stress and frustration when Principals challenged their autonomy by forcing new mandates that limited their creativity, the ability to connect with students, and weakened their motivation and self-efficacy.

Furthermore, Adshead, White and Stephenson (2006), Hammersley-Fletcher and Orsmond (2004), and Manson, Dubielzig and Singh (2012) categorised the feeling of stress with the workload and worries about being judged and criticised after being observed, as a negative attitude that emerged from peer coaching practice. These negative attitudes as suggested by Todd (2017) might be traced from the negative feeling of the anxieties about being observed and uncertainties about its purpose whilst receiving negative feedback on their practice. In their study, Slater and Simmons (2001) discovered that teachers involved in peer coaching practice very often,

experienced negative feedback from students and the administrators of the schools. This negative feedback supported by the lack of concern about observation skills and programme organisation led to the need to improve teachers' CPD programmes (Kurtts and Levin, 2000; and Ovens, 2004).

Meanwhile, Lofthouse and Leat (2013) discovered peer coaching practice might clash with managerial cultures that demanded accountability and surveillance which did not align with trust-based coaching partnerships. This managerial culture can be seen to relate to the 'performativity' approach that is defined as a mode of regulation that employs judgements, comparisons and displays as mean of incentive, control, attrition and change-based on rewards and sanctions (Ball, 2003). We may note that performativity processes in the education system may have promoted benefits such as a closure of the policy implementation gap, a challenge to provider capture by teachers and simplified national measures of school achievement (Jeffrey, 2002). Nevertheless, performativity also produced opacity rather than transparency as individuals and organisations take ever greater care in the construction and maintenance of fabrications in term of school performance (Ball, 2003).

Therefore, Darling-Hammond, Maria and Gardner (2017) argued that the professional development programmes such as the peer coaching practice conducted are less rigorous than what teachers need. Hooker (2013) reviewed that the potential problem of the peer coaching practice came from the interruption of the external factor include family commitments, work responsibilities, community obligations, and officer visits. Cahill (2018)

supported the argument of the negative outside source factors such as classroom control and school environment that has been the major contributor to developing a negative sense of teachers' identities and efficacy.

Another factor influencing the negative impact of peer coaching practice is a lack of training and financial problems to conduct the training (Aderibigba and Ajasa, 2013; Moss, 2015). Sharing the same thought, Wong and Nicotera (2003) asserted that the failure of peer coaching practice might result from insufficient training, limited resources and lack of evaluation. Consequently, the teachers receiving no training criticised what they saw as the numerous limitations resulting from the lack of programmatic support (Ovens, 2004). However, the expected requirement of this type of programme to support peer coaching practice, might have also explained the reason why peer coaching has not been common in pre-service teacher education (Lu, 2010).

2.4 Instructional leadership in supporting peer coaching

Principals as school leaders play an essential role in determining the success or failure of peer coaching (Robbins. 2015). The role of Principals as instructional leaders in the school organisation is important in encouraging teachers to improving themselves through CPD programmes (Ebmeier and Nicklaus, 1999: Hallinger et al., 2017; and, Moss, 2015). Principals also model their philosophical support for coaching by collaborating with teachers, demonstrating the peer coaching process, articulating the differential between peer coaching and evaluation, substituting for teachers, coordinating schedules, sharing research and exemplary practices about

peer coaching, and functioning as coach or the teacher to be observed (Robbins, 2015).

Hallinger and Murphy (1985, p. 221) conceptualised the instructional leadership model that consisted of three dimensions of the Principal's instructional leadership role and further delineated in terms of ten leadership functions as demonstrated in Figure 2.7. The first dimension that defines a school mission utilised the functions of framing and communicating the school's goals amongst the school community. Meanwhile, the second dimension is managing the instructional programmes, such as coordinating the school's curriculum, supervising and evaluating teacher's instructions, and monitoring student progress and achievement. The last dimension of the Principal's instructional leadership focuses on developing a positive school learning climate, which includes the functions of protecting instructional time, providing incentives for teachers and learning, promoting professional development amongst teachers, and maintaining high visibility of Principals in the schools.
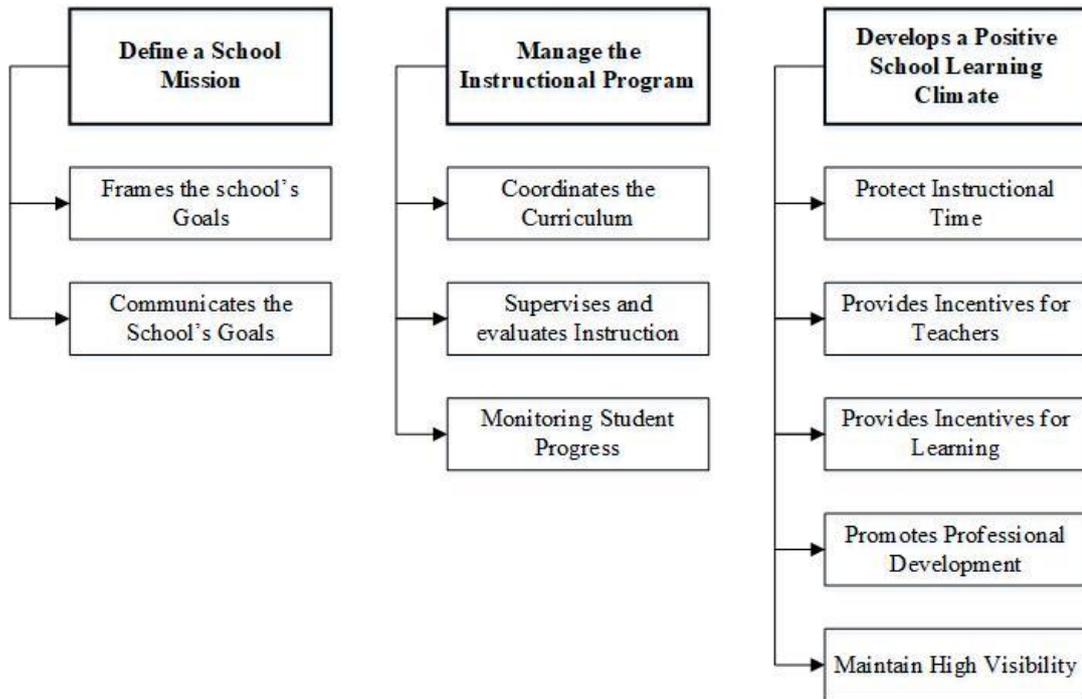
Figure 2.7: Instructional leadership model by Hallinger and Murphy (1985, p. 221)

Moreover, Zepeda et al. (2013) insisted the need for supporting teacher's learning by building instructional programmes that link the vision and mission of the schools to improve teachers' connection. Instructional leaders also recommend organising a collaborative team of teachers that are focused upon student learning and work independently to achieve shared goals within a mutual sense of accountability (DuFour and Mattos, 2013). Because of collaborative work promoted by Principals, teachers could avoid the isolated feeling, at the same time refine and regenerate new ideas and approaches for their learning improvement (Zepeda et al., 2013).

Furthermore, Qian, Walker and Li (2017) proposed an initial model of Instructional Leadership in schools, based on the model of China's education

system that is similar to the Asian' countries' education systems such as Malaysia and Singapore (Hairon and Dimmock, 2012). The model comprises six dimensions and a set of sub-dimensions. Figure 2.8 shows the major dimensions and sub-dimensions of the initial model of Instructional Leadership in China. This model shares some elements with the Hallinger and Murphy model (1985) such as defining schools' purpose and direction, evaluating and monitoring instruction, aligning the curriculum, and fostering professional development to enhance teacher capacities. The other two dimensions from the Qian, Walker and Li's model (2017) integrate with nurturing positive collaborative relationships with and amongst teachers, and promoting external communication to support learning. This model highlights the importance attached to certain practices in comparing with the Hallinger and Murphy model (1985), such as the ways in which Chinese Principals define purposes and set directions for schools, which are shaped by the government directive to identify unique features of schools in term of their curriculum or student activities (Qian, Walker and Li, 2017). The top down policy in determining the school's curriculum and student activities is the most common similarity between the model of China and Malaysia's education system (Hairon and Dimmock, 2012).
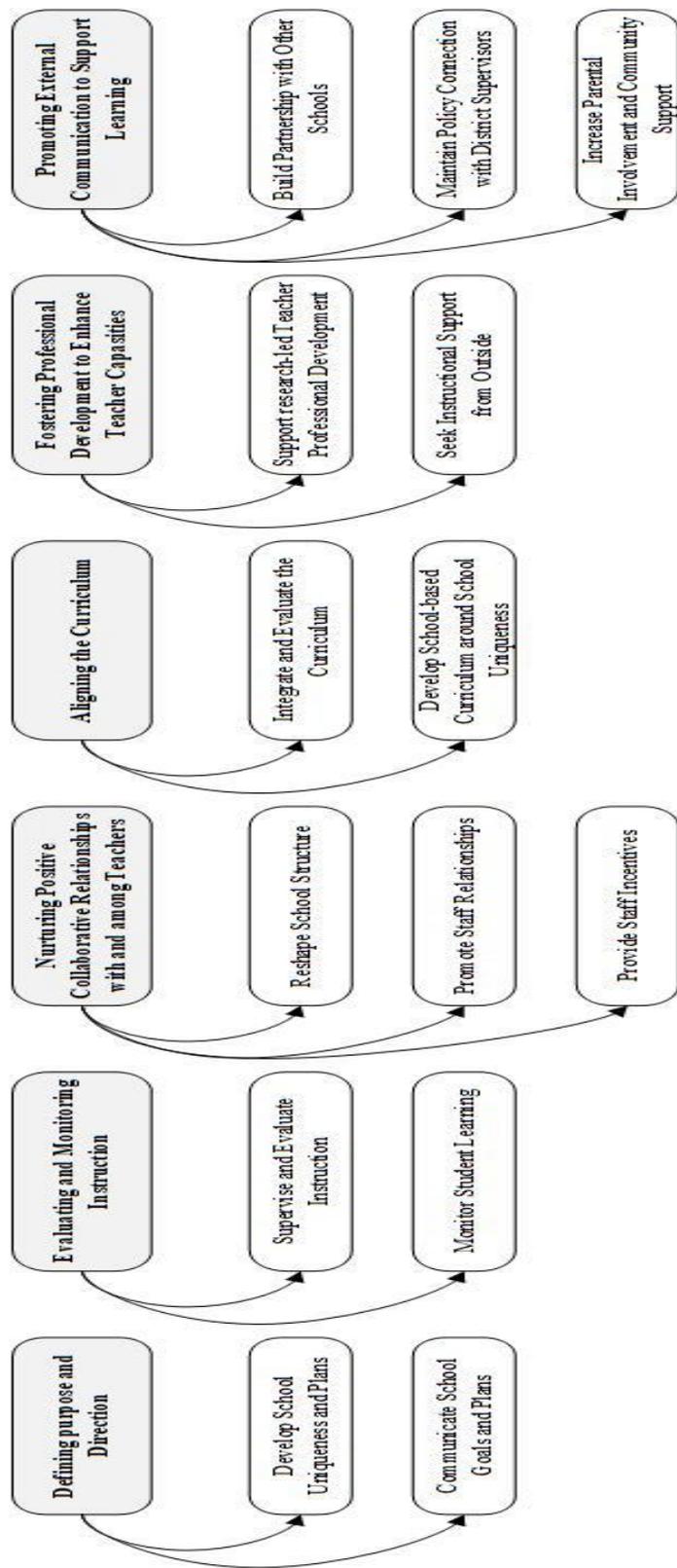
Figure 2.8: Initial model of instructional leadership in China by Qian, Walker and Li (2017, p. 193)

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Even though, Qian, Walker and Li (2017) emphasised the evaluation and monitoring of teaching as one of the vital dimensions in instructional leadership, the Principal is responsible for conducting evaluations, resulting in unintended consequences, which weakened the quality of evaluation feedback (Kraft and Gilmour, 2016). In addition, the observation conducted by the Principals cannot improve teaching practice effectively for the reason that they are constantly packed with management tasks, which add to the limited time and access (DuFour and Mattos, 2013).

Similarly, the observation and supervision in Malaysian schools is usually conducted by the Principals or the Senior Teachers who are being empowered by the MOE to guide, upgrade and facilitate teachers' development (Yunus, Yunus and Ishak, 2010). Harris et al. (2017) found that the Principals in Malaysian schools have a concern for promoting the teachers' learning and development. Thus, this research explores how instructional leadership is integrated with the peer coaching practice amongst the teachers.

2.5 Teacher commitment to the school organisation

Teacher commitment is prevalent in the literature, and varies according to different approaches of definition (Aydin, Sarier and Uysal, 2013; Celep, 2000, and; Raman, Ling and Khalid, 2015). The discussion about teacher commitment is frequently related to teachers' work performance and their capability to innovate and to integrate new ideas into their own practice, absenteeism, staff turnover, and having an important influence on students'

achievement, and attitudes towards school (Firestone, 1991; Graham, 1996; Louis, 1998; Nias, 2006). Meanwhile, Huberman (1993a) found that teacher commitment was one of the major features of the successful schools. The level of teacher commitment is considered to be a key factor in the achievement of current educational reform agendas, as it comprehensively influences teachers' willingness to engage in cooperative, reflective and critical practice (Crosswell and Elliot, 2004).

In this study, teacher commitment refers to an organisation, which has been conceptualised by early researchers as principally a function of individual behaviour and willingness of individuals to give their energy to the organisation through actions and choices over time (Nagar, 2012). Seymen (2008) described organisational commitment as an employees' desire to stay in an organisation and commitment to organisational objectives and values. According to Hausman and Goldring (2001), forming a community of learners for teachers is a powerful strategy for enhancing teacher commitment. Hausman and Goldring (2001) believed that teachers who feel a sense of collegiality and have opportunities to develop learning in their communities are most committed to their school.

Organisational commitment has been defined as the relative strength of an individual's identification with an involvement in a particular organisation (Mowday and Steers, 1979). Mowday, Porter and Steers (1982) characterised commitment as consisting of three components: i) belief in and acceptance of organisational goals and values (identification); ii) a willingness to exert effort on behalf of the organisation (involvement); and iii)

a strong desire to maintain membership in the organisation (loyalty). These components imply that members of an organisation who wish to be active players in the organisation have an impact on what is going on in it, feel that they have high status within it, and are willing to contribute beyond what is expected of them (Bogler and Somech, 2004). A substantial body of research has indicated that higher levels of organisational commitment result in more effort and increased dedication to attain organisational goals, which is closely related to organisational effectiveness (Dee, Henkin and Singleton, 2006).

Allen and Meyer (1990) explained that organisational commitment is a psychological state that shapes personnel's relationship with the organisation and has an effect upon whether or not the staff should continue their organisational membership. In detail, organisational commitment can be distinguished into three forms, which are; affective commitment, normative commitment and continuance commitment (Allen and Meyer, 1990). Affective commitment expresses the emotional attachment of the employees, whilst normative commitment reflects on their moral-ethical obligation towards the organization. The continuance commitment results from motivation to avoid impending costs that would be linked to a possible change of employer (Allen and Meyer, 1990).

Furthermore, Celep (2000) developed a set of teacher organisational commitments by associating four dimensions of commitment, which are; commitment to the school, commitment to the work group, commitment to the teaching occupation, and commitment to the teaching work. In the model of school instructional supervision for developmental approach, Glickman,

Gordon and Ross-Gordon (2017) set school or community goal and individual goal as factors in order to improve student learning. Osman (2009) defined the school or community goal as a teacher organisational commitment and individual goal as a teacher self-efficacy.

Previous research on teacher organisational commitment found that strong commitment influenced teachers' willingness to be involved in collaborative, reflective and critical practice (Crosswell and Elliot, 2004). In addition, Collie, Shapka and Perry (2011) observed that the promotion of a positive climate is amongst the key actions in fostering a greater teacher commitment. Nevertheless, the studies of teacher organisational commitment focused on connecting with the school leadership and environment (Davies and Davies, 2011; Sezgin, 2010, and; Yoruk and Sagban, 2012). Whilst, Bashir and Long (2015) revealed a significant and positive relationship between teachers' training in professional development with the organisational commitment. Due to the lack of research in teachers' CPD and organisational commitment in the Malaysian secondary school context, this research aims to investigate the relationship between the teachers' perception on peer coaching as professional development with their organisational commitment.

2.6   Teachers' self-efficacy

Self-efficacy is defined as belief in one's capabilities to organise and to execute the course of action required to produce the given achievements successfully (Bandura, 1994). Similarly, Gürcan (2005) defined self-efficacy as the function produced by people's capabilities as well as by all of their

judgments that they can execute using their skill. The self-efficacy beliefs determine how people feel, think, motivate themselves and behave, that produce these diverse effects through four major processes; cognitive, motivational, affective and selection processes (Bandura, 1997). In the meantime, Friedman and Kass (2002, p. 684) suggested a broader definition of self-efficacy as a "teacher's perception of his or her ability to (a) perform required professional tasks and to regulate relations involved in the process of teaching and educating students (classroom efficacy), and (b) perform organisational tasks, become part of the organisation and its political and social processes (organisational efficacy)".

Additionally, Tschannen-Moran et al. (1998) pointed out that self-efficacy theory applied in the educational realm, has sparked a rich line of research into how teacher's self-efficacy beliefs are related to their actions and to the outcomes they achieve. Newmann, Rutter and Smith (1989) referred to teacher's efficacy as the perceptions that their teaching is worth the effort and can lead to success for students. Moreover, Tschannen-Moran et al. (1998) proposed an integrated model of teacher self-efficacy that is influenced by four sources of information about efficacy (Bandura, 1986, and 1997) – mastery experience, physiological arousal, vicarious experience, and verbal persuasion. Figure 2.9 demonstrates the teacher self-efficacy cycle developed by Tschannen-Moran et al. (1998, p. 228).
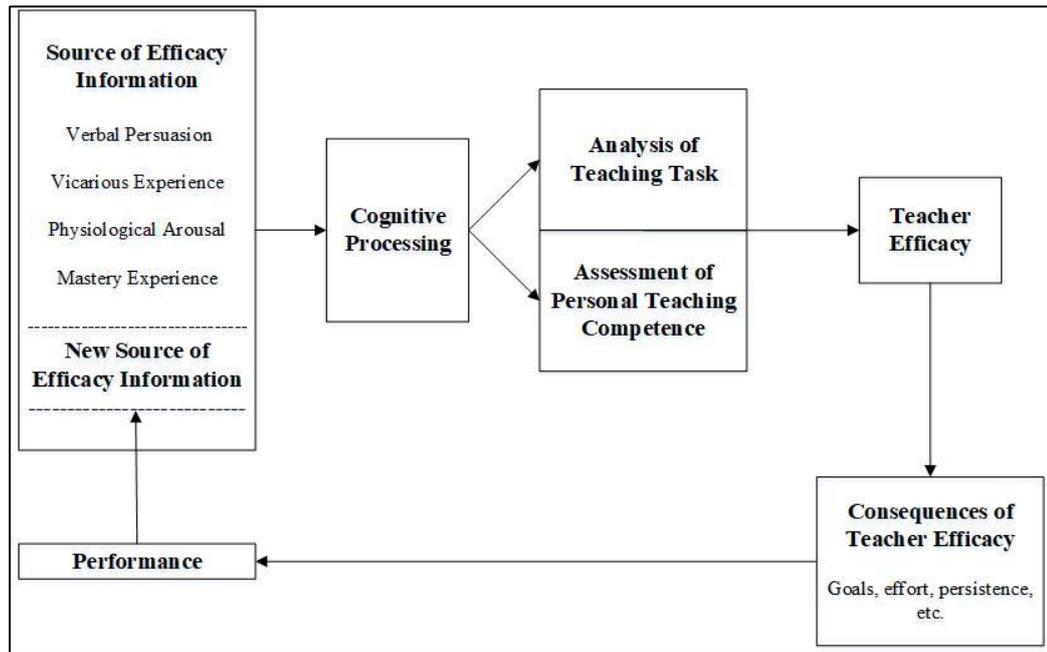
Figure 2.9: The cyclical nature of teacher efficacy (Tschannen-Moran et al., 1998, p. 228)

According to this Tschannen-Moran et al. model (1998), teachers consider the difficulty of the situation (Analysis of Teaching) when making efficacy judgement, and weigh that against their perceived beliefs of their own competencies as teachers (Assessment of Personal Teaching Competence). In completing the cycle, teachers' behaviours (consequences of teacher efficacy) provide performance feedback to the original sources of efficacy (Ebmeier, 2003). The attributes of these four main sources of Bandura's Teacher Efficacy interpreted by Ebmeier (2003, p. 114) are shown in Table 2.4.

Table 2.4: The attributional interpretation of teachers' self-efficacy (Ebmeier, 2003, p. 114)

Sources of Self-efficacy	Attributional interpretations
Mastery experiences	The extent to which a teacher has the opportunity to experience success in a given endeavour. Successful experiences raise efficacy beliefs, which contributes to expectation that performance will be proficient in the future.
Physiological arousal	The extent to which performances can be attributed to internal or controllable causes, not simply luck. The level of arousal, of either anxiety or excitement, also plays an important role.
Vicarious experiences	The extent to which a teacher has learned by observing the performances or skills of others and can identify with the performer.
Verbal persuasion	The extent to which the teacher has received specific performance feedback from a supervisor or colleague. Receiving encouragement to the extent that it boosts risk-taking performances increases efficacy.

Previous studies have demonstrated that teacher self-efficacy is significant in teachers' CPD (Cahill, 2018; Dellapena, 2017; Dudley, 2018; Powers, 2014; and, Zonoubi et al., 2017). Hausman and Goldring (2001) found that teachers with a high sense of efficacy are more likely to feel committed to their schools because they are more likely to invest in their profession and their students. The same result is shared by Chesnut and Burley (2015), who

suggested pre-service and in-service teachers' self-efficacy beliefs influence their commitment to the teaching profession. Meanwhile, Norton (2013) found in her study that teacher's self-efficacy is influenced by several factors including administrative support, teachers' attitude, faith and exercise, and the students in their schools. Self-efficacy also has been recognised as an interdependent critical factor of teachers' goals that contribute to improving student learning (Glickman et al., 2017; Osman, 2009, and; Zeb and Nawaz, 2016).

In focusing on the peer coaching approach, Dudley (2018) found that peer coaching is an effective tool to increase pre-service teachers' self-efficacy and pedagogical knowledge. Goker (2006) suggested how peer coaching can be a vehicle to develop self-efficacy amongst teachers by the practice of networking, reflecting, collective learning, problem diagnosing, materials adapting, and original learning designing. Meanwhile, Dellapenna (2017) revealed that peer coaching practice provided teachers with mastery and vicarious experiences, which influenced their self-efficacy. Therefore, peer coaching practice is a valuable use for teachers' professional learning, especially when implemented with the voluntary system (Dellapenna, 2017). The same result was also shared by Bruce and Ross (2008), and Zonoubi et al. (2017) that indicated the significant correlation between peer coaching practice and teachers' self-efficacy.

In the Malaysian context, although Ismail, Yen and Abdullah (2015) found that the variables of teachers' self-efficacy and PLCs are at a high level, the relationship between both variables showed a weak significant correlation

coefficient, and PLCs dimensions have a low impact on the teachers' self-efficacy improvement. Moreover, the research conducted by Jafar, Hasan and Yusoff (2017) found that trainee teachers preferred the supervision by an experienced lecturer rather than peer observation in order to enhance their self-efficacy. Osman (2009) also observed that interpersonal skills amongst the supervisors is the significant variable to influence teachers' self-efficacy. Consequently, this study aims to explore teacher's self-efficacy affected by peer coaching as a developmental tool.

2.7   Summary of the chapter

This chapter aimed to review research literature related to the study. The chapter has defined basic concepts of the PLCs, peer coaching, peer observation, instructional leadership, teachers' organisational commitment, and teacher self-efficacy. The literature reviewed throughout shows there are numerous research studies based on teachers' professional development focusing on peer coaching practice. In addition, the characteristic features of peer coaching as part of PLC strategies were reviewed in a Malaysian context in which this research is conducted. Specifically, this study focuses on the peer coaching practice in Malaysian secondary schools due to the gap and limitation in the previous research on teachers' professional development.

CHAPTER 3

METHODOLOGY

3.1   Introduction

The previous chapter investigated the literature that defined the concept of the research, which leads to the chosen research methodology in this chapter; a framework of the research design is reviewed and explained in detail. The chapter will proceed to discuss the methods carried out in this research including the theoretical framework, research instruments, sampling procedure, data collection and data analysis. The challenges experienced whilst conducting the research are also highlighted at the end of this chapter.

3.2   Philosophy paradigm

According to Bryman (2016), the philosophy of social research is influenced by three main elements relating to : i) ontological, ii) epistemological, and; iii) theoretical considerations. The ontological considerations of the research are related to the nature or reality of social entities (Bryman, 2016). The researcher influenced by the pragmatist views that: i) agreeing with the existence of an external reality independent of our minds, and; ii) denying that the truth regarding reality can be determined (Teddlie and Tashakkori, 2009). Therefore, the researcher believes the reality of the development programmes and peer coaching practice are renegotiated continuously and debated by the other researchers primarily in the context of Malaysian secondary school teachers. At the same time, the research aims to find out

the issues and problems regarding peer coaching practice and offer solutions through change and improvement. Hence, the researcher frames the research questions with the assumption that the findings would inform policy makers and teachers in supporting their professional development programmes.

Within a pragmatist approach, the researcher believes in an external world independent of the mind as recommended by Creswell and Creswell (2018). This allows him to be flexible enough to adopt the most practical approach in addressing the research question (Teddlie and Tashakkori, 2009). Hence, from epistemological considerations, this research takes an objective approach by not interacting with subjects through the survey as a quantitative approach. However, in the next stage of the research, interviews are used in a qualitative approach. Here, the researcher's approach is more subjective, as he is interacting with the participants as research subjects to construct realities. By doing this, there will be single and multiple realities derived from the quantitative and qualitative research (Rorty, 1999).

The pragmatic worldview provides the assumptions that an individual researcher has the freedom in choosing their methods, techniques, and procedures of research that best meets the needs and purpose of the study (Creswell, 2009). According to Onwuegbuzie and Leech (2005), the pragmatist researchers can merge both quantitative and qualitative approaches in a single investigation. The quantitative approach is typically motivated by the researcher's concerns, whilst the qualitative approach is often driven by a desire to capture the participant's voice regarding the issues

highlighted (Onwuegbuzie and Leech, 2005). Since the pragmatists do not see the world as in absolute unity, the researcher used multiple approaches for collecting and analysing the data to provide the best understanding of the research problem.

According to Tashakkori and Teddlie (2010), the essence of the mixed methods approach in a pragmatist paradigm is that the research questions can be answered by integrating the results of quantitative and qualitative data. Meanwhile, Creswell (2009) insisted that the pragmatist researcher looks to the 'what' and 'how' of research, based on the intended consequences. Thus, this research underlines the 'what' and 'how' questions to explore further the phenomenon and reality in the practice of peer coaching amongst teachers. The in-depth exploration through a mixed-method approach is indispensable in studying peer coaching practice and PLCs programmes that have been included in the teachers' CPD for better understanding and enriching the research findings.

Theoretically, this research combined a deductive theory process for quantitative data in the first phase, and an inductive theory process for the qualitative data in the second phase. The deductive theory process employed theoretical ideas in order to test the hypotheses related to the study, whilst the inductive theory process built a theory related to the research findings (Bryman, 2016). The researcher believes that with the mixed-methods approach, the research objectives on the exploration of the peer coaching practice amongst Malaysian secondary school teachers will be achieved.

3.3   Research design

According to De Vaus (2001), a research design is an essential of structure planning and outlines which are prepared for the undertaking of the whole study. Moreover, Creswell (2009) provided vibrant framework guidance for a research design that consists of three major components; i) philosophical worldviews/paradigms; ii) strategies of inquiry/approach, and; iii) research methods. The Creswell research design (2009) considered the application of mixed-method design as an alternative to social science research approach. In a similar vein, Tashakkori, Teddlie and Teddlie (1998) explained that mixed-method studies developed to a large degree from an outgrowth of the popularisation of triangulation methods that broke the methodological hegemony of the monomethod purist. In line with the Cresswell research design (2009), the researcher developed a mixed methods research design framework as demonstrated by Figure 3.1.

Philosophical Worldview/Paradigm
Pragmatic

Strategy of Inquiry
Sequential explanatory design
(Quantitative survey → qualitative interview)

Research Design
Mixed Methods Design

Research Methods
Research questions

Data collection
(survey and interview)

Data analysis and interpretation

Write-up and validation
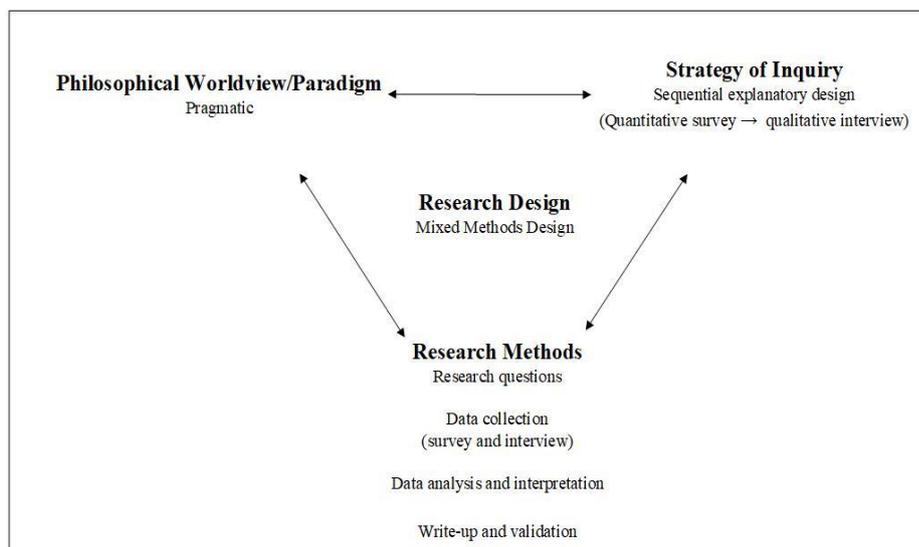
Figure 3.1: Research design framework adapted from Creswell (2009, p. 5)

The research is aimed to investigate the practice of peer coaching in PLCs amongst teachers in general and explore further significant themes in detail to answer the research questions. Therefore, the researcher adopted the pragmatic view as a worldview or paradigm of the research that is not committed to any one system of philosophy and reality but draws liberally from both quantitative and qualitative assumptions (Creswell, 2009). According to Teddlie and Tashakkori (2009), the pragmatist believes that epistemological issues regarding the relationship of the knower to the known in the nature of knowledge exist on a continuum, rather than on two opposing poles. Consequently, in the research, there was a highly interactive relationship between the researcher and the participants developed in the interview sessions for qualitative data. Whilst, in the other aspect of the research using the survey for quantitative data collection, the researcher did not need to interact directly with the participants.

This mixed methods study utilised a sequential explanatory approach that emphasised the quantitative data and combined it with the qualitative approaches as a strategy of inquiry to answer the research questions. The rationale for this approach is that the quantitative data analysis provides a general understanding of the research problem, whilst the qualitative data analysis refines and clarifies those statistical results by exploring participants' views in more depth (Ivankova, Creswell and Stick, 2007). According to Creswell and Creswell (2018), the sequential explanatory approach involves a two-phase data collection procedure in which the researcher collects quantitative data in the first phase, analyses the results, and then uses the

results to plan the second, qualitative phase. Moreover, Bryman (2008) asserted that mixed methods have developed as a simplified approach amongst the different types of researcher in addressing their research questions.

Moreover, Johnson et al. (2014) noted that the mixed methods movement had developed the potential to resolve some of the difficulties related to a single method; either quantitative or qualitative. By applying both quantitative and qualitative paradigms within the data process, mixed method research can unite the relative strength of both methodologies (Sechrest and Sidani, 1995). According to Creswell and Plano Clark (2011), the mixed method approach involves the use of both approaches in tandem so that the outcome of the study is more significant than either qualitative or quantitative research alone.

3.3.1   Strategy of inquiry

The strategy of inquiry is referred to as the type of model that provides specific direction for procedures in research design (Creswell, 2009). As mentioned earlier, this research focused on a mixed method design that utilised sequential explanatory design, which consists of two distinct phases: quantitative followed by qualitative. Figure 3.2 demonstrates the research model of sequential explanatory design adapted from Creswell (2009, p. 209).
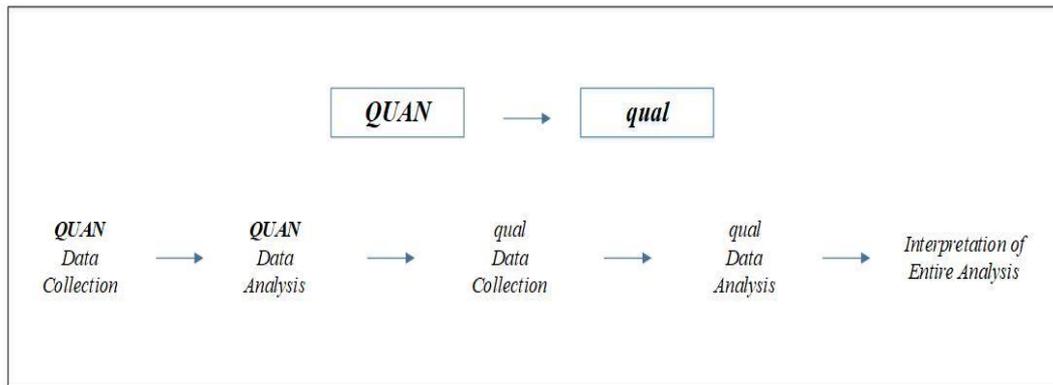
Figure 3.2: Research model of Sequential Explanatory Design (a) adapted from Creswell (2009, p. 209)

Tashakkori and Teddlie (2010) explained that the steps of sequential explanatory design commence by forming categories of themes through quantitative (QUAN) analysis and then confirming these categories with the qualitative (qual) analysis of other data. Creswell (2009) insisted that a sequential explanatory strategy is a popular strategy for a mixed method design that often appeals to researchers with robust quantitative learning. Therefore, the researcher uses the sequential explanatory strategy by collecting and analysing quantitative data at the first stage to; i) identify the components of a construct through factor analysis of quantitative data, ii) recognise issues that emerged from the outliers, and; iii) highlight the significant hypothesis results from the tests that have been conducted. Subsequently, the researcher emphasises these quantitative results in qualitative data collection and analysed the findings by validating the emergent themes as recommended by Tashakkori and Teddlie (2010).

This research used quantitative material derived from questionnaire surveys to reach a large number of participants and employed qualitative interviews

to provide rich data on the insights into the depth of the practice of peer coaching in secondary schools. According to Creswell (2009, p.203), "there is more insight to be gained from the combination of both qualitative and quantitative research than either form by itself"; and the researcher posits that their combined use provides an expanded understanding of the research problem. To make this clear, Table 3 illustrates the method and instruments related to the research questions that are being used in this study:

Table 3.1: Summary of research questions and methods used in the study

Research Question	Method and Instruments
How do teachers use peer coaching practice as an element of educational change in Malaysian secondary schools?	Quantitative data (Survey) Qualitative data (Interview)
How significant is the correlation between teachers' perception of peer coaching practice with teacher organisational commitment and self-efficacy?	Quantitative data (Survey) Qualitative data (Interview)
How do State Officer and Principal support the implementation of peer coaching practice as an element of PLCs in Malaysian secondary schools?	Qualitative data (Interview)
What are the potential barriers in implementing peer coaching in Malaysian secondary schools?	Qualitative data (Interview)

3.3.2   Research methods

As a mixed-method study, this research uses a survey for quantitative data and semi-structured interviews for qualitative data collection. The survey includes the questionnaires modified from previous research (Mowday and

Steers, 1979; Rajab, 2013, and; Schwarzer, Schmitz and Daytner, 1999). Meanwhile, the semi-structured interview is developed from the issues that identified in the literature review and the quantitative analysis such as the significant different of teachers' perception in different positions and school locations, the evaluation issues of peer observation, time constraints and the commitment and satisfaction to work issues.

3.3.2.1 Survey

The survey in the first phase of research is utilised to collect teachers' perceptions on i) the peer observation as a coaching task; ii) teachers' organisational commitment, and; iii) teachers' self-efficacy.

For the perception of peer observation, the researcher modified a questionnaire designed by Rajab (2013) who investigated the elements of peer coaching amongst teachers in Dubai. This questionnaire consisted of 24 items that were categorised into three sections; i) participant background information; ii) perception on Peer Observation Scale (POS), and; iii) training skill experience.

Meanwhile, the instruments of the Organisational Commitment Questionnaire (OCQ) developed by Mowday and Steers (1979) was employed in investigating teachers' commitment to the school organisations. According to Kanning et al. (2013), the OCQ compiled by Mowday and Steers (1979) is the most frequently used measurement related to the affective commitment. This OCQ consists of 15 items, of which six are negatively poled. Meyer and Allen (1991) acknowledged Mowday and Steers's OCQ with strong evidence

for internal consistency, reliability, convergent, discriminant and predictive validity. Although Meyer and Allen (1991) developed 18 items of affective, continuance and normative commitment, their questionnaire encountered issues such as having redundant items, item wording and factor structure in continuance commitment components (Jaros, 2007).

Consequently, this research uses the 15 items OCQ by Mowday and Steers (1979) in order to focus on the affective commitment amongst teachers to their school organisation. Abston (2015) argued that the OCQ by Mowday and Steers (1979) is a better predictor of faculty trust in the Principal than the OCQ by Meyer and Allen (1991). In his findings, Abston (2015) found that trusting the Principal was better explained by the OCQ of Mowday and Steers (1979) than by the OCQ by Meyer and Allen (1991). In the meantime, Celep (2000) developed Teacher Organisational Commitment that consists of four dimensions of commitment, which are; i) commitment to school; ii) commitment to teaching occupation; iii) commitment to teaching work, and; iv) commitment to a workgroup. However, only the first dimension of commitment to the school by Celep (2000) that consists of nine items adapted from the affective commitment by Mowday and Steers (1979), are related to this research. Moreover, Mowday (1999) insisted that the concept of OCQ is still relevant even though the nature of the employment relationship appears to have changed considerably in the past 25 years. Therefore, this research concentrates on employing the OCQ by Mowday and Steers (1979) in investigating the teacher's commitment to their school organisation.

As the pioneer in self-efficacy study, Bandura (2006) developed a myriad of the self-efficacy scales related to the different background of participants and researchers. The Teacher Self-efficacy Scale (TSES) constructed by Bandura (2006, p. 238) consists of 28 items in six dimensions, which are; i) efficacy to influence decision making; ii) instructional self-efficacy; iii) disciplinary self-efficacy; iv) efficacy to enlist parental involvement; v) efficacy to enlist community involvement, and; vi) efficacy to create a positive school climate. Moreover, Schwarzer, Schmitz and Daytner (1999, p. 2) developed a 10 item scale of teacher self-efficacy that measured four significant areas, which were; i) job accomplishment; ii) skill development on the job; iii) social interaction with students, parents, and colleagues, and; iv) coping with job stress. Meanwhile, the Teacher Sense of Efficacy Scale built by Tschannen-Moran et al. (1998) contained 24 items that were categorised into three constructs, which were; i) efficacy for instructional strategies; ii) efficacy for classroom management, and; iii) efficacy for student engagement. However, the researcher decided to employ TSES by Schwarzer, Schmitz and Daytner (1999) as a reason for the less items provided with the significant constructs to avoid prolonged items in the limited survey questionnaire conducted in the research.

A one to four Likert scale (Chang, 1994) was used to gather the data for POS, OCQ and TSES (1= strongly agree, 2= agree, 3= disagree, and 4= strongly disagree), whilst an open-ended question was used to ascertain the training skill experience. The Likert scale was chosen because it can show clearly teachers' perceptions by measuring the extent to which they agree or

disagree when answering the survey (Osman, 2009). According to Lozano, García-Cueto and Muñiz (2008), the maximum number of alternatives in the Likert scale is between four and seven. Therefore, the researcher decided to utilise one to four Likert scale measurement by eliminating a neutral option for the research. Sturgis, Roberts and Smith (2014) insisted that the one to four Likert scale measurement could reduce the inherent ambiguity and distraction in data collection that developed from a neutral opinion or having no opinion for a particular question or statement. In addition, the instruments in the survey were a compilation from the established questionnaires that have been tested and used by the researchers separately such as OCQ (Osman, 2009; Stegall, 2011; Wan Roslina, 2011); TSES (Ismail, Yen and Abdullah, 2015), and: POS (Rajab, 2013).

3.3.2.2 Questionnaire instrument

Overall, the survey (Appendix A) contains 56 items divided into five sections; i) participant background information; ii) POS; iii) OCQ; iv) TSES, and; v) Teacher's training skill experience. Table 3.2 demonstrates the summary of items in the survey for the research.

Table 3.2: Summary of the items in the survey

Section	Type	Dimension	Item's number
A	Demographic Information	Gender	1
		Age Group	2
		Years of class teaching experience	3
		Years of experience with peer observation	4
		Level of Education	5
		Current Position	6
		Type of school	7
		School location	8
B	Peer Observation Survey (POS)	Benefit	9, 11, 14, 16, 17, 19, 22, 23, 25, 27, 29, and 30
		Constraint	10, 12, 13, 15, 18, 20, 21, 24, 26, and 28
C	Organisational Commitment Questionnaire (OCQ)	Affective Commitment	31, 32, 34, 35, 36, 38, 40, 43 and 44
		Calculative Commitment	33,37,39,41,42 and 45
D	Teacher Self-efficacy Scale (TSES)	-	46,47,48,49,50, 51,52, 53, 54 and 55
E	Teachers' training skill	Yes or No and completing data of training (Course, duration, time and place)	56

The participant's demographic information (see Table 3.2) requested eight personal demographic background details. Meanwhile, the POS with 22

items investigated what constitutes effective peer observation, the teachers' opinions of peer observation as a strategy, and how it assists them. The items of POS are divided into two dimensions; i) Benefit (12 items), and; ii) Constraint (10 items). The OCQ in the survey measuring a teacher's commitment to the school organisation uses two dimensions: i) Affective Commitment (nine items), and; ii) Calculative Commitment (six items). The ten items of TSES applied in the survey to measure teachers' self-efficacy are in four major areas: i) job accomplishment; ii) skill development on the job; iii) social interaction with students, parents, and colleagues, and; iv) coping with job stress.

For the training skills section, an open-ended question (Yes or No) is developed to investigate the teachers' experience in previous training. The question is followed by the other open question related to the training and course that the teachers have completed regarding their teaching and learning skills.

3.3.2.3 Interview

According to Brundrett and Rhodes (2014), there are three primary types of the interviews in educational research; i) unstructured; ii) structured, and; iii) semi-structured. Unstructured interviews are developed with no predefined agenda or theoretical framework, whilst structured interviews are based on a series of predefined and detailed questions (Brundrett and Rhodes, 2014). Meanwhile, semi-structured interviews work with a series of predefined

questions under main-headings but allow some degree of latitude in what is discussed (Brundrett and Rhodes, 2014).

This study employed semi-structured interviews in the qualitative data collection phase that enabled the researcher to guide the interview and to ensure that the participants addressed the key issues that were defined in the schedule (Burton, Brundrett and Jones, 2014). The interviews focused on the participants' experience, understanding and perception of the peer observation process, potential barriers and challenges, school strategies in developing a collaborative environment, teachers' commitment, teachers' training and recommendations related to the implementation of peer coaching in schools. Therefore, the semi-structured interviews conducted were intended to provide insights into how the participants view these remarkable and significant issues that were identified in the survey element of the study for further explanation.

3.3.2.4 Language use in the research

The language used in the survey and interview was Malay because the participants' mother tongue was Malay. Therefore, the questionnaire and interview questions were translated from English into Malay by the researcher. Temple and Young (2004) asserted that if the researcher sees themselves as neutral and objective, it does not matter if they carry out the translation. However, awareness of researcher bias and potential loss of language in translation, the Malay translated questionnaires and interview questions were referred to two Malaysian experts in educational research,

who were the lecturers in the faculty of education in Malaysia. According to Sha and Immerwahr (2018), a collaboration between experts and researcher who knows the study objectives well can identify points of confusion to facilitate better understanding amongst all involved and provide guidance to minimise costly and time-consuming retranslation.

3.3.2.5   Pilot test for validity and reliability

A pilot test for the questionnaire and interview questions was conducted before the actual data was collected. The pilot tests are implemented to determine whether problems exist that need to be addressed before collecting the real data for the study (Rothgeb, 2011). Although the questionnaire was modified from previously validated and reliable research, the difference between language and culture involved in the research was considered, as this could affect the reliability. Hence, the pilot test was conducted to ensure the validity and reliability of the questionnaire (Creswell, 2013).

As suggested by Heale and Twycross (2015), the researcher used content validity and face validity to measure the instruments in the questionnaires. The content validity is formed to ensure the relevant content domain for the construct, whilst the face validity is to observe whether the questionnaire looks like a measure of the construct of interest (Trochim, 2006). The content validity involved the experts in the research area, while the face validity involves the respondents through the pilot test conducted (Webb et al., 1999).

Therefore, before conducting a pilot test, the researcher asked two experts from Malaysian Higher Education Institutes to validate the survey instruments for the research. Those experts were acquainted with the field of educational research and were active within the same research area. Currently, they are also acknowledged by the MOE, as trainers for teacher researchers in Malaysia. After advice from the experts for rewording some parts of the items, the questionnaires were distributed for the pilot test.

The pilot test was conducted using the Bristol Online Survey (BOS) application amongst 23 respondents to test the validity and reliability of the survey items. The BOS application allowed the researcher to conduct and analyse a secure online survey and authorised by the LJMU with personal student account registration. All of the respondents were secondary school teachers in the research population not including the NRSS and GARS teachers. The result of the pilot test was assumed to be valid with the research population based on the similarity of background; the respondents were teaching the Arabic language in secondary schools.

The researcher analysed and measured the item's reliability by Cronbach's Alpha coefficient, which is provided in the SPSS v.23 application. The Cronbach's Alpha is used to assess the strength of the internal consistency or reliability of the measurement that refers to the extent to which it is a consistent measure of a concept (Goforth, 2015). According to Pallant (2010), Cronbach's Alpha coefficient is one of the most commonly used indicators of internal consistency. Furthermore, George and Mallery (2016) provided a guide to evaluate the reliability coefficient as i) Excellent if greater than .90;

ii) Good if greater than .80; iii) Acceptable if greater than .70; v) Poor if greater than .50, and; Unacceptable if less than .50. Therefore, from the test, the levels of reliability of each variable are: i) Peer Observation Survey (0.820: good); ii) Teacher's Commitment (0.811: good), and iii) Teacher's Self-efficacy (0.953: excellent). The reliability results indicate a high level of reliability as the results are all above 0.70, which is the acceptable value according to Field (2013).

Despite a high level of reliability, ten items from the questionnaires were found to negatively influence the Cronbach's Alpha value. However, the researcher decided to leave the items with some modification, after discussing with the supervisors and considering the significance of the items in the research. The decision to leave the items was due to several conditions: first, the items were established by previous research; Second, the Cronbach's Alpha coefficient which increased within the items was insignificant in that it did not exceed more than five per cent (for example: the value of reliability if Item 40 deleted is 0.823 compared with the variable value which is 0.811, that only 1.48%); Third, the assumption of respondents' misunderstanding of the terms used in the items, which can be caused by the variance of the result. The misunderstanding of terms in the items might occur during the process of translation. Therefore, a modification of items through rephrasing and rewording were considered to increase the level of understanding amongst the respondents. The amendments of the items are as shown in Appendix G.

Meanwhile, Golafshani (2003) found that reliability and validity in the qualitative paradigm are conceptualised as trustworthiness, rigour and quality. Therefore, the researcher discussed with the supervisors comprehensively to ensure the quality of the validity throughout developing interview questions. Before commencing the main study, a pilot interview was undertaken with a volunteer teacher from a secondary school using Skype. From the pilot interview, the researcher considered modifying some questions (for example: rewording unclear translation and meaning of PLCs and peer coaching) regarding the feedback from the interviewee on the difficulty of the understanding and further explanation of the contents.

3.3.2.6   Research participants

Considering Fresko and Alhija (2015), the research on learning communities can be collected either heterogeneously or homogeneously. The data collection can be based on the grade level taught, the subject matter of the department, school type, or school district. A heterogeneous population or sample is one where every member has a different value for the characteristic, while a homogeneous set of data is constructed of subjects similar to each other (Glen, 2016). Although Maier (2005) argued that the heterogeneous group of samples provide the advantage of diversity, Manning et al. (2009) insisted that the homogeneous groups of individuals, who share everyday experiences might be more relevant and useful for participants. Moreover, the focus on a homogeneous group of teachers, such as teaching a particular subject is the recommended strategy to avoid the dominant group monopolising as in independent study (Mertens, 2014). Therefore, the

researcher chose to focus on the homogeneous group of Arabic language teachers in NRSS and GARS. The researcher's previous background as an Arabic language teacher in a school within the research population provided advantages in conducting the research for better in-depth understanding.

The research is focused on the Arabic language teachers as this subject is only offered compulsory in the NRSS and GARS, which are organised under the Islamic Education Division, MOE. Therefore, the improvement of Arabic language teachers' development in NRSS and GARS is essential as the Arabic language is amongst the core subjects in both types of schools (Mat Teh and Alias, 2008). Besides, the importance of mastering this language is not just a religious basis, but the Arabic language is becoming one of the most popular languages spoken all over the world and one of the official languages for the United Nations (Sakho, 2012). For students' future careers, it is an advantage to learn this language beside English as an international language around the world.

3.3.2.7   Research population

Consequently, the population of this study was the Arabic language teachers in NRSS and GARS in two states (Perlis and Kedah) of the Northern Peninsula Malaysia. Both states are known to vigorously implement Islamic culture and education related to the Arabic language. As the position of both states is adjacent to each other, it allowed the study to be conducted efficiently within the recommended period. According to the MOE (2016b), there are five NRSS and 30 GARS in the population with approximately 280

Arabic language teachers. These schools are also scattered in urban and rural areas and thus represent the range of geographical backgrounds in the research population.

3.3.2.8   Sampling

In the survey data collection, the size of the sample for the research was determined using the Krejcie and Morgan (1970a) sampling method to ensure an adequate sample represented the research population. The sample size formula developed by Krejcie and Morgan (1970a) determines the samples in cases where the researcher wants to come within five percentage points (with 95 per cent certainty) of what the results would have been if the entire population had been surveyed. Krejcie and Morgan (1970a) developed a sample size table for reference to facilitate researchers in determining their appropriate sample size. According to the Krejcie and Morgan's (1970b, p. 607) sample size table, the sample size for a population size of 280 teachers, is 160 teachers. To avoid the sampling error and data missing (Creswell, 2013), the researcher disseminated 200 questionnaires to teachers randomly to the 36 schools in the research population.

The stratified sampling was being used in the survey data in order to improve the accuracy and representativeness of the results by reducing sampling bias (Patton, 2002). Therefore, the researcher distributed the questionnaires proportionally amongst the schools, which was five sets of survey each for 30 GARS schools and 10 sets of survey each for five NRSS schools. The plausible reason of the proportions in survey distribution as the Arabic

language teachers in NRSS schools are more in total than GARS schools, and to ensure the survey represents from all the subgroups of NRSS and GARS schools.

Meanwhile, for the qualitative data in the second phase of research, the researcher utilised the previous experience and connection as a school teacher in the research population to recruit the potential participants to be interviewed. According to Cleary, Horsfall and Hayter (2014, p. 474), the number of participants in qualitative research is determined to; i) generate relevant information sufficiently; ii) benefit from the interactivity amongst the participants; iii) prevent socially correct responses, and; iv) avoid non-conducive activities. Therefore, the researcher indicates the number of participants by stratified sampling to represent the research population of teachers from all type of schools in both states to avoid saturation in one area. Table 3.3 demonstrates the sample size of the research population used by the researcher in the qualitative phase.

Table 3.3: Sample size of the research population for qualitative phase-interviews

Phases	Sample Type	Size	Proportion by type of Schools		Proportion by States	
			NRSS	GARS	Perlis	Kedah
1	Teachers	15	5	10	8	7
2	Principals	4	2	2	2	2
3	State Officers	2	-		1	1
Total		**21**	**7**	**12**	**11**	**10**

From the population, 15 teachers were from NRSS (five samples), and GARS (10 samples) whilst four Principals from both NRSS and GARS schools in two states respectively were interviewed. Additionally, two State Officers, who are responsible for Arabic language teachers' development from each state were involved in the interview procedure.

3.3.2.9 Data collection procedure

The researcher conducted research data collection on his own by travelling from one school to another school in the research population. Due to the large and full research population, the data collection procedure was conducted in four stages: i) survey; ii) interview with teachers; iii) interview with Principals, and; iv) interview with State Officers.

3.3.2.10 Survey

For the first stage of the survey, the researcher visited the NRSS and GARS schools in the population to discuss with the Principals and Head Panel of the Arabic language. With the background as a school teacher and own relationships with the NRSS and GARS schools, the researcher was accepted by the schools' management without any challenging procedures. After briefing the schools about the purpose of the project, the researcher left appropriate copies of questionnaires for the teachers with the Head Panels to distribute amongst the Arabic language teachers in the schools. They were given approximately one week to decide either to participate or not in the survey. After almost two weeks, the researcher revisited the schools and collected the completed questionnaires that had been gathered by the Arabic

language Head Panel in the sealed enveloped provided. Only the respondents from one school, situated on a separate small island, sent their completed questionnaires by post to the researcher's home address. From the 200 surveys distributed, only 186 of them were returned to the researcher. However, the returned surveys are greater than the sample size needed, which is 160 respondents. Therefore, the researcher included all 186 returned surveys in the preliminary data analysis to enhance the credibility of population representation. The process of collecting the survey data took almost one month to be completed.

3.3.2.11 Semi-structured interview

Semi-structured interviews were conducted to elucidate the issues that emerged from the surveys. The issues in surveys were recognised from the significant difference and correlation results of hypothesis tests in inferential analysis, and the outliers and the substantial tendencies such as the highest or the lowest responses and the difference between agree and disagree responses in descriptive analysis (De Vaus, 2001). The interview sessions involved three phases, which were: i) Arabic language teachers, ii) Principals, and; iii) State Officers. All of the sessions took place in the participants' school or office. Table 3.4 demonstrates the background of the participants involved in the interview sessions.

Table 3.4: Background of participants in interviews

Demographic	Number of participants	Percentage of the total interviews (%)
Position		
Teachers	15	71
Principals	4	19
State Officers	2	10
Gender		
Male	13	62
Female	8	38
Type of Schools		
NRSS	7	37
GARS	12	63
School Location		
Urban	10	53
Rural	9	47

Table 3.4 demonstrates that fifteen teachers (71%), four Principals (19%) and two State Officers (10%) participated in the interview sessions. Most of the participants were male (62%), whilst the remainder were female (eight participants, 38%). The majority of participants were from GARS (12 participants, 63%), whilst the remainder were from NRSS (seven participants, 37%). With regard to the school locations, the number of participants from urban areas (10 participants, 53%) is slightly higher than from the rural areas (nine participants, 47%).

3.3.2.11.1 Interview with teachers

The participants were selected by stratified sampling to represent the research population. The researcher is familiar to the population when he

used to be an Arabic language teacher in one of the schools in the population. This experience gives the researcher an advantage in approaching the participants and collecting their contact information. However, the participants in the interviews did not required to be selected from the survey respondents as the respondents are anonymous and volunteered in the survey. At the same time, the researcher also contacted the Head Panels in the schools to get a list of the teachers and selected the participants as suggested by the Head Panels to ensure the collaboration and cooperation during the interviews session.

In order to recruit the participants, the researcher prioritised the potential participants amongst the colleagues who already recognised him before as a school teacher and those who have been working together in the school events and programmes to ensure the comfort feeling and independent interviews conditions. The researcher contacted the selected participants privately by phone briefing them about the research and giving them three days to decide whether to participate or not in the interview. Fortunately, all the participants accepted to be interviewed, and the appointments were booked for the interview sessions according to the participants' availability.

All the sessions were conducted in the participants' schools and within school time for their convenience. Although 16 participants were planned to be interviewed at the beginning, only 15 participants were actually interviewed because the researcher's time for data collection was limited and the teacher was burdened by the workload. However, data collected from the interviews conducted are adequate and saturated for the analysis. Overall, each

interview session took between fifteen and thirty minutes. Every interview commenced by completing the consent forms and was recorded on the researcher's phone. The recorded voice of the interviews in the researcher's phone have been deleted after being transferred to the researcher's computer at University with personal password security. The process of interviews with the teachers took around three weeks to be completed.

3.3.2.11.2 Interview with Principals

The second phase of the interview sessions was conducted with the selected Principals from both NRSS and GARS in two states respectively. Four Principals were contacted by the researcher and were involved in the interviews. After briefing the Principals with the interview procedure, they were given three days to decide whether to participate or not. Despite the abundant workload and management meetings, all of the Principals accepted to contribute to the research and the interview sessions were conducted within their available time. All of the interviews with the Principals were conducted in the evening after the school sessions in their own office and took between twenty and forty minutes to be completed. The interview began with completing the consent form and being recorded as same as the procedure conducted with the teachers.

3.3.2.11.3 Interview with State Officers

The last phase of the interview process involved the State Officers in the Islamic Education Sector under the Education Department at the state level. Every state assigns an officer that takes responsibility for Arabic language

teacher performance and development. Thus, the researcher contacted Officers from each state to book appointments in conducting interview sessions. The interviews were conducted in the Officers' workplace. The recorded interview sessions took between twenty and fifty minutes after a briefing and completing a consent form.

3.3.2.12 Data analysis

The critical part of the research is data analysis, as every part of the data collected will affect the result (Walliman, 2005). Data analysis for this research was carried out regarding the sequential explanatory mixed method approach as previously suggested by Creswell (2009). At the same time, the analysis conducted also reflected the research questions highlighted in the first chapter. Therefore, quantitative data collected from the questionnaire was analysed in the first phase, followed by qualitative data from the interview sessions (Phase 2). Afterwards, both sets of data were interpreted together to address the study's research questions.

3.3.2.12.1 Questionnaires

The questionnaires from the survey were analysed using SPSS v.23. There are two types of data analysis; descriptive and inferential analysis. According to Trochim (2006), descriptive statistics analysis is used to describe the basic features of the data in a study by providing simple summaries about the sample and the measures with graphic descriptive analysis. Whilst Bhatia (2018) described descriptive analysis as the first level of research analysis that helps researchers summarise the data and find patterns. Therefore, in

this research, descriptive analysis demonstrates; i) an overview of participants' demography based on personal and school backgrounds, and; ii) participants' responses to the POS, OCQ, and TSES surveys. All of the descriptive analysis was measured by frequencies and percentages of the responses as suggested by Bhatia (2018). The frequencies and percentages presented a set of categorical data consisting of ordinal (participant background) and nominal data (POS, OCQ, and TSES) using table and graph for a better explanation and description of the data.

Meanwhile, inferential analysis is a complex analysis that shows the relationship between several different variables and is used to generalise results and make predictions about a larger population (Bhatia, 2018). This research uses five types of inferential analysis, which are: i) factor analysis; ii) Cronbach's Alpha, iii) independent sample t-test; iv) one-way ANOVA, and; v) Spearman's correlation.

According to Glen (2016), factor analysis is a process to shrink a mass of data into a smaller data set for more understanding and to be more manageable. Hence, factor analysis was conducted on the POS to manage items in the specific significant group of constructs. However, the researcher did not conduct factor analysis on OCQ and TSES as both questionnaires were established and been validated by many researchers (Foley and Murphy, 2015, and; Kanning and Hill, 2013). Meanwhile, the Cronbach's Alpha test was used on the POS, OCQ and TSES survey aspects respectively, to measure the reliability and internal consistency of the

instruments by estimating how well the items that reflect the same construct and thus yield similar results (Trochim, 2006).

Moreover, the independent sample t-test, the one-way ANOVA, and the Spearman's correlation test were used in order to test the hypotheses for the research questions. The independent sample t-test is used to compare the means of two sets of data, while the one-way ANOVA is employed to compare two means from two independent groups using F-distribution, which usually defines the ratio of the variances of the two normally distributed populations (Glen, 2016). Therefore, the researcher conducted an independent sample t-test to compare means in gender, type of schools and school location, whilst the one-way ANOVA was conducted to compare means for groups of age, teaching and observation experiences, level of studies, and position in schools. In the meantime, Spearman's correlation coefficient which measures the strength of a monotonic relationship between two variables was employed between constructs in the POS, OCQ and TSES surveys (Glen, 2016). The researcher decided to use the Spearman's correlation coefficient, which is a non-parametric test, due to the fact that data collected did not have a normal distribution (Glen, 2016).

3.3.2.12.1.1 Research hypothesis

In the quantitative analysis, ten alternative hypotheses regarding participants' background (eight hypotheses) and a correlation between variables (two hypotheses) are tested in order to explain the inferential data. According to McLeod (2018), the alternative hypothesis states that there is a significant

relationship or difference between two variables, which is contrary to the null hypothesis. The alternative hypothesis are selected with the consideration that the observations are the result of a real effect with some amount of chance variation superposed (Weisstein, 2019). Table 3.5 demonstrates the hypotheses tested in this research.

Table 3.5: Research hypotheses

No.	Hypotheses
$H_1$1	There is a significant difference in teachers' peer observation perception between male and female
$H_1$2	There is a significant difference in teachers' peer observation perception between GARS and NRSS schools
$H_1$3	There is a significant difference in teachers' peer observation perception between urban and rural schools
$H_1$4	There is a significant difference in teachers' peer observation perception between teachers' ages
$H_1$5	There is a significant difference in teachers' peer observation perception between teacher's year of teaching experiences
$H_1$6	There is a significant difference in teachers' peer observation perception between teacher's year of observing experiences
$H_1$7	There is a significant difference in teachers' peer observation perception between teachers' educations
$H_1$8	There is a significant difference in teachers' peer observation perception between teachers' current positions
$H_1$9	There is a significant relationship between constructs of peer observation scale and constructs of organisational commitment.
$H_1$10	There is a significant relationship between constructs of peer observation scale and teachers' self-efficacy

3.3.2.12.2 Semi-structured interview

According to Bailey (2008), the transcription of the recorded interview involves close observation of data through repeated careful listening by the researcher. Therefore, the researcher transcribed the recorded interviews carefully after repeating audio recording a couple of times to avoid missing the critical aspect of the data collection. Then, the transcriptions were sent back to the interviewees for confirmation and validation to avoid personal bias. Moreover, when the researcher transcribed the recorded voice, it made the researcher more familiar with understanding the data. Pope, Ziebland and Mays (2000) insist that familiarity with raw data, and attention to what is there rather than what is expected, can facilitate nuances, realisations or ideas which can emerge during analysis.

Since the interviews were conducted in the Malay language, the transcription of interviews was translated into the English language. Due to limited experience and ability with the English language, the researcher hired an expert in both languages to translate the transcriptions from Malay to English. For ensuring the validity of the translations, the researcher referred once again to the English language expert teacher in a Malaysian secondary school who is recognised and acknowledged by the MOE for the verification. According to Roberts (1997), it is essential for the researcher to work from the original speakers' voices for accurate transcription. Therefore, the researcher referred to the respondents' original voice in a few cases for the confirmation.

In the beginning, the researcher decided to use Nvivo software for qualitative data analysis. According to Wong (2008), Nvivo software allows for qualitative inquiry beyond coding, sorting, and retrieval of data. At the same time, Nvivo software is also designed to integrate coding with qualitative linking, shaping and modelling (Wong, 2008). However, after a discussion with the supervisor, the researcher started to analyse qualitative data manually for the reason of a more profound understanding of it and to be more familiar with the data. Consequently, the researcher read the transcripts repeatedly and highlighted the possible themes and codes that emerged from the data. The researcher listed all of the codes from the transcriptions as shown in Appendix H. Later, all the codes were categorised in themes according to the research questions and the identified issues from the survey analysis.

Maguire and Delahunt (2017) insisted that themes constructed from data should be coherent and be distinct from each other. Therefore, the researcher developed, reviewed and modified the preliminary themes to address the research questions, and then prepared a report of the analysis conducted.

3.3.2.13 Ethical consideration

Ethical issues have been addressed in many stages of the research, including in specifying the research problem and questions, collecting and analysing data, and interpreting the findings (Creswell, 2009). Moreover, Liverpool John Moores University (LJMU)'s code of practice for research (2010) is utilised under the guidelines from the British Educational Research

Association (BERA, 2011). Therefore, the researcher obtained ethical approval from the LJMU Research Ethics Committee, reference number 16/TPL/010, before conducting the research (Appendix I). The Ethics Committee approved the research questions and the data collection procedure. Besides, as explained in the previous topic of data collection, the researcher must have permission to conduct research in Malaysian schools. Hence, the researcher applied for permission from the EPRD and EPU (Appendix J and K) and was given a researcher identification card to conduct research (Appendix L). However, to ensure a smooth process to the data collection, the researcher also applied for permission from the State Education Department (Appendix M). All the participants in the data collection procedure are volunteers and completed a consent form (Appendixes A and C) which classified the importance of the research, participant's rights and the confidentiality of the research procedure. All personal details were confidential, and the data is stored in a secure place in the researcher's workplace cabinet that can only be accessed by the researcher. Moreover, the electronic documents are saved in the researcher's University hard disk and computer with password security protection.

Meanwhile, in analysing and interpreting the findings, the researcher considered protecting the anonymity of individuals and provided an accurate account of the information as suggested by Creswell (2009). No specific individual respondent's name was collected on the survey, and all of the interview participants' names were pseudonyms. Every specific name of the

individual, school, state or unit in the interview transcription were changed to a symbol and a number.

According to Walliman (2005), every researcher should always give full commitment with truthfulness and honesty to the data collected to ensure the essence of ethics, such as; i) avoiding plagiarism; ii) having a sense of responsibility and accountability, and; iii) acknowledging other ideas in citations and references. Moreover, the American Psychological Association (2010) described the characteristics of pure scholar research, which are: i) ensuring the accuracy of scientific knowledge; ii) protecting the rights and welfare of research participants, and; iii) protecting intellectual property rights. Therefore, the researcher fulfilled the commitment to ensure research ethics by establishing the above elements in the research.

3.3.2.13.1 Protecting participants

This can entail a number of aspects, including physical harm, stress, loss of self-esteem and coercion. In this study, there was no risk of physical harm and no coercion of any of the participants to be involved in the research or to disclose information. The rights of any individual in a research study are that confidentiality of information and anonymity are assured and that participation is voluntary and based on informed consent (Couchman and Dawson, 1995).

The researcher understood fully the ethical and moral issues arising from the dual role of the researcher as a colleague and teacher in Malaysia. This balance of power and status differential had to be explored fully in the

researcher initial introduction to the participants. In this study, the interviewer is also a teacher from a state school in Malaysia, which had to be addressed before the interviews commenced. Dual role research (practitioner and researcher) raises two overarching issues; the position of power and the release of results compromising the privacy or professional status of the teachers.

The researcher proceeded carefully with this integrated role, in a justifiable and sound manner and without threatening the validity of the research endeavour. Participants agreed voluntarily to participate (i.e. without physical or psychological coercion) and agreement was based on full and open information (Appendix A and C). The timing of the interviews took account of the patterns of the teachers. Also of critical importance, therefore, in minimising harm to participants, were ethical considerations related to informed consent and confidentiality (Appendix A and C).

The principle of informed consent means that potential research participants are given as much information as necessary to make informed decisions about whether or not they wish to participate in the research (Cohen, Manion and Morrison, 2007). This means the researcher had the responsibility to ensure that consent was based on the teachers being truthfully informed about the risks and benefits of taking part in the research. Informed consent and participation selection for the whole study occurred at the beginning of study. The researcher approached schools after the initial phases of the development of the questionnaire.

The researcher informed them verbally about the research, including possible risks and benefits to participation. It was important from the start of this process that the teachers were willing to open up and, therefore, the researcher had to reassure them that all information would be confidential and that only the researcher would listen to any recordings made. The consent form clearly indicated that all information would remain anonymous and that the teachers could withdraw at any time. Possible benefits were the opportunity for participants to reflect on their experiences as developing teachers, and support and guidance through gaining greater understanding of factors that help or hinder peer coaching.

Possible risks related to concerns about confidentiality and anonymity, and strategies for preserving these were outlined. Informed consent of each interviewee was gained (Sarantakos, 2005), by each participant being given a participant information sheet (see appendixes A and B) explaining their right to confidentiality, and to withdraw at any stage during the research, in line with the University Ethics Committee guidelines.

Bryman (2004) suggests that the issue of privacy is closely linked to the notion of informed consent, particularly in relation to the issues of anonymity and confidentiality. According to Christians (2000), ethics requires the researcher to take care to maintain the confidentiality of all data so that the identities, information of each participant and research locations remain confidential. Several measures were employed to ensure that confidentiality and anonymity were maintained.

All transcriptions were kept in a secure password-protected hard drive with restricted access. Participants were assured of anonymity by ascribing a number to each trainee in the reporting of the data. Cohen, Manion and Morrison (2007) talk about privacy in relation to respecting the rights of participants to only divulge information with which they feel comfortable. It was also discussed that the content of the interviews was not part of their regular professional practice as part of the programme and they were being conducted solely for the purpose of a research project. At no time during the research process was pressure put on the teachers to reveal information.

Deception is linked to the ethical principle of informed consent and voluntary participation. Neuman (2003) contends that the right of a person not to participate becomes a critical issue whenever the researcher uses deception, disguises the research, or uses covert research methods. In carrying out this study, no deception was intended or knowingly carried out. The researcher was also aware of the suggestion by Sarantakos (2005) that a potential, ethical weakness of qualitative research relates to the requirements that researchers enter the personal world of their participants. In this study, all care was taken to ensure that the researcher behaviour was ethical, unbiased and sensitive to the participants and their contexts (Guba and Lincoln, 1994).

3.4   Research challenges

The researcher faced some challenges in order to conduct the data collection and analysis process. Amongst the challenges in data collection included the distance of schools in the research population and the participant's workload.

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The researcher decided to distribute the survey manually, ensuring that the questionnaires were received and hopefully completed by the respondents. In the researcher's previous experience, many of the targeted respondents and teachers ignored the survey they received through the post and online. Therefore, meeting face to face with the Head Panels and the Principals reduced the potential of the survey being ignored. In one case, a school was situated almost 200 km from the researcher's residence. There, the survey which was given to the Head Panel went missing somewhere in the school office. The researcher needed to provide another survey form for the respondents in that school to be completed.

The researcher also faced a challenge in approaching and organising potential participants for the interviews due to their limited time and workloads. In some cases, the researcher did not get the opportunity to meet with the potential participants although he had visited the schools twice. The constraints of workload amongst the participants occurred from the extra curricular events that were organised at the schools and district level when data collection was being conducted. The same situations occurred in organising the interviews with the Principals and State Officers, which were booked a month in advance.

In analysing the data, the researcher needed to be familiar with SPSS programs for the quantitative data, and thematic coding for the qualitative data. With limited knowledge and experience with data analysis, the researcher faced difficult challenges to prepare the analysis. However, with

the direction from a statistics expert at LJMU and supervisory guidance, the challenges were handled successfully.

3.5　Summary of the chapter

In this chapter, the philosophical stance that has framed the basis of the research design was explained comprehensively. A mixed-method study with a sequential explanatory design was a proposal to explore the practice of peer coaching in PLCs programmes amongst Malaysian secondary school teachers. In detail, this research combined the survey technique in the quantitative paradigm in the first phase and the semi-structured interview in the qualitative paradigm in the second phase. At the same time, research methods regarding data collection and analysis were described in detail with ethical considerations. The researcher also shared some of the challenges in order to conduct the research. In the next chapter, findings of the research are presented commencing with the quantitative data.

CHAPTER 4

QUANTITATIVE RESULTS

4.1   Introduction

This chapter presents the findings of the quantitative analyses based on the objectives of the study. The chapter is thus sectionalised as follows: The first section presents an overview of the demographic and descriptive characteristics of the participants based on personal and school backgrounds. The second section presents the descriptive analysis of the POS, OCQ and TSES. The last section presents the findings of the inferential analysis commenced by factor analysis and reliability tests of the POS, OCQ, and TSES, followed by the analysis based on the research questions and hypotheses of the study. Specifically tested in this section are the independent sample-t-test, the one-way ANOVA, and the Spearman's correlation.

4.2   Background of the respondents

This survey was conducted amongst 280 Arabic language teachers in 35 schools drawn from two states (Kedah and Perlis) in the Northern Peninsula of Malaysia. Accordingly, of the 200 questionnaires that were randomly distributed, only 186 were returned. After screening the data, seven of the surveys were found unusable due to the invalidated data and considerable missing values in demographics and scales measured. As suggested by Kang (2013), these seven unusable responses were omitted with available

case analysis to produce unbiased estimates and conservative results. Hence, only 179 were accepted in the research. This gives an overall response rate of 90%. Table 4.1 shows the response rate of the survey.

Table 4.1: Response rate of the survey

	Frequency	Percentage
Schools according to the states	35	100
Kedah	31	89
Perlis	4	11
Schools according to the types	35	100
Government Aided Religious (GARS)	30	86
National Religious Secondary (NRSS)	5	14
Respondents		
Population	280	100
Minimum Sample required (Krejcie et al., 1970)	160	57
Surveys		
Questionnaire distributed	200	100
Questionnaire returned	186	93
Questionnaire accepted	179	90

The demographic characteristics of the respondents include their gender, age, education level, teaching experience, observing experiences, and the current employment position in the schools. Table 4.2 thus illustrates the personal/demographic characteristics of the respondents.

Table 4.2: Personal/Demographic characteristic of respondents

Demographic	Frequency	Percentage
Gender		
Male	71	41
Female	102	59
Missing data	6	
Ages		
Under 35	74	41
35 to 44	69	39
45 and above	36	20
Teaching's experience		
1 to 3 years	33	19
4 to 6 years	18	10
7 to 9 years	37	21
10 years and above	88	50
Missing data	3	
Observing experience		
1 to 3 years	79	45
4 to 6 years	39	22
7 to 9 years	20	12
10 years and above	37	21
Missing data	4	
Education level		
Diploma	16	9
Bachelor	150	84
Master/PhD	13	7
Current Employment Position		
Senior teacher	46	26
Normal teacher	89	51
In-training teacher	40	23
Missing data	4	

Table 4.2 shows that more than half of the respondents (59%) were females. This difference can be attributed to the trend where more female teachers responded to the questionnaires than their male counterparts as a result of simple random sampling. By the method of simple random sampling, every individual has an equal chance of being selected in the sample from the population (Acharya e al., 2013). Another plausible reason for this finding could be that there are more female teachers compared to their male counterparts in the teaching profession in Malaysia (MOE, 2017b; and, Norzaini, 2013).

The findings in Table 4.2 also show that most of the respondents are less than 35 years old (41%). The next quantum of respondents was aged between 35 and 44 years (39%). Meanwhile, the rest of the respondents (20%) were aged 45 and above. The situation reveals that the participants covered all levels of ages, from the young teachers to the mature ones. Whilst peer observation was more effective when the observer and the teacher who was being observed were from similar of backgrounds (Horner, Bhattacharyya and O'Connor, 2008), this assortment of ages provides relevant information for the different perception of peer observation amongst the teachers from the different level of ages.

On teaching experience, Table 4.2 shows that half of the respondents (50%) have been teaching for more than ten years, whilst 10% and 21% of the teachers have been teaching for four to six years, and between seven and nine years respectively. Meanwhile, 19% of the respondents have been teaching for one to three years. This statistic indicates that a good number of

the teachers had taught for a significant period of time. This places them in a good position to address the perception of peer observation practice.

Peer observation is critical in developing effective learning in the classroom (White, 2010). Hence, based on the observing experience of the participants, Table 4.2 indicates that the majority of respondents (45%) have one to three years observation experience. Accordingly, respondents with four to six years and seven to nine years observation experience were 22% and 12% respectively. Meanwhile, 21% of the respondents had more than ten years of observing practice in the schools. A plausible reason for the limited observing experience amongst the majority of the teachers is that the observing method is not practised widely in the schools. In addition, the teacher observation normally accustomed to supervising newly qualified teachers for evaluation and peer observation is a new approach introduced for teacher development (MOE, 2014b).

Analysing the teachers' level of education, the majority of the respondents had a Bachelor's degree (84%). Meanwhile, the respondents with a diploma were only 9%. A minimum group of respondents (7%) had a post-graduate certificate. The MOE has targeted that the minimum educational qualification for secondary school teachers should be a bachelor's degree. The respondents who only hold a diploma can be recognised as teachers from GARS. In the GARS, the school committee has the autonomy to choose the teachers who were being paid by the school board trust or state government. Hence, the research explores how the different levels of education

background amongst the respondents view the peer observation as a developmental process for teachers.

On teaching positions held by the respondents, the normal teachers represented 51% of the total respondents; teachers who were promoted to be senior teachers are 26%. Meanwhile, 23% of the respondents were in-training teachers. Most of the senior teachers are engaged with a leadership position in the school such as Head Panel, Principal Assistant and Excellent Teacher who are normally empowered by the Principal to supervise and observe other teachers (Yunus, Yunus and Ishak, 2010). Most of the in-training teachers are GARS teachers who are offered by the MOE to take the Malaysian Post-Graduate Courses during Holidays (KPLI-KDC) in Teacher Education Institutes to gain their qualification and job confirmation in the schools (MOE, 2015a). Therefore, this thesis investigates the perceptions of teachers in different positions in the schools.

Demographic data was collected from the respondents' current schools background. The background of the schools is based on the school category and the school location. Table 4.3 demonstrates the demographics of the school background due to the category and location.

Table 4.3: Respondents' school background

Demographic	Frequency	Percentage
Category		
Government Aided Religious (GARS)	140	80
National Religious Secondary (NRSS)	34	20
Missing data	5	
Location		
Rural	107	62
Urban	67	38
Missing data	5	

From the Table 4.3, it can be noted that most of the respondents were serving in GARS (80%). This is quite large in comparison to the respondents from NRSS (20%). Most of the GARS are community support schools, which are mainly established to accommodate large numbers of students. However, although NRSS schools were fewer than GARS schools, all the NRSS schools are clustered and controlled by the MOE. This means that the teachers in the NRSS schools were specially selected, well trained and skilled, in comparison to teachers in the GARS schools.

On the location of the schools, Table 4.3 indicates that 62% of the schools are situated in rural areas whilst 38% of the schools situated are situated in urban areas. This finding is related to the 2017 statistics of the MOE of Malaysia, which stated that 65% of the GARS and NRSS schools were situated in rural areas (MOE, 2017b).

4.3   Descriptive analysis

The inclusive descriptive analysis using frequency and percentages are used to analyse teachers' perception of the POS, OCQ, and TSES as an element of educational change in secondary school.

4.3.1   Descriptive analysis of Peer Observation Scale

The descriptive data analysis is done to assess the overall view of respondents' perception of the phenomena in the study. 22 items in the POS distributed into ten categories according to the themes designed in the questions are so done for better understanding and discussion. The categories discussed in the descriptive analysis are; ideals, enhancement, advantage, professionalism, peer visit routine, skills, self-motivated, interruption, job stress and management issue. Table 4.4 illustrates the distribution of items according to the themes. Moreover, an open-ended question in the peer observation questionnaire investigated the training and courses participated in by the respondents focused on peer observation skills and knowledge of CPD in their schools.

Table 4.4: Order of distribution of items in POS according to the themes

No	Themes	Items	
1	Ideal tool	P3	Contribution
		P17	Gaining new ideas
2	Enhancement	P14	Instruction enhancement
		P16	Not to improve CPD
3	Advantages	P19	Improves new teacher
		P21	Improve in-service teacher
4	Professionalism	P11	Evaluation
		P22	Meeting professional need
5	Visit routine	P15	Benefit visiting
		P20	Unbenefited visiting
6	Skills	P6	More idea and skills
		P8	Exchanging expertise
		P9	Enough time for feedback
7	Self-motivated	P1	Motivation
		P12	Worries
8	Interruption	P2	Interruption
		P13	Lack class control
		P18	Unhelpful to face challenge
9	Job overload	P4	Overwhelming
		P10	Job stress
10	Management issue	P5	Time consumption
		P7	No right to choose observer

POS measured respondents' perception of peer observation based on their knowledge, expectation and experience in school environments. As a tool of teachers' improvement practice, the items (P3 and P17) investigated what teachers perceived of the peer observation as an ideal tool in teacher's CPD. At the same time, POS also focused on the peer observation's enhancement in teacher's professionalism improvement (items P14 and P16), its

advantages to the teachers (items P19 and P21), how it meets teacher's professionalism expectation (items P11 and P22), and the benefit of peer visit routine for observation (items P15 and P20). Apart from measuring the skill's enrichment and enhancement of peer observation in teachers' strategy, these items also investigated teachers' expectation on their peer observer and how they mastered the observation's skill recently (items P6, P8, and P9).

In the meantime, peer observation for teacher professional development cannot escape the barriers and challenges from the teacher either himself or the school management as well. The elements of the constraint explore current challenges that are obstructing the practice of peer observation amongst Malaysian teachers. In view of the above, the elements were distributed into four sections, which are; self-motivated (items P1 and P12), interruption (items P2, P13, and P18), job overload (items P4 and P10), and lack of time management and procedure (Items P5 and P7).

In general, POS shows the high-level of acceptance of the peer observation approach as a tool for professional development amongst the teachers. The agreement on the benefit of peer observation to enrich teacher's method of teaching proved the high expectation of the peer's role to carry out the school's achievement. More specifically, it seemed that peer observation helps new and in-service teachers to improve their skills by exchanging expertise and cooperative activities.

However, the data also illustrates a negative perspective amongst teachers. A modest number of teachers felt stressed with peer observation and

feedback sessions, misunderstood and did not value the process. The outcome being that teachers misunderstood and undervalued the peer observation, and had a lack of commitment towards it. Respondents were uncertain whether peer observation practice practically is used in schools as teacher professional development or not. Although interruptions from lessons and class management did not raise any difficult challenges, it was still viewed as time-consuming and extra work to engage with the peer observation system. Being overloaded with work and unsupportive management seemed to be the main barriers to supporting peer observation in the schools. These negative situations for peer observation should be addressed in the qualitative interview for better understanding of the phenomenon.

4.3.1.1   The ideal of peer observation practice

Figure 4.1 demonstrates teachers' response on the practicality of peer observation (P3) and how they believe they can get new ideas from the peer observation activity (P17). Generally, more than 90% of the respondents believed that they could develop themselves in teaching by practising peer observation in their schools. Item P3 shows that 91% of respondents agreed and strongly agreed that practising peer observation will contribute to improving teaching and learning development processes. This positive response indicates the high level of readiness amongst the respondents to practise peer observation in developing their teaching and learning skills. It is plausible to state that whether they were willing to practise or not, most of

them agreed that peer observation somehow could develop their professional practice.

Similarly, item P17 demonstrates that 92.7% of respondents agreed and strongly agreed that they could gain new ideas whilst watching their peers teaching in peer observations. The result shows that most of the respondents agreed with the two-way benefit between mentor and mentee in teachers learning. They also agreed that the observer and who is being observed are both beneficiaries in line with mutual sharing conversation and experience.
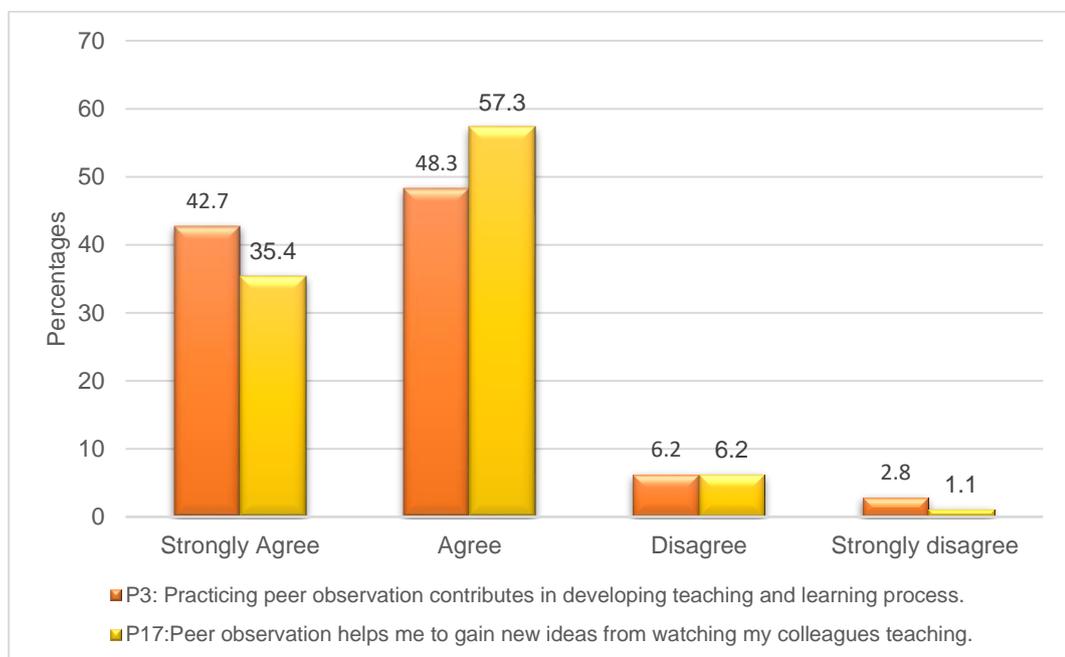
Figure 4.1: Findings of Items P3 and P17

4.3.1.2   The enhancement of peer observation practice

Teachers as educators can develop themselves in different ways such as seminars, workshops, self-learning, case studies and coach programmes. Regarding the enhancement and enrichment of instructional processes, most

of the respondents agreed that the peer observation programme enriches and enhances their methods of teaching. Item P14 in Figure 4.2 demonstrates that 93.8% of respondents strongly agreed/agreed with the statement that peer observation would enrich their skills. Only a small number of respondents (6.2%) did not agree that peer observation gives them the opportunity to sharpen their instructional skills. The respondents followed the same pattern for the negative item P16 in Figure 4.2. Evidently, 83.1% of respondents did not agree with the statement that the lack of peer observation does enhance teachers' CPD. However, 16.9% of respondents did agree that peer observation does not enhance and improve teacher's CPD. Therefore, the respondents might regard peer observation as one of the review and assessment methods for the teaching performance.
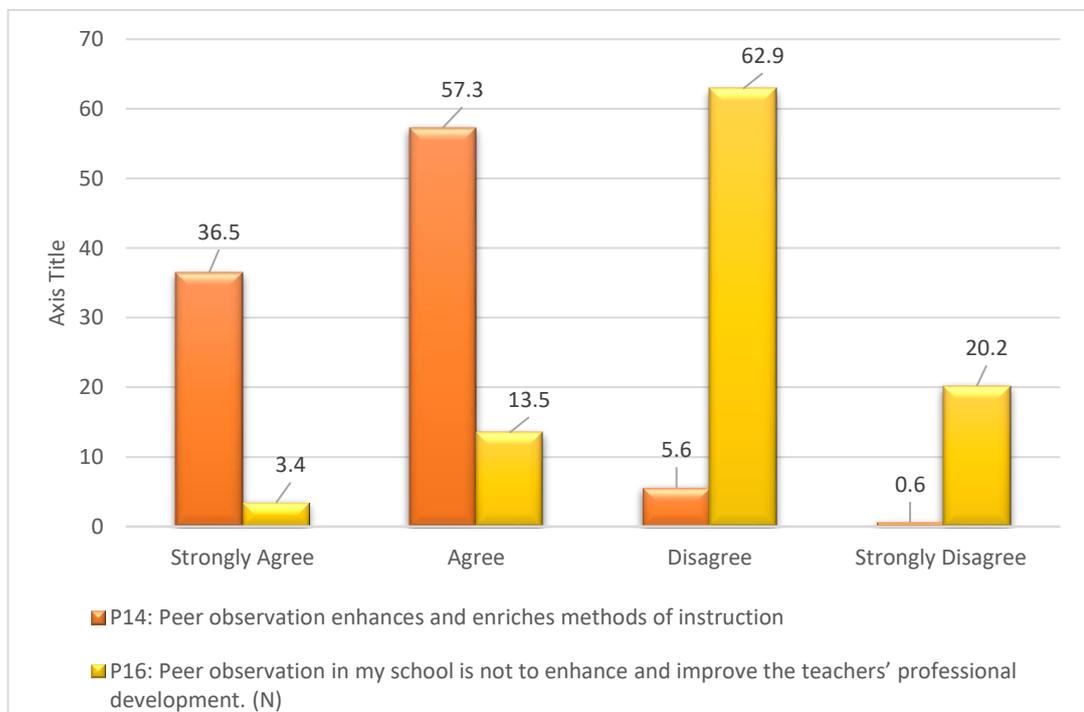
Figure 4.2: Findings of Items P14 and P16

4.3.1.3 The advantages of peer observation for beginner and in-service teachers

Although in-training and in-service teachers do not have the same level of teaching experience in the school, nearly all of the respondents agreed that peer observation is the medium that will benefit both types of teachers in the schools. Figure 4.3 describes the level of respondents' agreement on the teacher's improvement between the beginner teachers (item P19) and in-service teachers (item P21). Figure 4.3 indicates that more respondents agreed that peer observation is advantageous for in-service teachers (95.6%) than in-training teachers (91.5%). Moreover, a small number of respondents (8.5% and 4.4%) did not agree and strongly did not agree that peer observation improves teachers' capabilities.
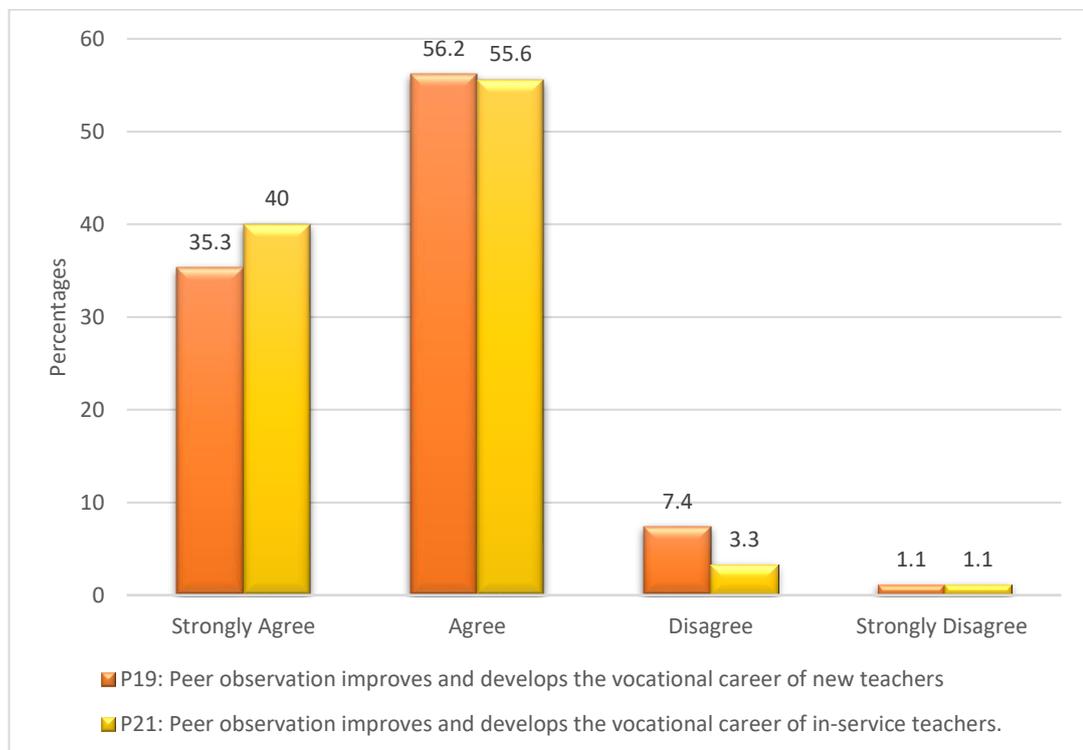
Figure 4.3: Findings of Items P19 and P21

4.3.1.4 Teacher professionalism and the peer observation practice

Educators as professional learners are always looking for better situations and environments to support their learning (Coe et al., 2014). On item P22 as depicted in Figure 4.4, 76.4% of respondents agreed and strongly agreed that peer observation practice meets their professional needs. However, 23.6% of them did not agree with the statement. The situation can be explained by the response of two-thirds of the respondents (75.8%) for item P11 in Figure 4.4 who viewed peer observation practice as a performance evaluation assessment to review teachers' performance. Though peer observation was recognised as self-development and not as evaluation, only 23.5% of respondents did not agree with this statement. This evaluation needs to be explored further in the qualitative interview for more understanding.
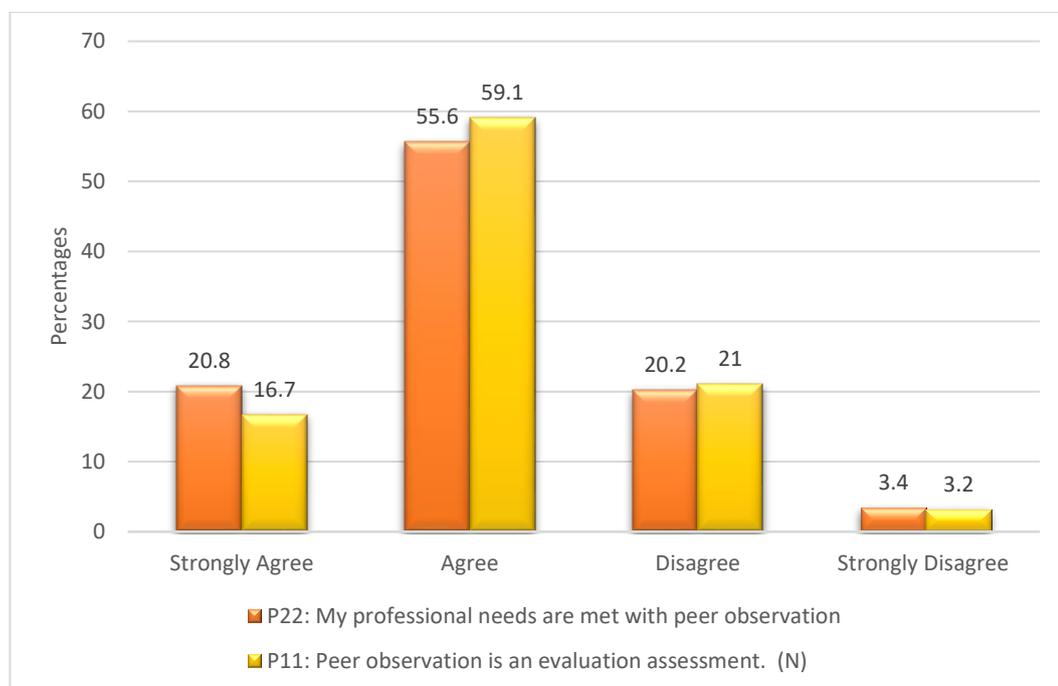
Figure 4.4: Findings of Items P22 and P11

4.3.1.5 Peer visit routine

Practical peer observation should give an advantage to the teachers to improve their skills and knowledge. Considering all aspects of peer observation skills and values, teachers who were being observed were satisfied and gained the benefit and new ideas for their instructional activities in the class. Based on item P15, Figure 4.5 states most of the respondents (89.8%) did agree that they benefit from classroom reciprocal visits of co-teachers. Similarly, for the negative statement about the reciprocal visits based on item P20 in Figure 4.5, 90.4% of the respondents disagree and strongly disagree that they did not benefit from their peer's observation exercise. As the school management implements the practice of peer observation, they should believe that it is part of their professional improvement. However, 9.6% of the respondents did not believe that peer observation could benefit them. The qualitative interview in the next stage will consider exploring the benefit of peer observation for teachers' satisfaction and the school's improved performance.
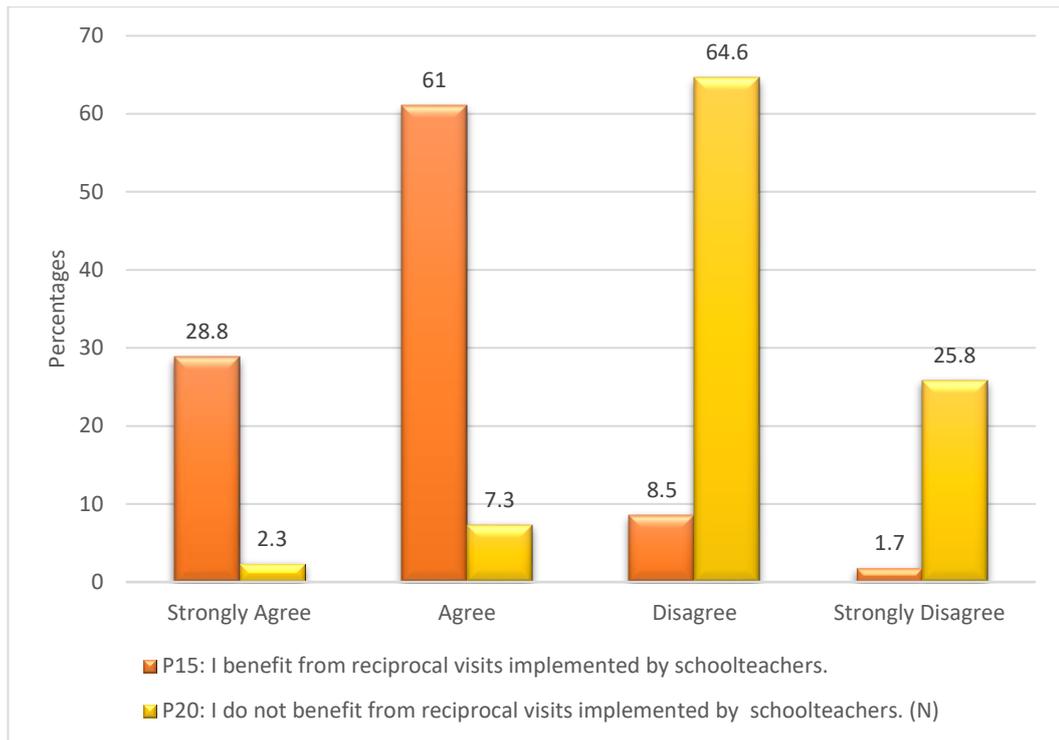
Figure 4.5: Findings of Items P15 and P20

4.3.1.6 Teaching approach in peer observation practice

Teacher's collaboration and exchange expertise are part of the skills built by peer observation practice (Borich, 2016). Teachers did believe that peer observation could give them the opportunity to gain more skills and ideas based on their current environment and situations. Therefore, item P6 in Figure 4.6 demonstrates that almost all (75.3%) respondents felt that they could get more ideas and skills from their counterparts in comparison to what they can gain from workshops or seminars. Moreover, in responding to item P8 in Figure 4.6, 95.5% of the respondents are of the opinion that peer observation is a way of exchanging expert knowledge amongst themselves. Although 24.7% of respondents disagree and strongly disagree with the

comparison between peer observation and workshops, only 4.5% of the respondents had a negative view about peer observation being an avenue for exchanging expertise in practice. This circumstance explains why some of the respondents choose workshops and seminars in spite of the exchanging and sharing session in peer observation which aims to ensure teachers gain new skills and knowledge. Apparently, if the workshops and seminars are conducted by the experts or well-trained presenters, teachers may feel them more convenient and comfortable to gain better knowledge and skills than peer observation sessions.
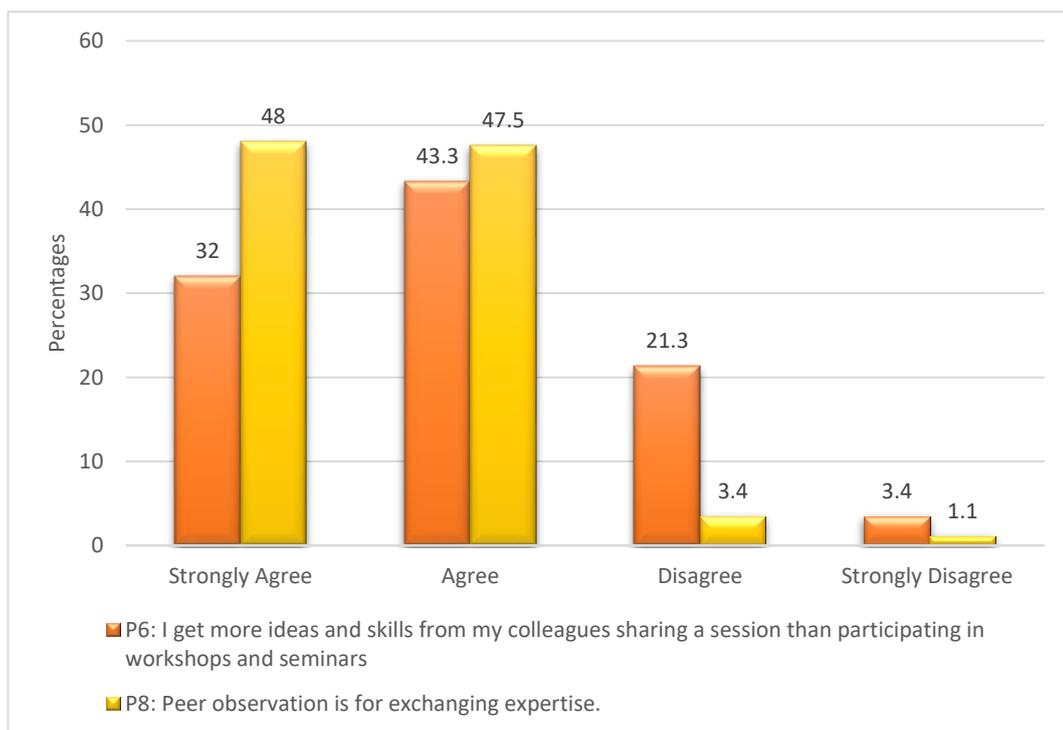
Figure 4.6: Findings of Items P6 and P8

One of the vital elements in peer observation is giving feedback on the teaching practice (Robbins, 2015). Feedback is an approach used to improve the skills and focus occasioned by problematic situations in the practice of

teaching (Borich, 2016). As such, item P9 in Figure 4.7 shows most of the respondents (84.2%) agreed and strongly agreed that they do have sufficient time to give and analyse feedback from their colleagues. Beside giving the appropriate time for analysing the weakness, feedback sessions can also be used to explore the advantages and benefit of the observation session. However, a small minority of respondents (15.8%) did not agree and strongly do not agree in making the time for feedback sessions.
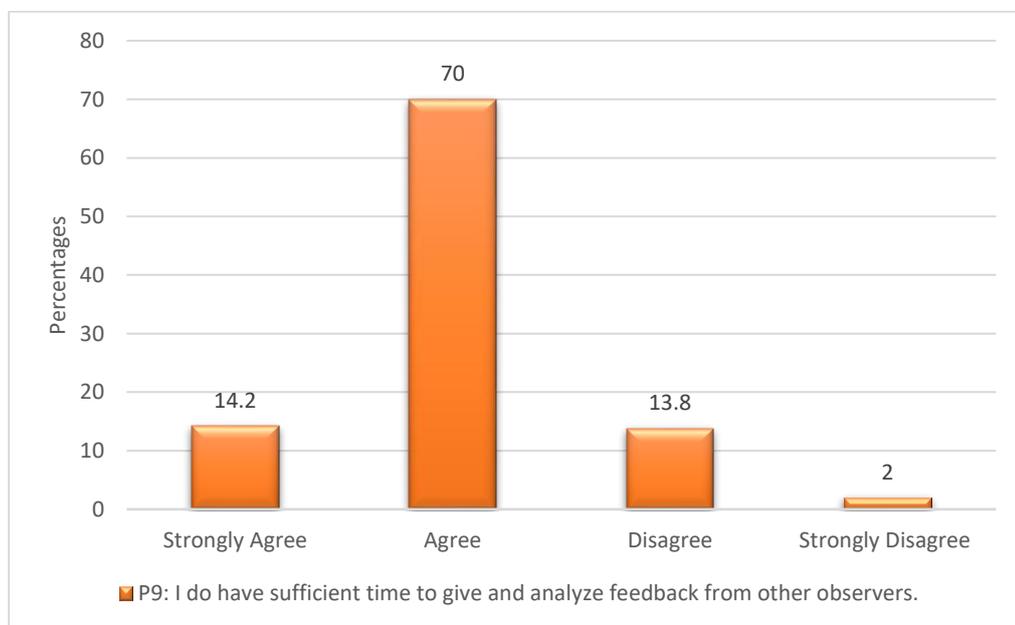
Figure 4.7: Findings of Item P9

4.3.1.7 Self-motivated and peer observation

Before engaging in the peer observation process, the relationships between a mentor and a mentee should be transparent and confidential (Lee, 2013). Confidentiality is an essential principle of peer observation (Lee, 2013). Without feeling safe and confidential, teachers may be worried and

unmotivated. Regarding teacher's perception of their acceptance for being observed, most of the respondents were motivated when being observed. Item P1 in Figure 4.8 shows 85.4% of the respondents did agree/strongly agree with confidence and motivation. Yet, 14.6% of the respondents indicated that they did not agree and strongly not agree to get some motivation whilst being observed in their classroom. The disagreement of the motivation somewhat related to the obstacles and constraints of peer observation practice as shown in the next following items (Items P4, P5, P7, and P10).

However, in responding to the item P12 (negative item) in Figure 4.8, 41.9% of the respondents agreed and strongly agreed to feel worried and stressed with the observation sessions. One plausible explanation of the increasing number on the element of worry and stress related to the teacher's motivation is that some of the teachers might be motivated with the feeling of worry and stress towards the observation. This situation indicates that some of the teachers can absorb the challenge when being observed and can easily adjust for the purpose of self-improvement and motivation.
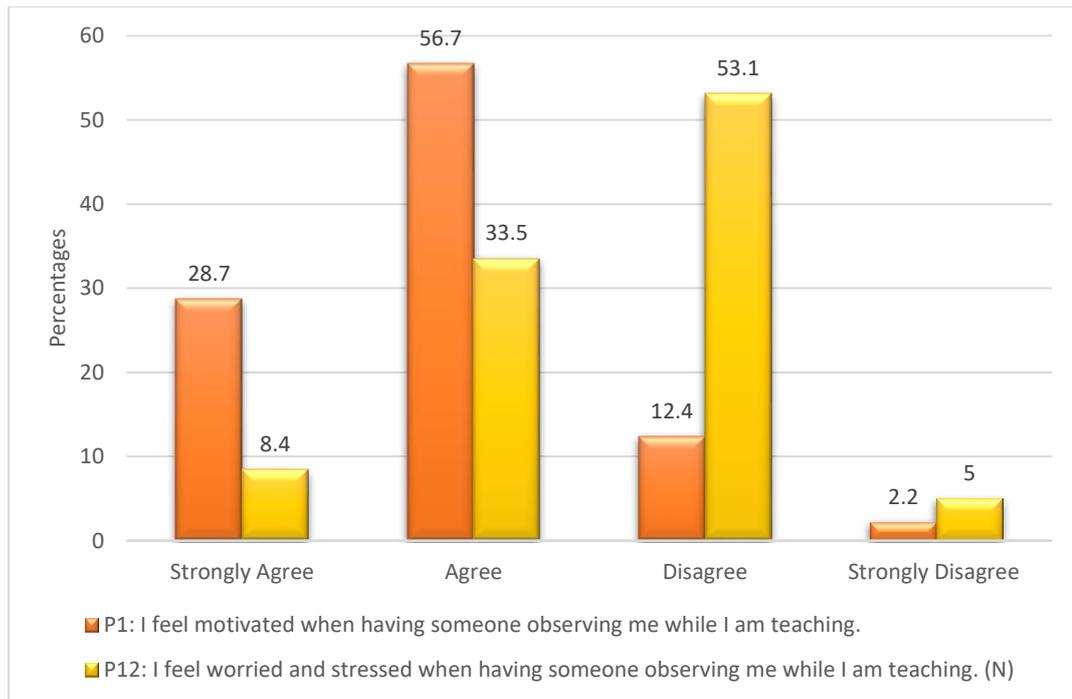
Figure 4.8: Findings of Items P1 and P12

4.3.1.8 Interruption

Interruption is one of the barriers highlighted in this survey. Basically, interruption explores teachers' perceptions of their teaching curriculum tasks, class controls, and new curricula implementation. From the feedback of items P2, P13, and P18 in Figure 4.9, most of the respondents noted that they did not agree and strongly disagree that practising peer observation will interrupt their current peer observation practice. In responding to the item P2, 72.9% of the respondents thought that practising peer observation did not interrupt their lesson plan from being completed. Similarly, 70.3% of the respondents felt that peer observation practice did not decrease pupils' participation in the classroom. Meanwhile, 84.9% of them did not agree that peer observation is not helping them to face the challenge associated with implementing the new

curricula. Amongst the respondents who agreed and strongly agreed with these items, the interruptions involved with class control (item P13) and lesson plan (item P2) showed the significant numbers, 29.7% and 27.1% respectively. Whilst only 15.1% respondents agreed/strongly agreed with another item of interruption in implementing new curricula (item P18).
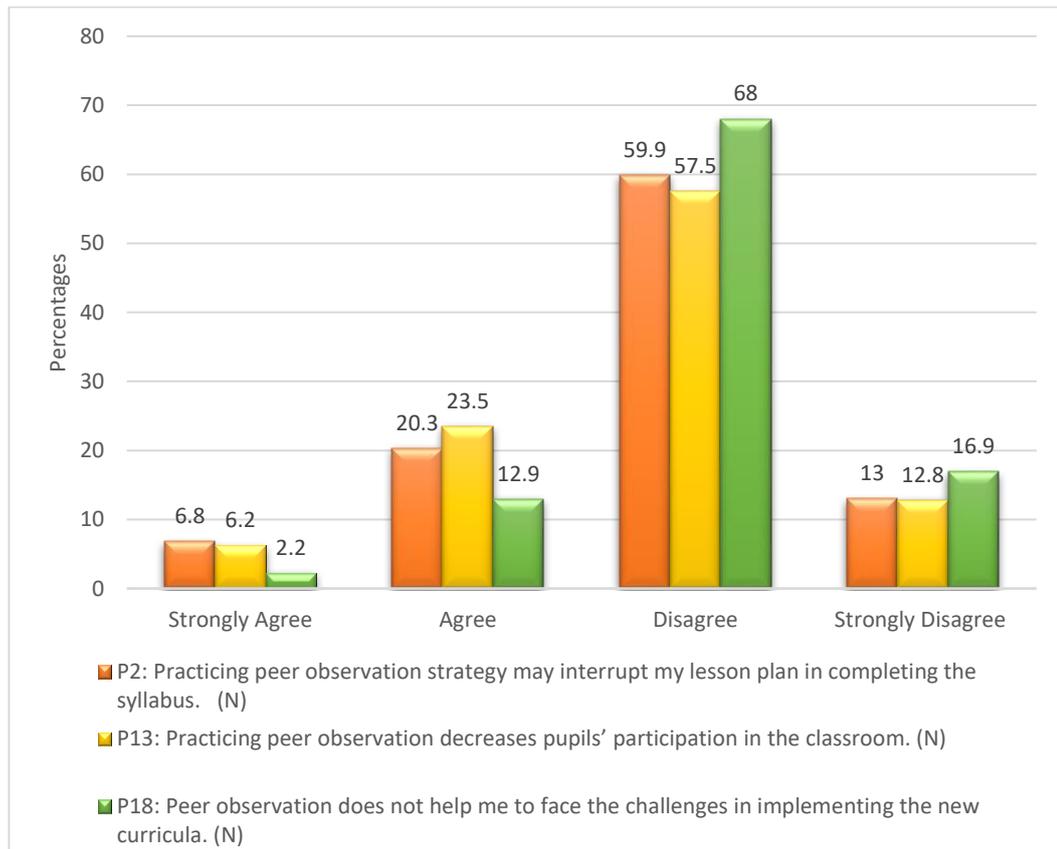
Figure 4.9: Findings of Items P2, P13 and P18

4.3.1.9 Work overload

Another barrier to peer observation is the overwhelming amount of work of the teachers. Interestingly, there was a balance between the level of agreement and disagreement amongst the respondents as to how overwhelming their work is. Item P4 in Figure 4.10 illustrates that 55.3% of

the respondents did agree and strongly agree that they were overwhelmed by their administrative workload, which did not relate to their ability to teach. Likewise, for item P10, 52.5% of the respondents were of the opinion that their involvement with school committees, activities, and projects, did not give them much time to practise peer observation. The issue of the large number of respondents, who noted some agreement with the negative items of work overloading having an effect on peer observation, will be further discussed in the qualitative report section of this thesis.
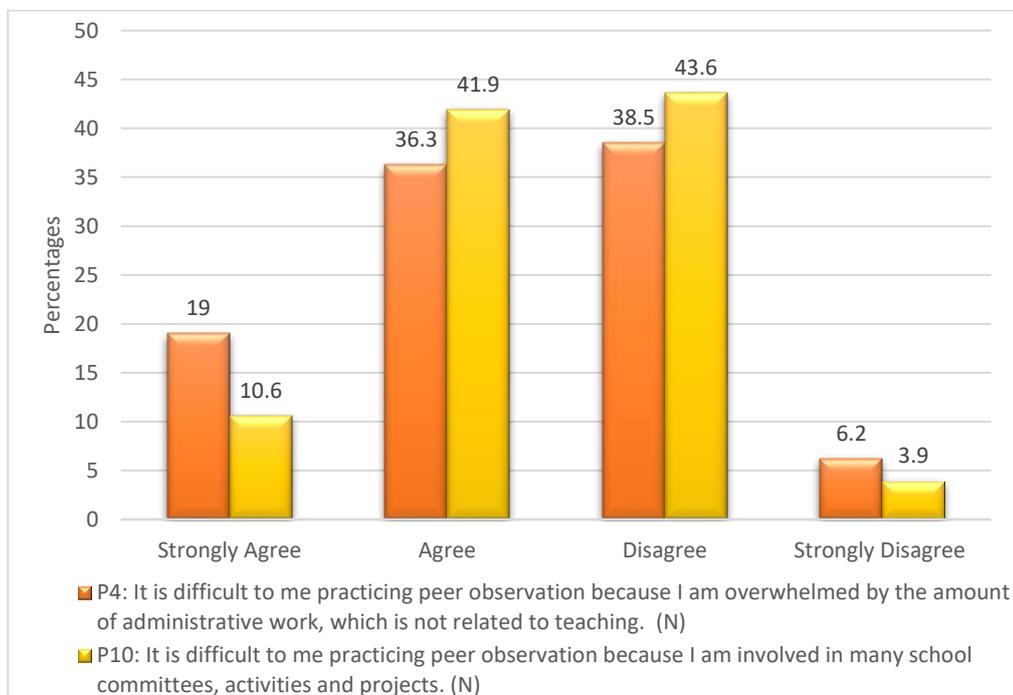
Figure 4.10: Findings of Items P4 and P10

4.3.1.10 Management issue

Time management is an important factor in management strategy (Forsyth, 2013). Teachers who fail to manage their time will have problems in effectively conducting peer observation practice (Robbins, 2015). Since peer

observation needs to be planned and prepared for, item P5 in Figure 4.11 indicated 46.3% of respondents spent a great deal time and effort in preparing for peer observation. Although 53.7% of them did not agree and strongly did not agree with the lack of time management, a plausible reason for this finding can be suggested.

Similarly, in the procedure of peer observation, in which the teacher being observed is unable to choose the observer, 46.3% of respondents did agree or strongly agree it was an excuse not to practise peer observation (Item P7 in Figure 4.11). Though item P7 shows more than half (53.6 %) of the respondents did not agree and strongly did not agree, the factor of adverse impact should not be ignored. The reason and cause must be stressed to gain an understanding of peer observation practice. Therefore, time management and teacher's right to choose observer as core management issues should be highlighted as aspects of further analysis in the interviews (qualitative section of the report).
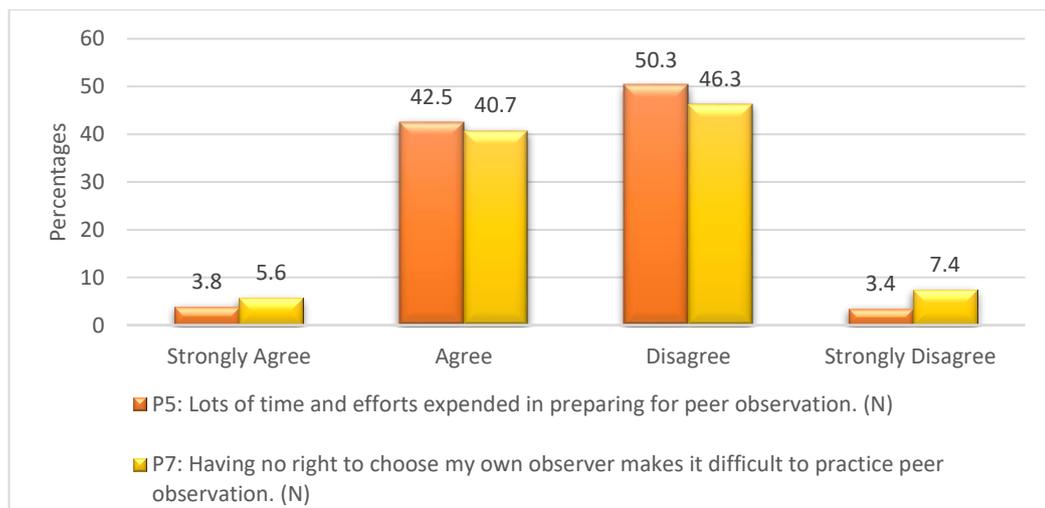
Figure 4.11: Findings of Items P5 and P7

4.3.1.11 Training participation

One of the critical parts of the peer observation practice was how teachers acknowledge peer observation skills and ideas by the number of training sessions they have previously participated in Figure 4.12 illustrates the results of the open-ended question on whether the respondents have attended a training on peer observation. Whilst 22% of respondents stated that they have participated in peer observation skills training, 78% stated they had not accessed any peer observation-training workshop or seminar.
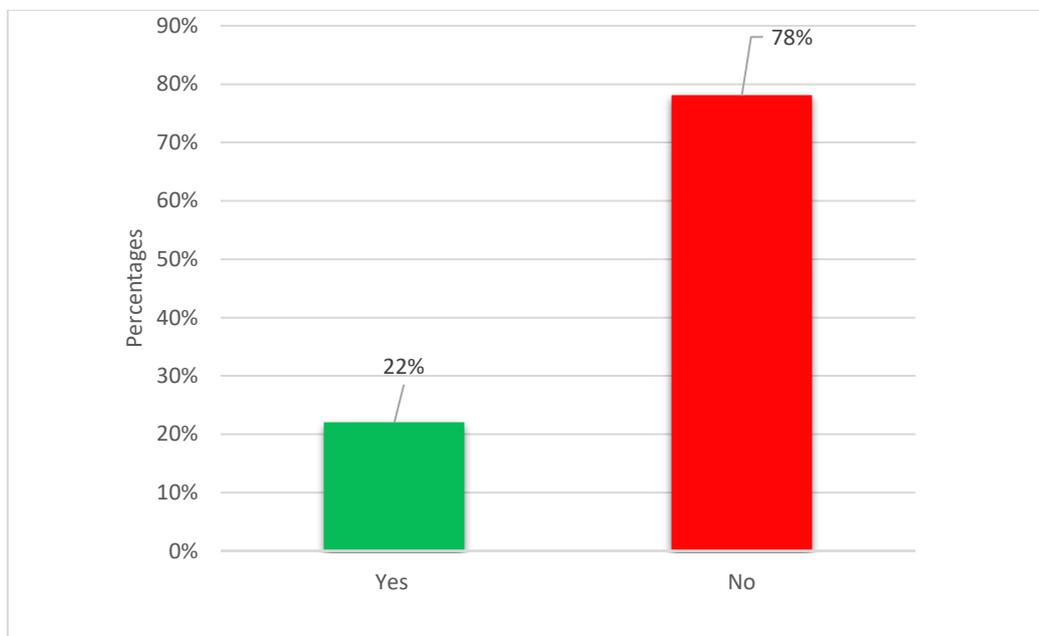
Figure 4.12: The response to peer observation training participated in by respondents

Moreover, Figure 4.13 illustrates the sort of training that teachers participated in. Evidently, 55.6% of the respondents who attended peer observation training had participated in in-house training conducted by the management of their schools. Meanwhile, 36.1% of the teachers had participated in workshops and seminars organised either by the District Education Officer or

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by the State Education Department. Only 8.3% of the respondents had been involved in training conducted at the national level. This situation can be explained by the fact that the teachers who participated in national or district level training are chosen from the potential teachers that could assist their schools and district in implementing peer observation practice. However, these figures (Figures 4.12 and 4.13) explained that the majority of the teachers still do not participate in any peer observation training and workshops.
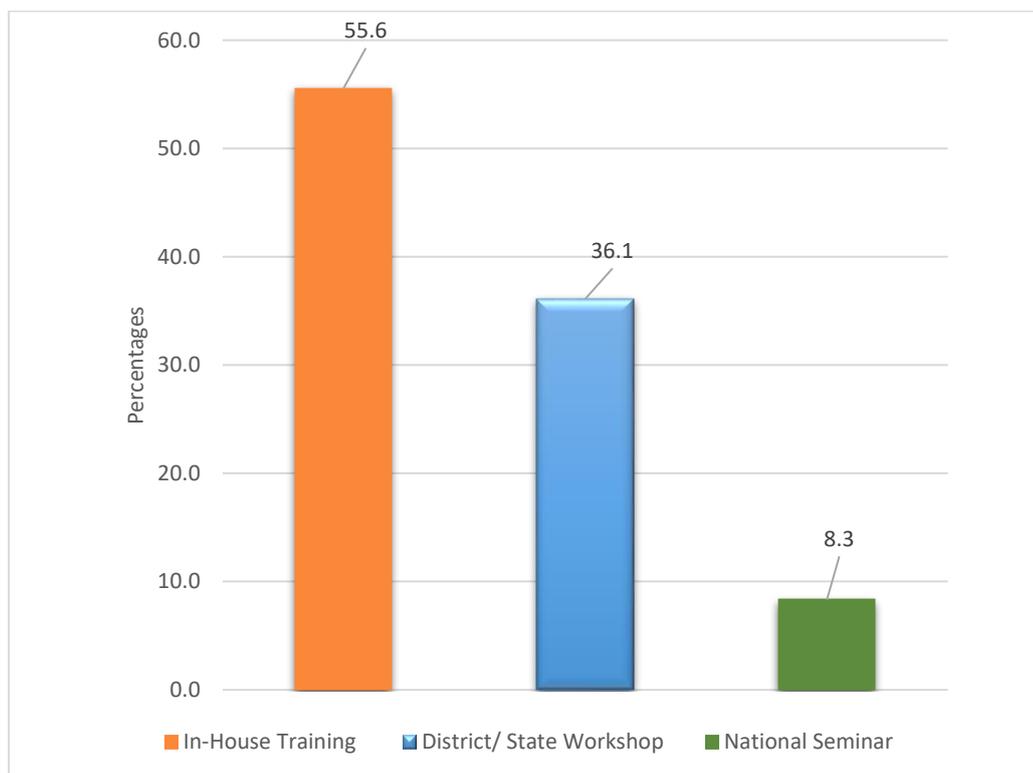
Figure 4.13: Level of peer observation training participated in by the respondents

4.3.2 Descriptive analysis of Organisational Commitment Questionnaire

The OCQ in the research is made up of 15 items as developed by Mowday and Steers (1979). The OCQ is used to determine the understanding of employees' behaviour, which can affect organisational performance, self-satisfaction and motivation levels (Menezes et al., 2015). Commeiras and Fournier (2001) described the OCQ by distinguishing it into two dimensions; Affective and Calculative. The Affective dimension in OCQ consists of nine positive items, OCQ1, OCQ2, OCQ4, OCQ5, OCQ6, OCQ8, OCQ10, OCQ13, and OCQ14. The Calculative dimension is made up of six negative items, OCQ3, OCQ7, OCQ 9, OCQ11, OCQ12, and OCQ15. Table 4.5 demonstrates the distribution of dimensions in OCQ and their description.

Table 4.5: The distribution of dimensions in OCQ and their description

Affective Dimension		Calculative Dimension	
OCQ1	Willing to put great effort	OCQ3	Very little loyalty to school
OCQ2	School as great organisation	OCQ7	Rather work in another school
OCQ4	Accept any job to stay in school	OCQ9	Would leave the school if job change
OCQ5	Share same value with school	OCQ11	Not progressing well in the school
OCQ6	Proud to be part of school	OCQ12	Questioning school's policies
OCQ8	Inspired by school	OCQ15	Work in the school as a mistake
OCQ10	Glad to choose the school		
OCQ13	Caring of school's fate		
OCQ14	School is the best place		

4.3.2.1 Affective dimension

The Affective dimension score measured teachers' commitment on their firm belief and acceptance of the organisation's goals and values, their willingness to apply considerable effort on behalf of the organisation and a strong desire to maintain membership in the organisation (Mowday, Porter and Steers, 1982, p 27). Items OCQ2 and OCQ6 in Figure 4.14 described the firm belief and commitment of the respondents to their schools. Item OCQ2 demonstrates that 87.6% of the respondents strongly agreed and agreed that their school is a great organisation. Likewise, Item OCQ6 shows that a large number of respondents (88.2%) felt honoured to be part of the school's staff where they belonged. However, 13.4% of the respondents chose to not agree and strongly not agree mentioning their school as a great workplace (OCQ2) and 11.8% of them disagree with feeling proud to be on the school's staff (OCQ6).
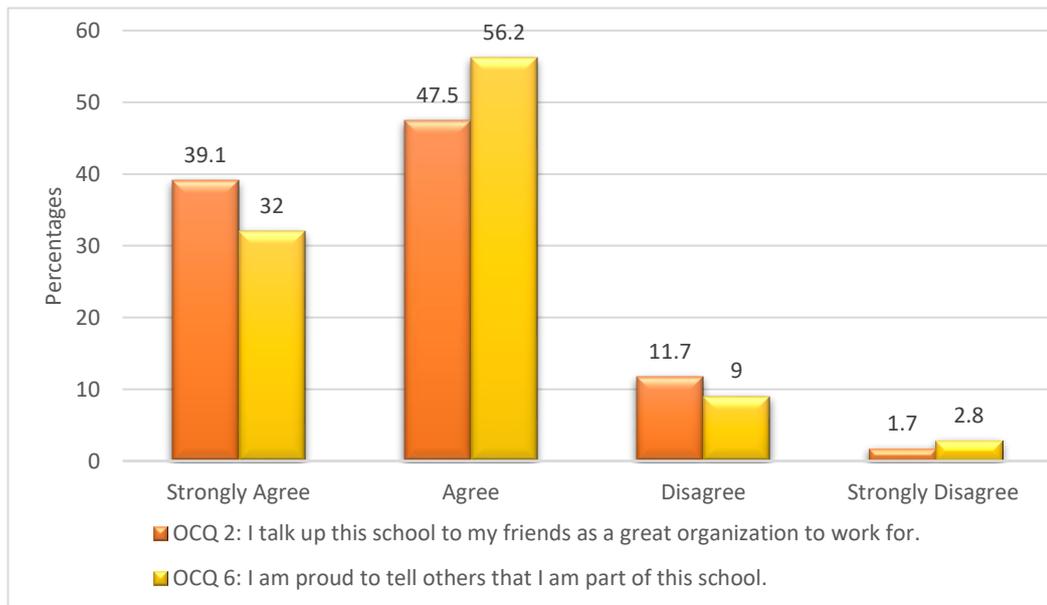
Figure 4.14: Findings of Items OCQ2 and OCQ6

In response to items OCQ5, OCQ8 and OCQ14 in Figure 4.15, the majority of the respondents agreed with the positive statements. Item OCQ5 demonstrates 77% of respondents agreed and strongly agreed to have the same values with the school whilst comparing with the others who did not agree and strongly did not agree (23%). Meanwhile, a stronger positive response was raised in item OCQ8 when they defined their schools as the best inspiring workplace for their job performance (84.7%). However, 15.3% of respondents did not feel inspired (disagree and strongly disagree) with their schools to gain the best performance in their tasks as teachers (OCQ8). A similar pattern of results shown in Item OCQ14 where the respondents highlighted to agree and strongly agree (87.2%) describing their school as the best workplace ever.
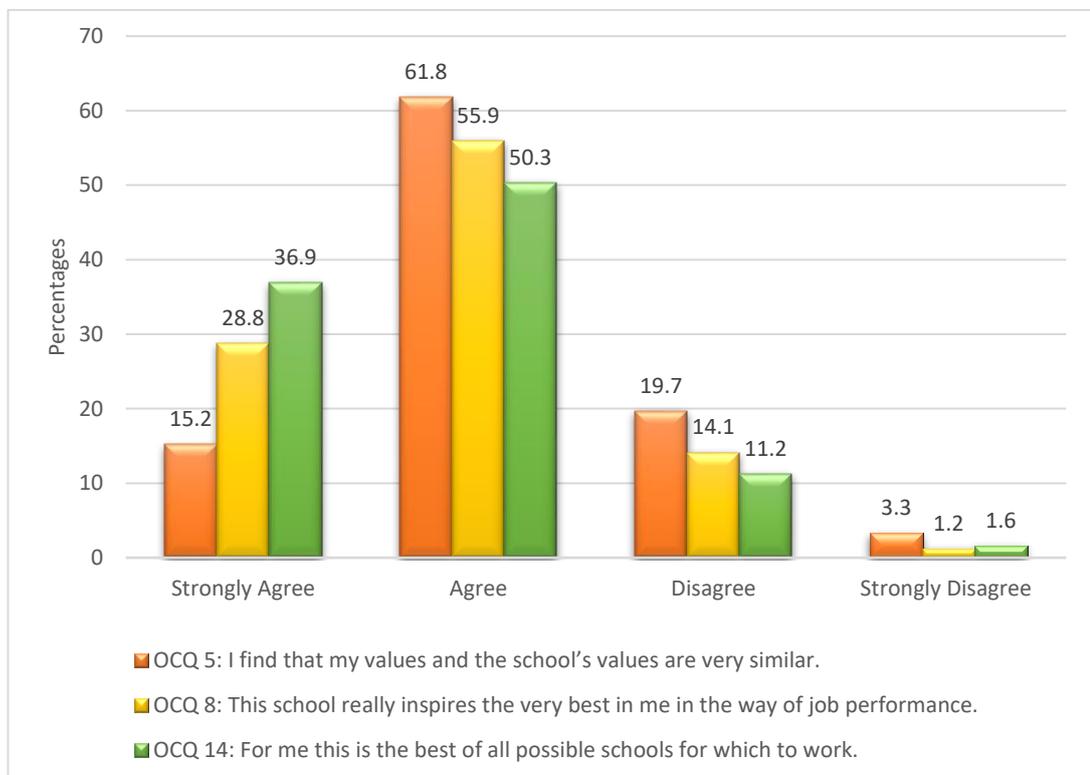
Figure 4.15: Findings of Items OCQ5, OCQ8 and OCQ14

Figure 4.16 illustrates the identical pattern of positive response for items OCQ1 and OCQ13, which emphasised the respondents' willingness to work hard towards the school's accomplishments. Nearly all respondents (97.6%) agreed and strongly agreed to help beyond their regular teaching role to achieve excellence in their school (OCQ1). Hence, 94.9% of respondents in item OCQ13 agreed and strongly agreed to take the responsibility of the school's achievement. Therefore, they were willing to put as much as they can to maintain the school's performance and success.
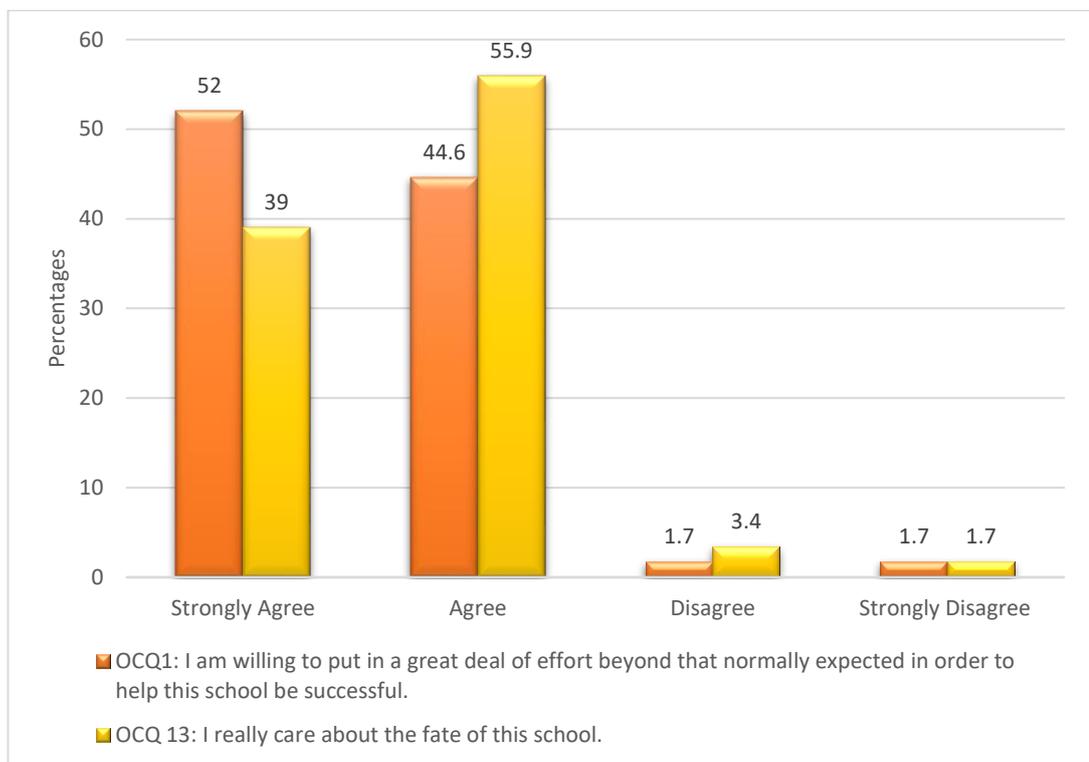
Figure 4.16: Findings of Items OCQ1, and OCQ13

Finally, Figure 4.17 illustrates the respondent's desire to maintain their position in the school. Specifically, based on item OCQ4, 19.2% of respondents strongly agreed to accept any work to secure their current place in the school, whilst the 53.4% agreed. However, 27.4% of respondents on

item OCQ4 disagreed and strongly disagreed to change their jobs and positions as a reason to stay in the current school. In the meantime, Item OCQ10 shows the majority of respondents (86%) are satisfied working in their current schools since they first joined the school. Nevertheless, 14% of respondents in item OCQ10 were not satisfied with their current workplace. Further discussions with respect to the above findings are discussed in the qualitative report section of this chapter.
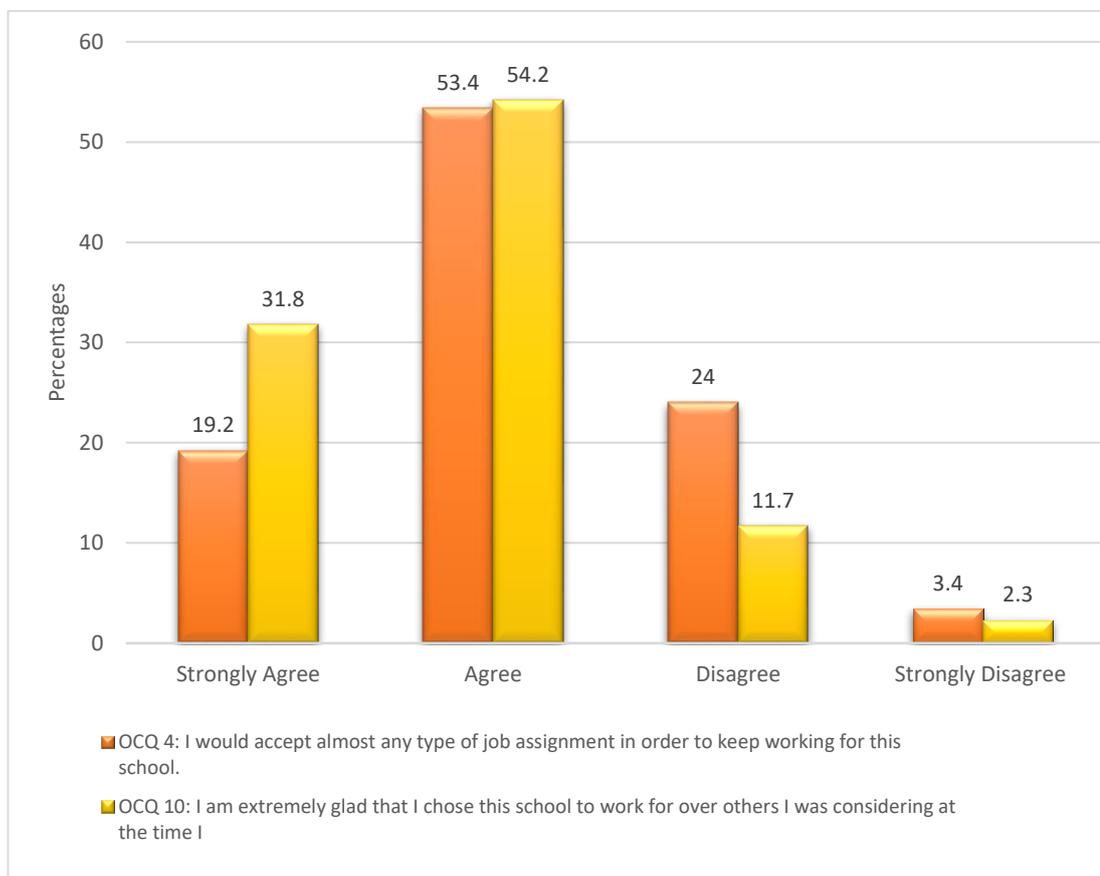
Figure 4.17: Findings of Items OCQ4 and OCQ10

4.3.2.2 Calculative dimension

Calculative dimension is based on the concept of exchange between individuals and organisations, as well as on the notion of investments and

side-bet theory (Becker, 1960). Calculative commitment is the outcome of an individual's decision to remain with an organisation because of the personal time and resources already devoted to the organisation (Park and Rainey, 2007). At the same time, there is a financial cost for changing the jobs. The six items in Calculative dimension are stated as negative statements and were rotated in descriptive analysis to get real data.

Items OCQ3 and OCQ15 in Figure 4.18 demonstrate the level of teachers' loyalty and satisfaction to their school. Accordingly, 90.5% of respondents disagreed and strongly disagreed to be disloyal in the item OCQ3. Similarly, item OCQ15 shows a high satisfaction with the decision to work in the school with 40.2% and 51.4% of them disagreed and strongly disagreed respectively when responding to the negative statement. However, a slight minority of respondents (9.3%) did not feel committed to their school (Item OCQ13), whilst 8.4% of them regretted being part of the current school staff (Item OCQ15).
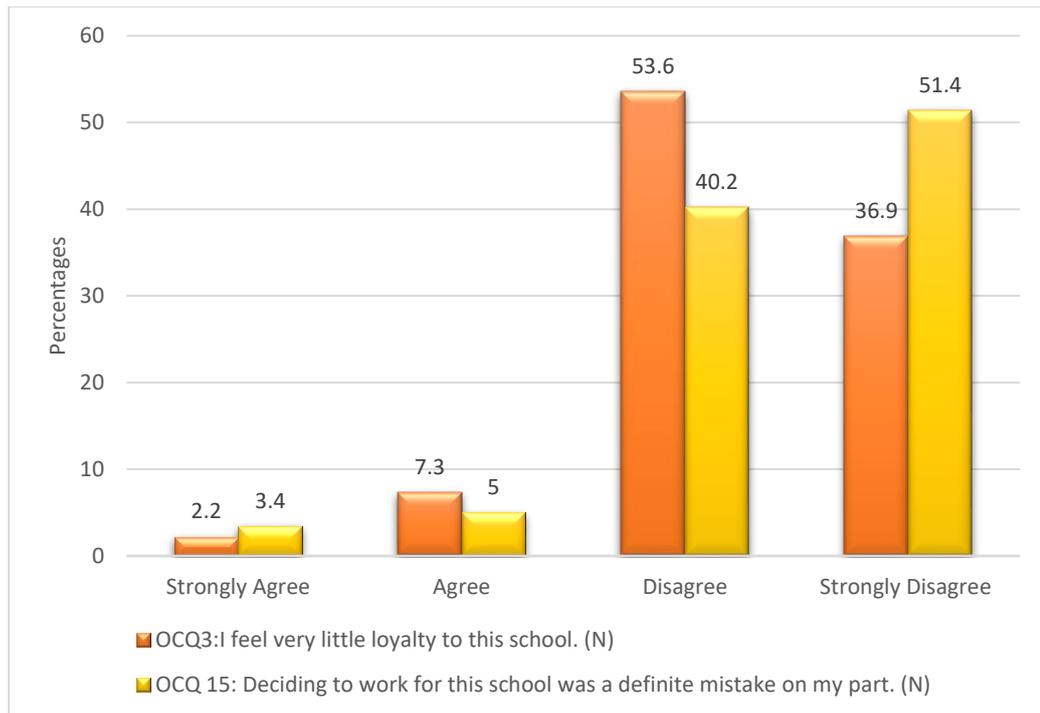
Figure 4.18: Findings of Items OCQ3 and OCQ15

Furthermore, items OCQ7 and OCQ9 in Figure 4.19 report the issue of the current job description and the teachers' level of commitment to the school. More than two thirds of the respondents did not agree and strongly disagree with the choice of moving to another school either with the same job description (OCQ7) or for the reason of the changing personal task (OCQ9). However, 29.2% of the other respondents agreed and strongly agreed with leaving the current school as a result of their job's modification. Normally, only the MOE Malaysia makes a decision for teachers' replacement and exchange. Teachers are allowed to request for exchange twice a year through the MOE website (*e-Tukar*) for a plausible personal reason, but with the approval of the Principal. On the other hand, exchanges and transfers are done for the reason of disciplinary issues or for teachers' promotion.
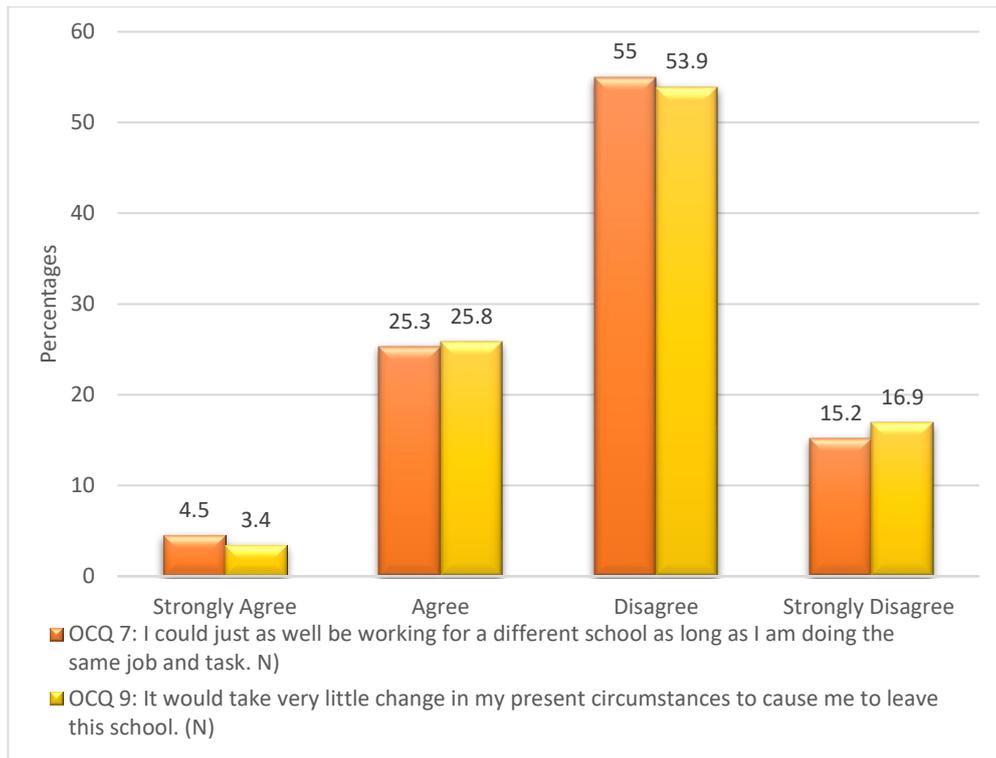
Figure 4.19 Findings of Items OCQ7 and OCQ9

Items OCQ11 and OCQ12 in Figure 4.20 present teachers' commitment related to their job promotion and school's policies. Item OCQ11 shows that teacher's promotion and progression was not the issue amongst the majority of respondents as 85.5% of them did not agree and strongly disagree for not promoting and progressing in the current schools. Nevertheless, 14.5% of respondents were troubled with the promotion and progression as they did agree and strongly agree with the statement. As the promotion and progression have a strong connection with school policies and management, one-quarter of the respondents still questioned their school policies when responding agreed and strongly agreed with the item OCQ12. Clearly, the majority of them (76%) did not agree and strongly did not agree with item OCQ12, indicating their trust for the school for being a supportive employer.
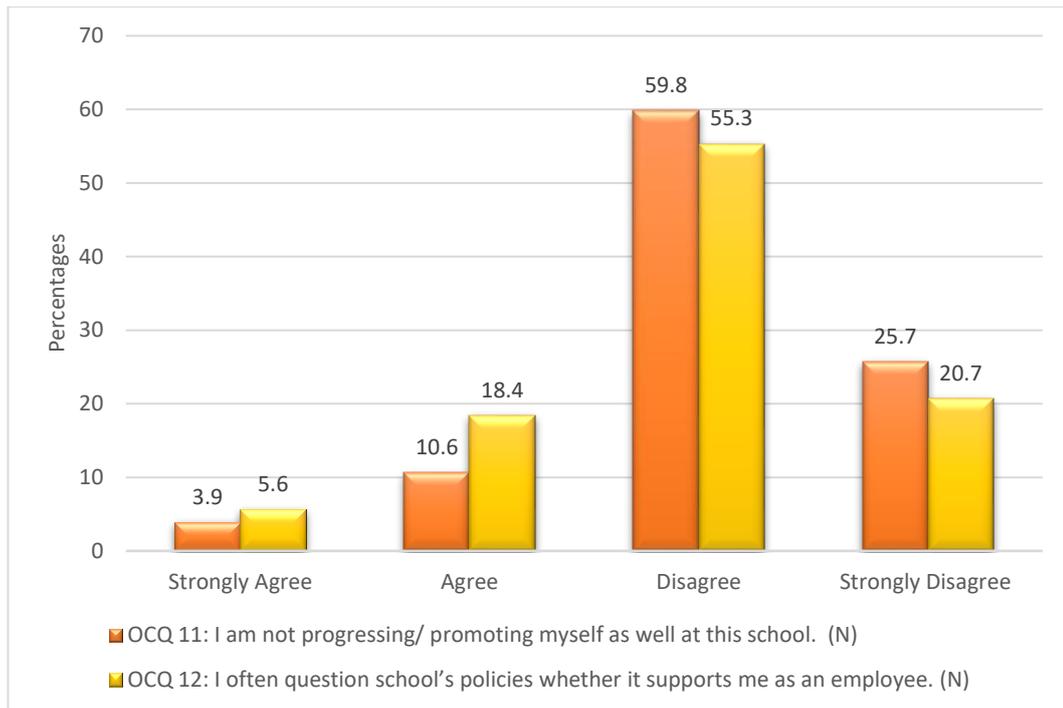
Figure 4.20: Findings of Items OCQ11 and OCQ12

4.3.3 Descriptive analysis of Teacher Self-efficacy Scale

Self-efficacy is defined as an individual's belief in their own potential to encounter and possibly deal with difficulties whilst working (Luszcynska, Scholz and Schwarzer, 2005). Meanwhile, Schwarzer and Hallum (2008) highlighted teacher self-efficacy as a personal factor that may protect them from barriers such as job strain and burnout. According to Ebmeier (2003), self-efficacy is segmented into four significant scopes, which are job accomplishment, skill development, social interaction and coping with job stress. There are ten items in the TSES developed by Schwarzer and Hallum (2008) which were responded to by 179 teachers (respondents). Overall, the majority of respondents agreed and strongly agreed with the items of TSES.

Figure 4.21 demonstrates responses to items TSES4 and TSES7, which relate to how teachers responded to accomplishing tasks in positive circumstances. Nearly all of the respondents (98%) were optimistic that they are capable of addressing the needs of the students. At the same time, 98% of the respondents are also confident that they have a positive influence on the personal and academic development of their students.
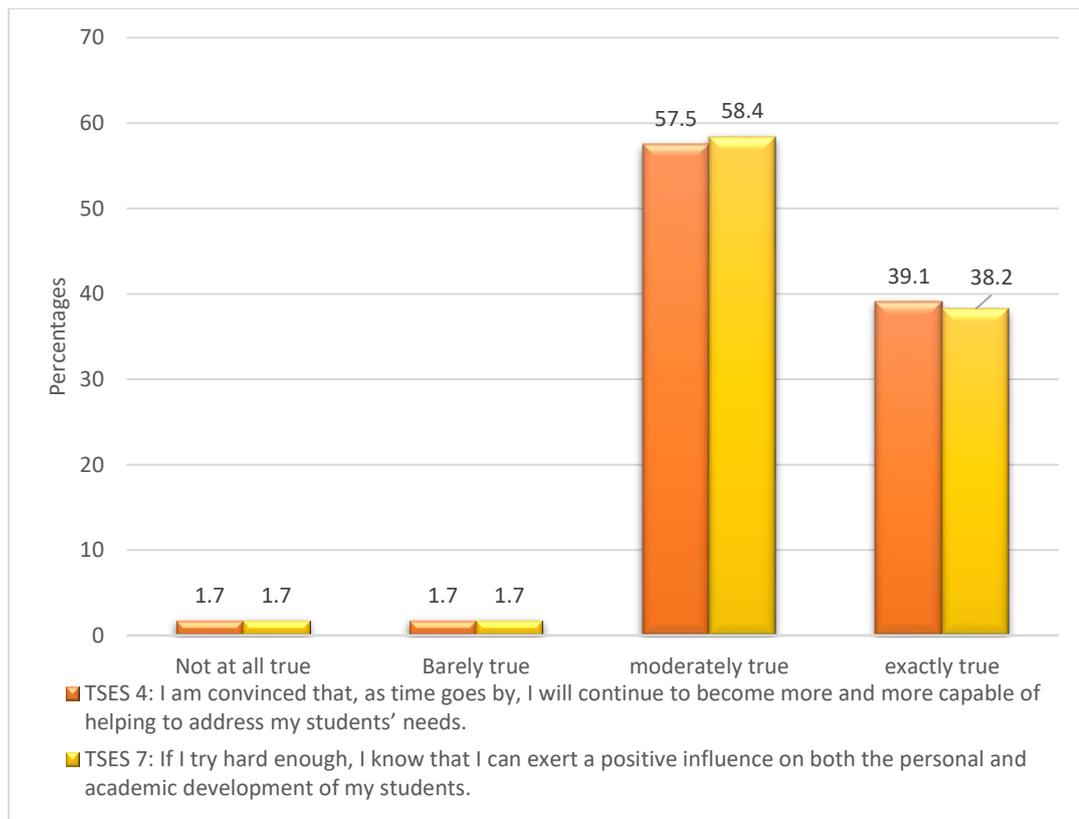
Figure 4.21: Findings of Items TSES4 and TSES7

On skills development in teaching (TSES1 and TSES3 in Figure 4.22), 91.1% of the respondents were convinced that their professional skills in teaching were in excellent condition even to the most challenging students. Meanwhile, 94.4% of them believed that if they keep trying to develop their skills, they would be able to reach out to the most difficult students. However,

8.9% of respondents were not convinced to be able to prepare themselves in improving the achievements of their students due to the lack of skill development process.
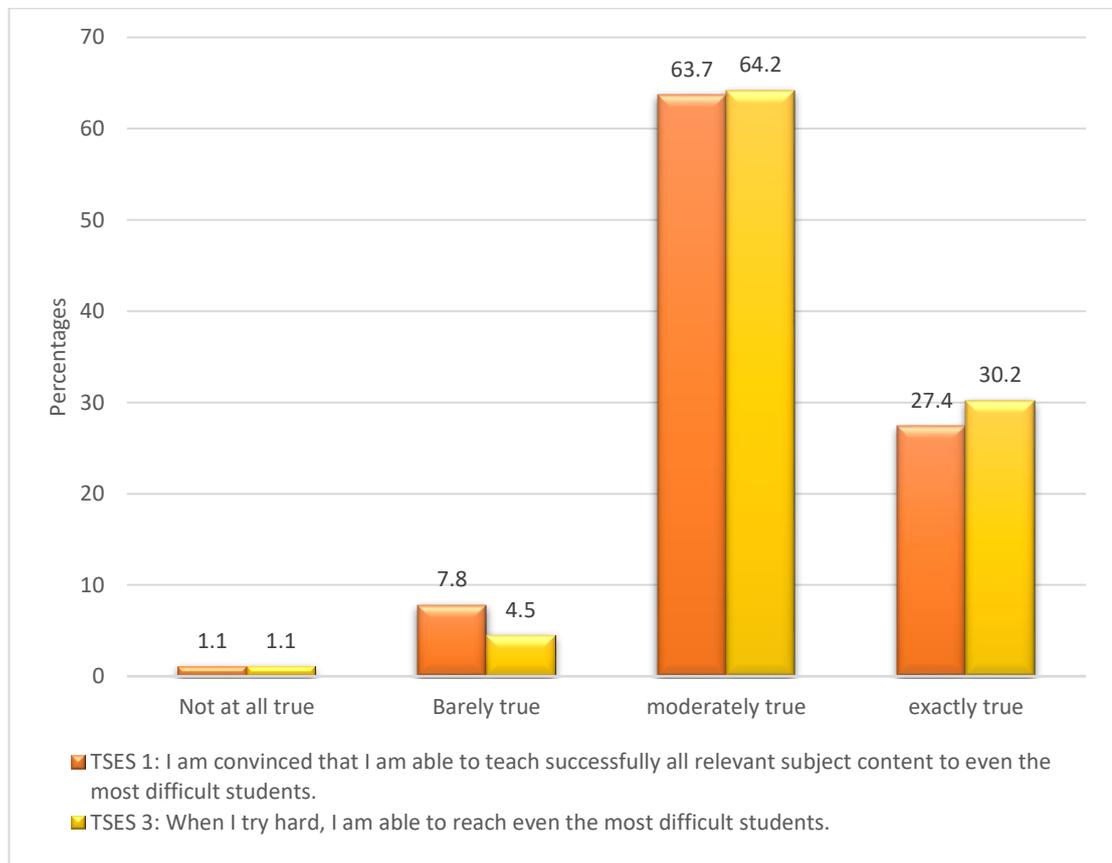
Figure 4.22: Findings of Items TSES4 and TSES7

Teachers are always in communication with students, parents and peers in carrying out their professional tasks as teachers (White, 2016). Somehow, the miscommunication and misunderstanding whilst interacting with others, affect teacher's self-efficacy (Ozkan et al., 2014). Items TSES2, TSES9 and TSES10 in Figure 4.23 demonstrate teachers' efficacy whilst in difficult situations. Item TSES2 shows 27.5% of respondents have a firm belief in themselves to maintain a positive relationship with parents even when in

stressful situations. Moreover, item TSES9 demonstrates that 18.4% of the respondents positively responded to motivate their students in innovative projects in their schools. However, when involving unsupported colleagues who were opposing them, 16.2% of respondents stated that they failed to carry out the innovative projects. In fact, the highest negative score amongst these items came from skeptical peers. This result explains that some teachers experienced unsupportive colleagues who do not encourage them in dealing with difficult situations.
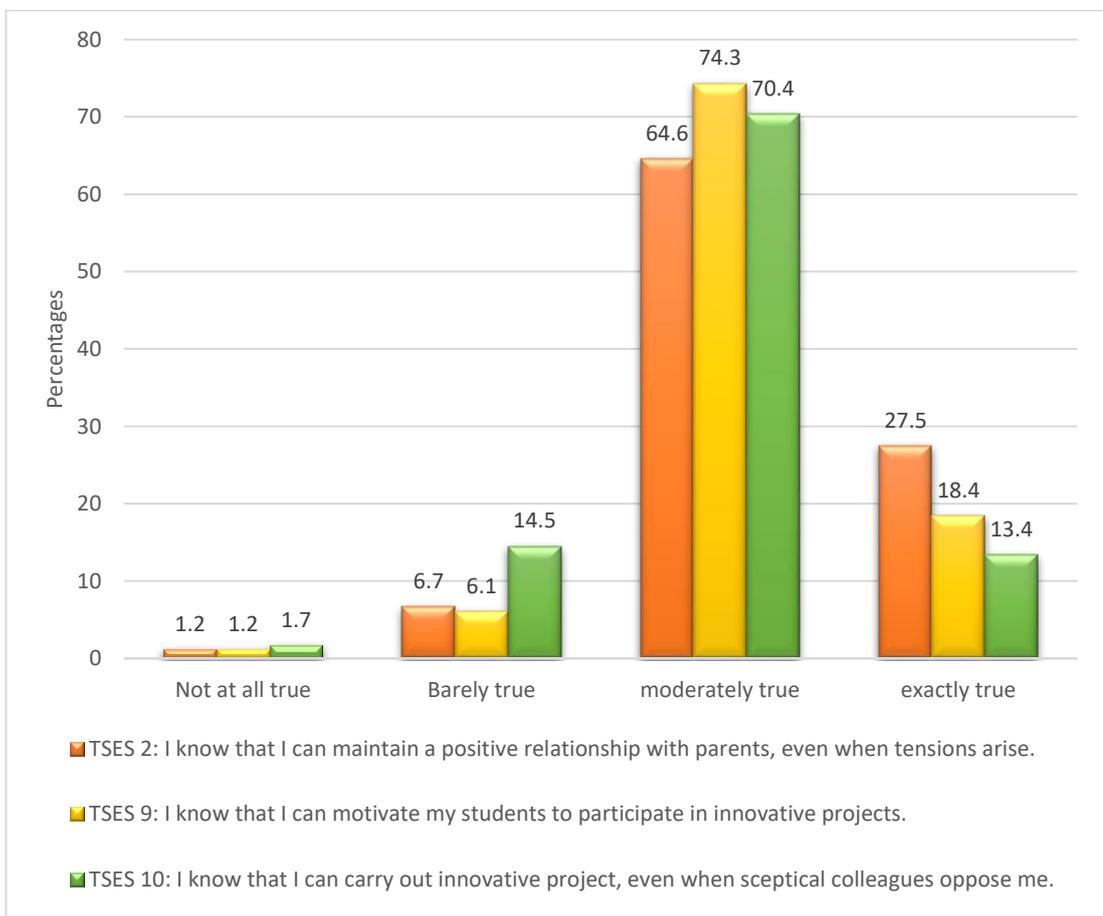
Figure 4.23: Findings of Items SES2, SES9 and SES10

Finally, items TSES5, TSES6 and TSES8 in Figure 4.24 shows teachers' response on various kinds of job stress. All of the items indicate that job stress arose when respondents were influenced negatively whilst being disrupted, having a bad day and facing problems with school managements. Around 10% of respondents reported being less confident with disruption (TSES5), having a bad day (TSES6) and being challenged by administration problems (TSES8). Amongst these three items, the school management's problems had the highest positive response as 27.9% of them developed coping strategies to deal with the system constraints (TSES5). However, the majority of the respondents (85% - 88%) still show a high level of profesionalism with high and moderate confidence in coping with unexpected stress.
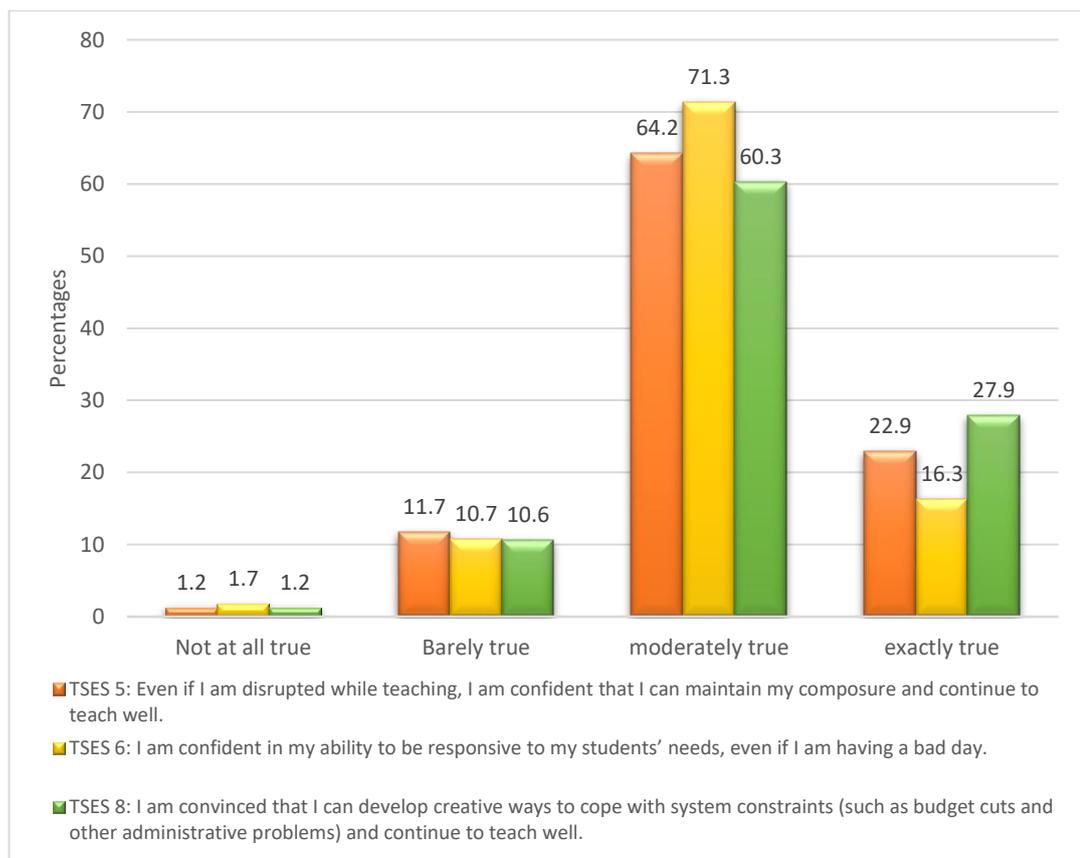
Figure 4.24: Findings of Items TSES5, TSES6 and TSES8

4.4　Inferential statistical analysis

The inferential analysis commenced with an exploratory factor analysis (EFA) on the POS, followed by the internal reliability test for all of the constructs in the questionnaires. Subsequently, the inferential statistical analysis was done with a view to understand teachers' perceptions about peer observation and the correlation with teachers' commitment and self-efficacy. The analysis was categorised by the tests regarding the Research Question One and Research Question Two for better explanation.

4.4.1　Factor analysis

An Exploratory Factor Analysis (EFA) was conducted on the peer observation scale. This was done to ascertain if any items should be dropped before the inferential statistics analysis of the variables of the study is conducted. The factor analysis was conducted using the five-step approach as suggested by Williams, Brown and Onsman (2010). The steps are; first, conduct a preliminary analysis to ascertain if the sample is appropriate for a factor analysis test. Second, extract and present the factors. Third, set the criteria that are needed in determining factor extraction. Fourth, rotate the factors to see if any items should not be included in the intended constructs. Fifth, thematically name the selected factors. However, the researcher did not conduct factor analysis on the OCQ, and TSES as these measurements have been validated and used by many researchers (Foley and Murphy, 2015, and; Kanning and Hill, 2013).

4.4.1.1 Preliminary analysis

Before conducting the preliminary analysis, sample size and correlation analysis were conducted. According to Field (2013) and Myers, Ahn and Jin (2011) in order to run a factor analysis, the sample size should be greater than 300. However, Jung and Lee (2011) opined that a sample size of 50 cases may be adequate for factor analysis. In view of the position of the above researchers on the adequacy of sample size, the 179 cases used in the present study, in the opinion of the researcher is apt. On factor elimination, Stevens (2009) noted that factor loadings from .40 and above should be considered as reliable.

Correlation between the items of a construct displays the relationship between individual items of that construct (Williams, Brown and Onsman, 2010). Field (2013) clarified that the relationship between the items of a construct ensures that a factor is functional whilst at the same time reflecting with two potential problems: (1) correlations that are not high enough, and (2) correlations that are too high (Field, 2013, p 685). On the threshold of correlation needed for a research of this nature, Tabachnick and Fidell (2012), and Pallant (2016) suggested a value of .3 as the minimal correlation matrix between the items. A factorability of .3 indicates that the factors account for approximately 30% relationship within the data (W Williams, Brown and Onsman, 2010). Field (2013) suggested when there is high correlation (>.8) between items of a construct, such items should be eliminated to avoid the problem of multicollinearity, which is one major problem faced in the process of factor analysis. Subsequently, after scanning

the correlation matrix between 22 items in POS (Appendix N), none of the correlation coefficients above .8 was found. Each item correlated at least .3 with the others. Considering that the items are correlated to some degree, though not unusually significant, no items were eliminated from the analysis at this stage.

Furthermore, under the preliminary analysis, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity as suggested by Williams, Brown and Onsman (2010) were done. The KMO represents the ratio of the squared correlation between variables to the squared partial correlation between variables (Field, 2013). The KMO index ranges from 0 to 1, with .5 considered suitable for factor analysis (George and Mallery, 2016). A value of 0 indicates that the sum of the partial correlations is relative to the sum of correlations. This indicates diffusion in the pattern of correlations. A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors (Field, 2013). Accordingly, Table 4.6 demonstrates the results of the KMO and Bartlett's tests for the 22 items of the peer observation scale. The KMO overall was 0.888 which was closer to 1 and good enough for further analysis.

Table 4.6: KMO and Bartlett's test result

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of	Approx. Chi-Square	1698.889
Sphericity	df	231
	Sig.	.000

Finally, the Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix (Field, 2013). The Bartlett's measure should be significant (p<.05) for factor analysis to be suitable (George and Mallery, 2016). Bartlett's test of sphericity was assessed on the items to measure whether the correlations between the items were sufficiently large for a factor analysis test to be conducted. Table 4.6 demonstrates that Bartlett's test was highly significant ($p < .001$), hence, further analysis. The findings from the preliminary analysis indicate that the included items have satisfactory characteristics to conduct a factor analysis.

4.4.1.2 Factor extraction

The Principal Axis Analysis method is used to extract the factors as recommended by Yong and Pearce (2013) as it is capable of analysing correlations and calculating a residual matrix. Table 4.7 represents the factor matrix result after extraction based on Kaiser's criterion of retaining items with *eigenvalues* greater than 1.0. Accordingly, 22 items of the POS made four retained factors. Each factor contains the loading of each item greater than .3, which is the lowest loading suggested by Field (2013). The blank spaces in the table indicate the factor loading less than .3 and all of the items sorted from the highest ranking of the factors to the lowest ranking according to the factor loading.

Table 4.7: Result and Communalities

Factor Matrix[a]	Factor			
	1	2	3	4
P14 Instruction enhancement	.799			
P17 Gaining new ideas	.786	.333		
P15 Benefit visiting	.765			
P19 Improves new teacher	.753			
P21 Improve in-service teacher	.710			
P8 Exchanging expertise	.698			
P3 Contribution	.677			
P16 Not to improve CPD	-.658		.373	
P20 Unbenefited visiting	-.634	.333	.499	
P18 Unhelpful to face challenge	-.605			
P1 Motivation	.573			
P6 More idea and skills	.507	.330		.311
P9 Enough time for feedback	.446			
P22 Meeting professional need	.397			
P12 Worries	-.373	.342		
P11 Evaluation	.346			
P2 Interruption	-.329	.517		
P10 Job stress		.508	-.330	
P13 Lack class control	-.321	.472		
P7 Right to choose observer	-.390	.400		.351
P4 Overwhelming		.461	-.526	
P5 Time Consumption		.329	-.370	

Extraction Method: Principal Axis Factoring. a. 4 factors extracted. 10 iterations required

Table 4.7 demonstrates that the majority of items in the factor matrix indicated a high factor loading. Evidently, the first factor with the item P14 had the highest score (.799). Meanwhile 10 items loaded in the second factor with five of the items greater than .4 (P10, P2, P13, P7 and P4). The third factor only loaded five items with three of them being less than .4 (P16, P10 and

P5). According to Field (2013), each factor should have more than four items greater than .4 to be factor-analytically fit for further analysis. However, the fourth factor had the weakest score factor loading with only two items less than .4 (P6 and P7) and had a cross loading with the other factors. This factor extraction result is counted in determining the significant number of factor in the next step of analysis.

4.4.1.3 Number of factor extraction determination

In determining factor extraction, three criteria were employed. The criteria are Kaiser's criterion (eigenvalues greater than 1.0), scree plot and parallel analysis. Kaiser's criterion is the most commonly used method, which allows only factors with an eigenvalue of 1.0 or more to be retained for further analyses (Pallant, 2016). The eigenvalue of a factor represents the amount of the total variance explained by that factor (Pallant, 2016). Table 4.8 demonstrates four factors with eigenvalues over the Kaiser's criterion of 1.0 and the initial total variance that explained the factor accounted for 32.5%, 12.5%, 7.9% and 4.6% of variance respectively. Although Kaiser's criterion is one of the popular methods used by the researchers, it has been criticised on the basis that it retains too many factors in some situations (Pallant, 2016).

Table 4.8: Total variance explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**7.159**	**32.541**	**32.541**	6.725	30.568	30.568
2	**2.756**	**12.526**	**45.067**	2.214	10.065	40.634
3	**1.747**	**7.939**	**53.006**	1.259	5.721	46.355
4	**1.006**	**4.575**	**57.581**	.478	2.171	48.526
5	.966	4.389	61.970			
6	.953	4.330	66.301			
7	.777	3.533	69.834			
8	.714	3.246	73.080			
9	.674	3.063	76.143			
10	.635	2.886	79.028			
11	.630	2.865	81.893			
12	.551	2.504	84.398			
13	.508	2.308	86.706			
14	.497	2.258	88.964			
15	.444	2.017	90.982			
16	.403	1.832	92.814			
17	.342	1.555	94.369			
18	.333	1.514	95.883			
19	.271	1.230	97.114			
20	.235	1.068	98.182			
21	.208	.946	99.128			
22	.192	.872	100.000			

Extraction Method: Principal Axis Factoring.

However, Kaiser's criterion is accurate under two conditions. First, when there are fewer than 30 items and the communalities after extraction are greater than .7. Second, when the sample size exceeds 250 and the average communalities after extraction is greater than .6 (Field, 2013, p.698). Table 4.9 indicates the communalities after the extraction. Evidently, only two items

(P17 and P20) have communalities exceeding .7. Hence, the average communalities can be found by adding them up and dividing by the number of communalities (10.419/22=.474). Accordingly, both of these criteria suggested by Kaiser might be inappropriate for these data. Therefore, the Kaiser's criterion is not significant for POS items and another criterion should be considered in determining the factor extraction.

Table 4.9: Communalities

	Initial	Extraction
P1	.385	.350
P2	.424	.417
P3	.522	.558
P4	.410	.560
P5	.253	.269
P6	.398	.472
P7	.344	.440
P8	.518	.508
P9	.358	.265
P10	.376	.421
P11	.316	.235
P12	.309	.282
P13	.345	.356
P14	.700	.687
P15	.671	.649
P16	.614	.649
P17	.731	.791
P18	.516	.529
P19	.666	.629
P20	.647	.764
P21	.610	.572
P22	.306	.274

Extraction Method: Principal Axis Factoring.

Another test conducted was the Catell's scree test which involves plotting each of the eigenvalues of the factors and inspecting the plot to find at what point the shape of the curve changes direction and becomes horizontal (Pallant, 2016). Cattell (1966) recommended retaining all factors above the elbow, or break in the plot as these factors contribute the most to the explanation of the variance in the set (Pallant, 2016). Figure 4.25 is the scree plot of the data. Hence, from the scree plot, there are a slight inflexion after factor 2 and a clear horizontal curve change direction break after factor 4. Therefore, the researcher could probably justify retaining either two or three factors.
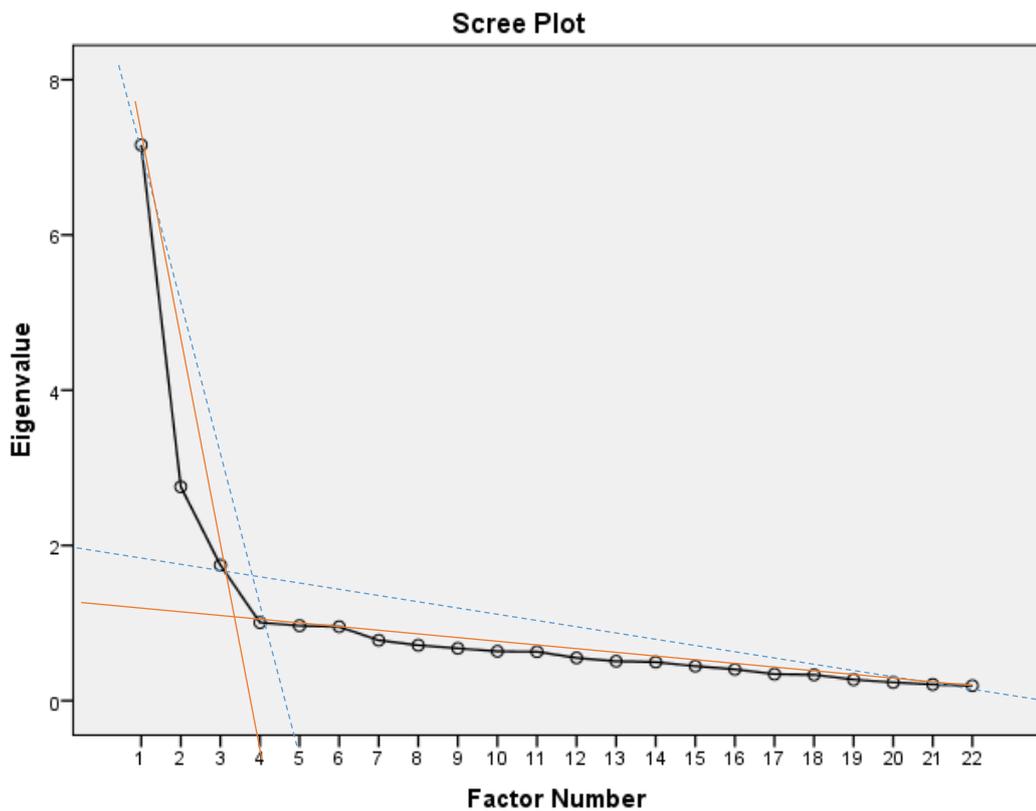
Figure 4.25: Scree plot of data extraction

Finally, a parallel analysis test was done to determine the number of factors to retain. Zhang, Liu and Wang (2016) suggested that parallel analysis is recommended when sample sizes were small and correlations amongst dimensions were low. For that purpose, the researcher used the FACTOR ver. 10.3.01 developed by Lorenzo-Seva (2013) to investigate the parallel analysis with Pearson Correlation Matrices. Table 4.10 shows the result of parallel analysis based on the minimum rank factor analysis suggested by Lorenzo-Seva, Timmerman and Kiers (2011). The result recommended retaining either two factors with 95-percentile consideration or three factors with means' consideration.

Table 4.10: Parallel analysis with Pearson correlation matrices based on Factor Analysis

Item	Real-data % of variance	Mean of random % of variance	95 percentile of random % of variance
1	35.5**	9.6	10.6
2	13.9**	8.8	9.4
3	8.2*	8.1	8.8
4	4.9	7.6	8.2
5	4.6	7.2	7.7
6	3.7	6.7	7.1
7	3.7	6.3	6.7
8	3.2	5.8	6.2
9	3.0	5.4	5.8
10	2.9	5.0	5.4
11	2.7	4.7	5.0
12	2.3	4.3	4.6
13	2.0	3.9	4.3
14	1.9	3.5	3.9
15	1.8	3.1	3.5
16	1.7	2.7	3.1
17	1.3	2.3	2.7
18	1.1	1.9	2.4
19	0.8	1.5	2.0
20	0.5	1.0	1.5
21	0.1	0.6	1.1
22	0.0	0.0	0.0

* Advised number of dimensions when 95 percentile is considered: 2
* Advised number of dimensions when mean is considered: 3

Upon comparing the result of the two-factor analysis test with three factors analysis test, and for the purpose of consistency and logical explanation of the item distribution, the researcher recommended retaining just two factors

for further investigation. As such only two factors were maintained for further investigation.

4.4.1.4 Factor rotation

Factor rotation was performed after the number of factors has been determined. Pallant (2016) urged that rotation does not change the underlying solution. She noted that it rather presents the pattern of loadings in ways that are smooth for interpretation. Meanwhile, Field (2013) recognises the varimax as orthogonal rotations and the best rotation process for simple factor analysis since it is known to be a right general approach that simplifies the interpretation of factors. Therefore, the researcher used the varimax rotation to attempt maximum dispersion of loading between factors. Table 4.11 demonstrates the rotated component matrix using the Principal Axis factoring analysis with varimax rotation retaining two factors for the analysis.

Table 4.11: Rotated Factor Matrix a

	Factor	
	1	2
P17 Gaining new ideas	.843	
P14 Instruction enhancement	.801	
P15 Benefit visiting	.786	
P19 Improves new teacher	.772	
P21 Improve in-service teacher	.702	
P8 Exchanging expertise	.667	
P3 Contribution	.623	
P6 More idea and skills	.589	
P9 Enough time for feedback	.516	
P22 Meeting professional need	.444	
P1 Motivation	.437	
P11 Evaluation	.415	
P2 Interruption		.611
P13 Lack class control		.580
P20 Unbenefited visiting		.564
P16 Not to improve CPD	-.436	.546
P18 Unhelpful to face challenge		.546
P7 No right to choose observer		.522
P10 Job stress		.511
P12 Worries		.484
P4 Overwhelming		.439
P5 Time consumption		**.344**

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

The two factor loadings show almost all of the items loading substantially only on one factor. The first factor had a high loading on the first twelve items with the highest being P17 (.843). Four of the items loaded in the first factor (P22, P1, P11, and P16) indexed below .5. Meanwhile, the second factor loaded ten items with the highest score being P2 (.611). Three of the items in second

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factor score were below .5 (P12, P4, and P5) with the lowest being P5 (.344). However, P16 recorded cross loading between both factors with verified higher loading (.546) to the second factor than the first factor (-.436). Accordingly, Lani (2010) classified the level of factor loading criteria based on their magnitude: greater than .3 as minimum consideration level; higher than .4 as more important; and higher than .5 as practically significant. After consideration with the minimum level of loadings as recommended by Lani (2010) with greater than .3, all the items are accepted with the condition as P16 (.546) remain in the second factor and P5 (.344) at minimum consideration level. To conclude, 12 items (P17, P14, P15, P19, P17, P21, P8, P3, P6, P9, P22, P1, and P11) were categorised in the first factor, 10 items (P2, P13, P20, P16, P18, P7, P10, P12, P4, and P5) clustered in second factor, and no item was deleted.

4.4.1.5   Factor's interpretation and labelling

The labelling of factors is a subjective, theoretical and inductive process (Williams, Brown and Onsman, 2010). Therefore, the researcher considered the items in the first factor as the positive factor of peer observation. The items in the first factor suggested the characteristics of the teacher's interest and expectation on the benefits and advantages of peer observation. Therefore, the first factor was labelled as the Benefit of peer observation. Meanwhile the second factor was loaded with the negative items and the challenging aspect of peer observation like interruption, stress, and worries. As a result, the second factor was labelled as Constraint of peer observation. Table 4.12 shows the distribution of items in two specific factors.

Table 4.12: Item distribution in two factors result

Benefit		Constraint	
P17	Gaining new ideas	P2	Interruption
P14	Instruction enhancement	P13	Lack class control
P15	Benefit visiting	P20	Unbenefited visiting
P19	Improves new teacher	P16	Not to improve CPD
P21	Improve in-service teacher	P18	Unhelpful to face challenge
P8	Exchanging expertise	P7	No right to choose observer
P3	Contribution	P10	Job stress
P6	More idea and skills	P12	Worries
P9	Enough time for feedback	P4	Overwhelming
P22	Meeting professional need	P5	Time consumption
P1	Motivation		
P11	Evaluation		

4.4.2 Reliability of scales

Three scales are used in the present study. They are; i) Peer Observation Scale (POS), ii) OCQ, and iii) TSES. The scales were accordingly tested for reliability based on the Cronbach's Alpha test. The Cronbach's Alpha is based on the average inter-item correlation and normally ranges between 0 and 1.0 (Trochim et al., 2015). The closer Cronbach's Alpha coefficient is to 1.0, the more significant the internal consistency of the items in the scales (Auer, Guralnick and Simonics, 2018). George and Mallery (2016) provided the level of Cronbach's Alpha coefficient as "$\alpha > .9$ – Excellent, $\alpha > .8$ – Good, $\alpha > .7$ – Acceptable, $\alpha > .6$ – Questionable, $\alpha > .5$ – Poor, and $\alpha < .5$ – Unacceptable". Meanwhile, Pallant (2016) insisted that a scale with Cronbach's Alpha coefficient higher than .7 be required to create a reliable construct of multiple variables. Table 4.13 demonstrates the constructs contained in these three scales.

Table 4.13: Scales and constructs in the research

Scales	Number of constructs	Constructs	Number of items
Peer Observation Scale	2	Benefit	12
		Constraint	10
Organisational Commitment Questionnaire	2	Affective Commitment	9
		Calculative Commitment	6
Teacher Self-efficacy Scale	1		10

4.4.2.1 Reliability on Peer Observation Scale

Table 4.14 illustrates the Cronbach's Alpha reliability result of the first construct of Peer Observation Scale on Benefit is .896, which is a good score (George and Mallery, 2016). The analysis also shows how much the reliability would increase/decrease if any of the items are deleted. In this case, a slight increasing score of the reliability test to .898 was found if the item P11 (evaluation) was deleted. However, the researcher chose to retain the item because deletion would yield an increase of only .02, and the recent reliability of .896 is good enough (Field, 2013).

Table 4.14: Construct of Benefit reliability analysis

Number of Items	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
12	.896	P17 Gaining new ideas	.879
		P14 Instruction enhancement	.880
		P15 Benefit visiting	.881
		P19 Improves new teacher	.880
		P21 Improve in-service teacher	.883
		P8 Exchanging expertise	.885
		P3 Contribution	.888
		P6 More idea and skills	.892
		P9 Enough time for feedback	.894
		P22 Meeting professional need	.895
		P1 Motivation	.895
		P11 Evaluation	.898

Meanwhile, the result of Cronbach's Alpha score for Constraint (Table 4.15) is .799, which is an acceptable score (George and Mallery, 2016). Inspection of the corrected item-total correlation also did not show any increasing value of reliability if any item is deleted. Hence, inferential statistical analysis can be run on all of the items in this construct.

Table 4.15: Construct of Constraint reliability analysis

Number of Items	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
10	.799	P2 Interruption	.775
		P13 Lack class control	.777
		P20 Unbenefited visiting	.777
		P16 Not to improve CPD	.777
		P18 Unhelpful to face challenge	.778
		P7 No right to choose observer	.781
		P10 Job stress	.784
		P12 Worries	.782
		P4 Overwhelming	.792
		P5 Time consumption	.796

4.4.2.2   Reliability of Organisational Commitment Questionnaire

The Cronbach's Alpha test was done for the constructs in OCQ. There were two constructs measured in the OCQ, which are Affective Commitment and Calculative Commitment. Table 4.16 demonstrates the result of Cronbach's Alpha test. Affective Commitment as a construct had a Cronbach's Alpha score of .898, which is a good score (George and Mallery, 2016). Moreover, nine items measured in this construct showed no Cronbach's Alpha score increasing if an item was deleted. Hence, the inferential statistical analysis also can be run on all of the items in this construct.

Table 4.16: Construct of Affective Commitment reliability analysis

Number of Items	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
9	.898	OCQ1	.892
		OCQ2	.881
		OCQ4	.894
		OCQ5	.892
		OCQ6	.878
		OCQ8	.885
		OCQ10	.885
		OCQ13	.889
		OCQ14	.887

The other construct of OCQ, Calculative Commitment has a score of .779 in Cronbach's Alpha reliability test result. Although .779 is an acceptable score (George and Mallery, 2016), the Table 4.17 illustrates one of six items in calculative commitment affected the Cronbach's Alpha result. However, as the item OCQ7 is theoretical relevance in the research (Kanning and Hill, 2013) and the remaining reliability is still an acceptable score, the researcher decided to retain OCQ7 in the construct.

Table 4.17: Construct of Calculative Commitment reliability analysis

Number of Items	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
6	.779	OCQ3	.730
		OCQ7	.827
		OCQ9	.743
		OCQ11	.708
		OCQ12	.731
		OCQ15	.717

4.4.2.3 Reliability of Teacher Self-efficacy Scale

The last scale measured by the reliability test was the Teacher's Self Efficacy Scale (TSES), which contains only one construct of ten items (Table 4.18). The Cronbach's Alpha result on this scale showed the highest score, .907 which is an excellent grade as it is very close to 1 (George and Mallery, 2016). The test on the items in this construct also did not find any results of an increased score of Cronbach's Alpha if any of the items are deleted. Consequently, the TSES result in the research was consistent to be tested in the inferential statistical analysis.

Table 4.18: Construct of TSES reliability analysis

Number of Items	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
10	.907	TSES1	.895
		TSES 2	.898
		TSES 3	.895
		TSES 4	.896
		TSES 5	.899
		TSES 6	.900
		TSES 7	.896
		TSES 8	.899
		TSES 9	.899
		TSES 10	.902

To conclude, Table 4.19 demonstrates overall Cronbach's Alpha score for each of the scales according to the constructs. The highest score was TSES with .907 and the construct of Calculative Commitment in OCQ was the lowest score (.779) amongst the others.

Table 4.19: Summary of Cronbach's Alpha score for scales

Scales	Constructs	Cronbach's Alpha
Peer Observation Scale	Benefit	.896
	Constraint	.799
Organisational Commitment Questionnaire	Affective Commitment	.898
	Calculative Commitment	.779
Teacher Self-efficacy Scale		.907

4.4.3   Test for Research Question One

Eight hypotheses were tested to investigate a possible significant difference of the teachers' perception based on their demographic characteristic in Research Question One. Table 4.20 shows the hypotheses that were tested in the analysis. As such, three Independent Sample t-tests and five tests of one-way ANOVA were used to distinguish the difference of the teachers' perception of peer observation. Independent Sample t-test was used to measure the significant difference in two groups of gender, type of school and location of the school. Meanwhile, one-way ANOVA was used to test the significant difference in groups based on age, teaching experience, observing experience, level of education and position in schools.

Table 4.20: The hypothesis and tests for Research Question One

No.	Hypothesis	Test
1	There is a significant difference in teachers' peer observation perception between male and female	Independent Sample t-tests
2	There is a significant difference in teachers' peer observation perception between GARS and NRSS schools	Independent Sample t-tests
3	There is a significant difference in teachers' peer observation perception between urban and rural schools	Independent Sample t-tests
4	There is a significant difference in teachers' peer observation perception between teachers' ages	One-way ANOVA
5	There is a significant difference in teachers' peer observation perception between teacher's year of teaching experiences	One-way ANOVA
6	There is a significant difference in teachers' peer observation perception between teacher's year of observing experiences	One-way ANOVA
7	There is a significant difference in teachers' peer observation perception between teachers' educations	One-way ANOVA
8	There is a significant difference in teachers' peer observation perception between teachers' current positions	One-way ANOVA

4.4.3.1   Independent Sample t-test for genders

An independent Sample t-test was conducted to compare the difference in means of teachers' perception of peer observation between male ($n = 71$) and female teachers ($n = 102$). Table 4.21 shows the result of the independent sample t-test based on gender. There was no significant

difference in the score for males (M = 2.08, SD = 0.36) and females (M = 2.06, SD = 0.35) with $t(171)$ = .302, p = n.s. Therefore, the Hypothesis 1 (H1) on the difference between genders was not supported. These results suggest that there is no difference in perception of peer observation between male and female teachers.

Table 4.21: Independent Samples t-test results on genders

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.165	.685	.302	171	.763	.01648	.05457	-.09123	.12419
Equal variances not assumed			.300	146.476	.765	.01648	.05500	-.09221	.12517

4.4.3.2 Independent Sample t-test for type of schools

An independent Sample t-test was also used to investigate the teachers' perception of peer observation in two types of religious secondary schools in Malaysia which are NRSS (n = 34) and GARS (n = 140). The result of the test to compare the difference means of teachers' perception of peer observation between NRSS and GARS is presented in Table 4.22. The result shows that there was no significant difference in the score for NRSS (M = 2.05, SD = 0.37) and GARS (M = 2.08, SD = 0.35) with $t(172)$ = .453, p = n.s. Therefore, the Hypothesis 2 (H2) on the difference between the types of

schools was rejected. This result suggests that there was no difference in perception of peer observation between GARS and NRSS teachers.

Table 4.22: Independent Samples t-test results for type of schools

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | | | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	T	df	Sig. (2-tailed)	Mean Differen ce	Std. Error Differe nce	Lower	Upper
Equal variances assumed	.426	.515	.453	172	.651	.03045	.067 29	-.10236	.16327
Equal variances not assumed			.432	47. 676	.667	.03045	.070 54	-.11141	.17231

4.4.3.3 Independent Sample t-test for school's location

Similarly, the independent Sample t-test was conducted to measure the difference between teachers' perception of peer observation in two types of school locations, urban (n = 67) and rural area (n = 107). Table 4.23 demonstrates the result which shows a significant difference in the score for rural teachers (M = 2.12, SD = 0.34) and urban teachers (M = 1.99, SD = 0.40) with; $t(172)$ = 2.488, p = 0.01. Therefore, the Hypothesis 3 (H3) on the difference between school's locations was supported. This result suggests that the school's location does affect teacher's perception of peer observation. Specifically, the result recommends that teachers in rural schools have more positive perceptions concerning peer observation than their urban counterparts. Therefore, the significant difference between school locations needs to be discussed further in qualitative interview analysis.

Table 4.23: Independent Samples t-test results for schools' locations

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
| | | | | | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.518	.473	2.488	172	.014	.13325	.05356	.02753	.23896
Equal variances not assumed			2.542	149.991	.012	.13325	.05242	.02967	.23682

4.4.3.4 One-way ANOVA test on ages

The comparison by age was categorised into three groups; below 35 years old ($n = 68$), between 35 and 45 years old ($n = 67$) and above 45 years old ($n = 35$). The mean values of teachers' perception of peer observation scores by ages were; below 35 ($M = 2.05$, $SD = 0.39$), 35 to 44 ($M = 2.04$, $SD = 0.40$) and above 45 ($M = 1.94$, $SD = 0.36$). The results of one-way ANOVA test in Table 4.24 shows no significant difference between the groups of ages. Table 4.24 demonstrates that the one-way ANOVA ($F (2,167) = 1.20$, $p = 0.306$) showed no statistically significant difference between group of ages at the .05 significant level. Therefore, the Hypothesis 4 (H4) was rejected and it suggests that there is no difference of peer observation perception between teachers according to groups of age.

Table 4.24: One-way ANOVA results for overall teachers' perception of peer observation by ages

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.357	2	.178	1.193	.306
Within Groups	24.969	167	.150		
Total	25.326	169			

4.4.3.5 One-way ANOVA test on teaching experience

The research also investigated the teaching experience amongst the respondents to determine the different perceptions of peer observation practice. There were four groups of teaching experience years; one to three years ($n = 33$), four to six years ($n = 18$), seven to nine years ($n = 37$), and ten years and above ($n = 88$). The mean scores for all four groups of teaching experience fluctuate slightly amongst the groups. Teachers with one to three years ($M = 2.03$, $SD = 0.32$) had the lowest score. The mean score increased for teachers with four to six years ($M = 2.13$, $SD = 0.42$). Meanwhile, the mean score slightly decreased for the seven to nine-year group ($M = 2.04$, $SD = 0.30$), and rose again for the teachers with above ten years' experience ($M = 2.10$, $SD = 0.37$). However, no significant difference between teaching experiences amongst the respondents was found. Table 4.25 illustrates the result of the one-way ANOVA test ($F(3,172) = 0.51$, $p = .677$) which indicates no statistically significant difference between teaching experience at the .05 significant level. Hence, the Hypothesis 5 (H5) was not supported, and the results suggest that no difference was found on teachers' perceptions of peer observation between their years of experiences.

Table 4.25: One-way ANOVA results for overall teachers' perception of peer observation by teaching experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.189	3	.063	.509	.677
Within Groups	21.290	172	.124		
Total	21.479	175			

4.4.3.6   One-way ANOVA test on observing experience

For the observing experience, respondents were categorised into four groups; one to three years (n = 79), four to six years (n = 39), seven to nine years (n = 20), and ten years and above (n = 37). The teachers' perception of peer observation appeared to fluctuate starting with the one to three-year group (M = 2.07, SD = 0.38), increasing for the four to six-year group (M = 2.12, SD = 0.33), decreasing to the lowest for the seven to nine-year group (M = 2.01, SD = 0.36), and increasing again for the group above 10 years (M = 2.09, SD = 0.32). Moreover, the one-way ANOVA test conducted did not find a significant difference between the groups based on their observing experience. Table 4.26 shows the result of one-way ANOVA (F (3,171) = 0.40, p = .751), with no statistically significant differences between teaching experience at the .05 significant level. The results rejected Hypothesis 6 (H6) and proved that no difference was found in teacher's perception of peer observation based on their years of observing experience.

Table 4.26: One-way ANOVA results for overall teachers' perception of peer observation by observing experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.151	3	.050	.403	.751
Within Groups	21.317	171	.125		
Total	21.468	174			

4.4.3.7   One-way ANOVA test on educational background

According to the level of educational background, teachers were divided into three groups of education level; diploma (n = 16), bachelor (n = 150) and postgraduate (n = 13). The mean score of the groups based on their perception of peer observation practice starting with diploma holders (M = 2.07, SD = 0.35) is slightly less than degree holders (M = 2.09, SD = 0.35) and decreasing to the lowest for the postgraduate level degree holders (M = 1.98, SD = 0.30). The one-way ANOVA test performed, indicates no significant difference was revealed amongst the teachers' educational background. The results are further demonstrated in Table 4.27 (F (2,176) = 0.64, p = .528) with no statistically significant difference between teaching experience at the .05 significant level. Therefore, the Hypothesis 7 (H7) was rejected, and the results suggest that no difference in teacher's perception of peer observation between the different educational backgrounds was noted.

Table 4.27: One-way ANOVA results for overall teachers' perception of peer observation by educational background

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.157	2	.078	.640	.528
Within Groups	21.505	176	.122		
Total	21.661	178			

4.4.3.8 One-way ANOVA test on teacher's position

The respondents of the study were categorised into three groups based on their positions in the schools. The teacher's positions were; senior teachers ($n = 46$), normal teachers ($n = 89$), and in-training teachers ($n = 40$). Based on their perception of peer observation, the means score of the groups started with the highest for the senior teachers ($M = 2.19$, $SD = 0.30$), decreasing to the lowest for the assistant teachers ($M = 1.99$, $SD = 0.36$) and increasing again for the in-training teachers ($M = 2.14$, $SD = 0.30$). Hence, a one-way ANOVA test was performed to determine the significant difference between groups. From the Table 4.28, the result of one-way ANOVA (F $(2,172) = 6.53$, $p = .002$) indicates that there is a statistically significant difference between teaching experience at the .05 significant level. Therefore, Hypothesis 8 (H8) was supported. The result suggests that there was a significant difference between groups of positions amongst the teachers. Therefore, a Post hoc with Tukey HSD test was conducted to identify the significant difference between groups.

Table 4.28: One-way ANOVA results for overall teachers' perception of peer observation by teachers' position

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.460	2	.730	6.530	.002
Within Groups	19.228	172	.112		
Total	20.688	174			

Table 4.29 shows a Post hoc comparison using the Tukey HSD test results that indicated two significant comparisons between groups and no significant comparison in another. The peer observation perception from senior teachers (M = 2.19) was significantly (p = .003) higher than the normal teachers (M = 1.99). Similarly, the in-training teachers' perception (M = 2.14) was also significant (p = .050), higher than the normal teachers (M = 1.99). The comparisons are stated with a 95% confidence interval of the difference between the means from 0.02 to 0.37 points on a -5 to +5 scale. Meanwhile, the difference between senior teachers and in-training teachers was not significant. The significant difference between teachers' positions required further exploration in the qualitative interview analysis for more understanding.

Table 4.29: Post-Hoc Tests for teachers' perception of peer observation by teachers' position

(I) Position	(J) Position	Mean Difference (I-J)	Std. Error	Sig.	95 % Confidence Interval	
					Lower Bound	Upper Bound
Senior Teacher	Normal Teacher	.20362*	.06072	.003	.0601	.3472
	In-training Teacher	.05320	.07228	.742	-.1177	.2241
Normal Teacher	Senior Teacher	-.20362*	.06072	.003	-.3472	-.0601
	In-training Teacher	-.15042	.06365	.050	-.3009	-.0001
In-training Teacher	Senior Teacher	-.05320	.07228	.742	-.2241	.1177
	Normal Teacher	.15042*	.06365	.050	-.0001	.3009

4.4.3.9   Summary of Hypotheses results for Research Question One

In general, the significant difference found in the two demographic backgrounds, which are school's locations and teachers' positions. Therefore, the H3 and H8 were accepted. However, there was no significant difference in the other six demographic backgrounds after being tested with the inferential statistical analysis. Table 4.30 demonstrates the summary of the analysis results for the first research question.

Table 4.30: Summary of hypothesis results for Research Question One

No.	Hypothesis	Analysis	Result	Conclusion
1	There is a significant difference in teachers' peer observation perception between male and female	Independent Sample t-tests	Not significant	Rejected
2	There is a significant difference in teachers' peer observation perception between GARS and NRSS schools	Independent Sample t-tests	Not significant	Rejected
3	There is a significant difference in teachers' peer observation perception between urban and rural schools	Independent Sample t-tests	Significant	Accepted
4	There is a significant difference in teachers' peer observation perception between teachers' ages	One-way ANOVA	Not significant	Rejected
5	There is a significant difference in teachers' peer observation perception between teacher's year of teaching experiences	One-way ANOVA	Not significant	Rejected
6	There is a significant difference in teachers' peer observation perception between teacher's year of observing experiences	One-way ANOVA	Not significant	Rejected
7	There is a significant difference in teachers' peer observation perception between teachers' educations	One-way ANOVA	Not significant	Rejected
8	There is a significant difference in teachers' peer observation perception between teachers' current positions	One-way ANOVA	Significant	Accepted

4.4.4 Tests for Research Question Two

Research Question Two is focused on the effectiveness of the peer observation perception to organisational commitment and self-efficacy amongst the teachers. Hence, five constructs in three scales are used to measure effectiveness. The constructs are, the POS, OCQ, and TSES. There were two constructs for POS and OCQ respectively, and one construct for TSES. Constructs for peer observation were Benefit and Constraint, whilst constructs for OCQ were Affective and Calculative. Table 4.31 illustrates the constructs used for the analysis.

Table 4.31: List of constructs measured in Research Question Two

Scale	Construct	Number of items	Means	Cronbach's Alpha
POS	Benefit	12	1.899	0.896
	Constraint	10	2.705	0.799
OCQ	Affective	9	1.834	0.898
	Calculative	6	2.946	0.779
TSES	Self-efficacy	10	1.841	0.907

Furthermore, two hypotheses were developed for Research Question Two. The hypotheses were to prove the relationship between the constructs of teachers' peer observation perception and organisational commitment and teachers' self-efficacy. Spearman correlation test was chosen to show the relationship between the constructs. Table 4.32 lists the hypothesis tested in Research Question Two.

Table 4.32: The hypothesis and tests for Research Question Two

No.	Hypothesis	Test
1	There is a significant relationship between constructs of peer observation scale and constructs of organisational commitment.	Spearman correlation
2	There is a significant relationship between constructs of peer observation scale and teachers' self-efficacy	Spearman correlation

4.4.4.1 Test of Normality

Before conducting correlation test between the constructs, a normality check was performed to analyse the appropriate type of correlation that should be used in the correlation test. The constructs were analysed for normality test with boxplots, skewness and Shapiro-Wilk procedures. Figure 4.26 demonstrates the boxplot results of the constructs. The boxplots of Benefit and Constraint are reasonably close to the centre of the box, and the whiskers are at an approximately equal length. However, the boxplots for the other three of constructs, Affective, Calculative and Self-efficacy are slightly disturbing in that the medians are close to the upper quartile. The lower whisker in Self-efficacy boxplot is shorter than the upper one, which would be suggesting positive skewness. There are also some outliers in all of the constructs and Pearson's correlation is sensitive to these as well as skewness.
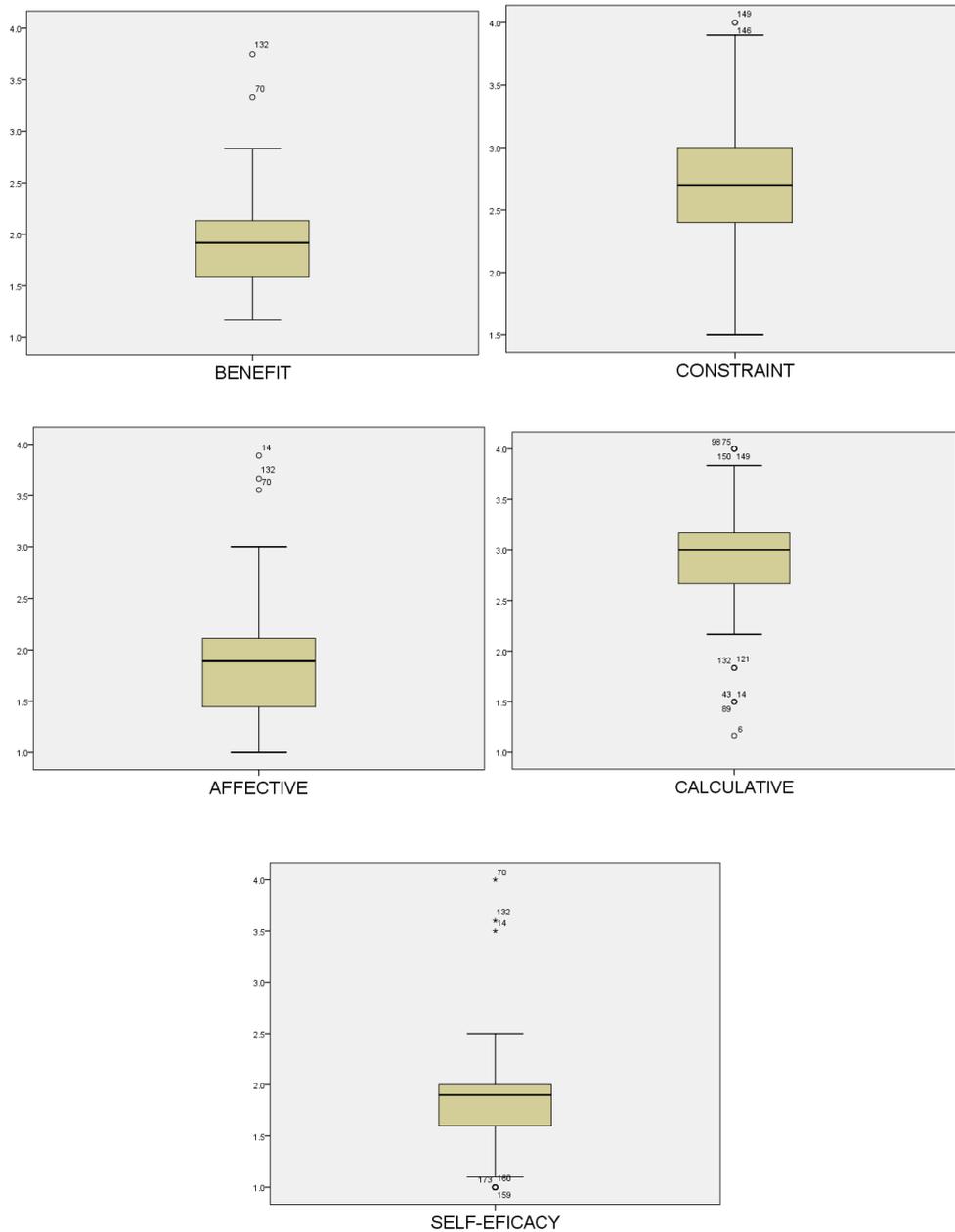
Figure 4.26: Boxplots of constructs

Since some doubts arose over normality, the skewness coefficient test was done to investigate if there was further evidence to suggest the constructs were skewed. A quick check indicates the skewness coefficients were not sufficiently large to warrant concern, since the absolute values of the skewness coefficients are less than two times their standard errors. However, Table 4.33 illustrates that only the Constraint data's skewness was consistent

with the data to be normal (0.140 < 2 x .182), whilst the other four constructs appeared larger than would call for concern. The data skewness showed construct of Benefit (0.723 > 2 x .182), Affective Commitment (0.775 > 2 x .182), Calculative Commitment (-0.540 > 2 x .182) and Self-efficacy (0.862 > 2 x .182) respectively.

Table 4.33: Data of skewness and standard errors between constructs

Descriptive Statistics	N	Skewness	
	Statistic	Statistic	Std. Error
Construct of Benefit	179	.723	.182
Valid N (listwise)	179		
Construct of Calculative	179	-.540	.182
Valid N (listwise)	179		
Construct of Constraint	179	.140	.182
Valid N (listwise)	179		
Construct of Affective	179	.775	.182
Valid N (listwise)	179		
Construct of Self-efficacy	179	.862	.182
Valid N (listwise)	179		

Table 4.34 illustrates the results of Shapiro-Wilk procedure for testing normality. The results, based on all the five constructs are quite significant (α < .005). This means there are no concerns over the normality of the data, hence the continuation of the Spearman's correlation analysis.

Table 4.34: Test of normality by Shapiro-Wilk procedure

Tests of Normality			
	Shapiro-Wilk		
Construct	Statistic	df	Sig.
Benefit	0.950	179	0.000
Constraint	0.984	179	0.034
Affective	0.950	179	0.000
Calculative	0.959	179	0.000
Self-efficacy	0.893	179	0.000

4.4.4.2 Correlation between POS and OCQ

The Spearman's correlation test conducted between teachers' perception of peer observation and organisational commitment used four constructs, which are Benefit, Constraint, Affective and Calculative (Table 4.35). A statistically significant and positive correlation between Benefit and Affective was noted, r_s (179) =.501, p = .000. Similarly, a statistically significant Spearman correlation coefficient was also noted between Constraint and Calculative r_s (179) = .408, p = .000. The relationship between Benefit and Calculative showed a negative correlation, r_s (179) = -.307, p = .000). There was also a relationship between Constraint and Affective with a significant negative correlation (r_s (179) = -.248, p = .000).

Furthermore, the square of correlation coefficient was calculated to assess the practical importance and to get the r^2 for the coefficient of determination. This shows how much of the variation in one of the variables is associated with variation in the other. Therefore, the r^2 between Benefit of peer observation and Affective commitment is 25% ($.501^2$ = .251), which is 25.1%.

This is an acceptable r^2 value. However, the r^2 between Constraint and Calculative is 16.65% (.408² = .1665, which as a percentage = 16.65%). Likewise, the r^2 between Benefit and Calculative commitment drew the weak relationship in a practical sense; knowledge of one of the Constructs would account for only 9.42% (-.307² = .0942, which as a percentage = 9.42%) of the variance in the other. The weakest relationship was noted between Constraint and Affective commitment with an r^2 value of 6.15% (-.248² = .0615, which as a percentage = 6.15%).

Table 4.35: Correlation results for POS and OCQ

Correlation				
	1	2	3	4
Benefit	1	-.431[**]	.501[**]	-.307[**]
Constraint		1	-.248[**]	.408[**]
OCQ Affective			1	-.404[**]
OCQ Calculative				1

$p^{**} < .001$

4.4.4.3 Correlation between POS and TSES

Similar correlation tests were conducted to investigate the relationship between perception of peer observation (Benefit and Constraint constructs) and Self-efficacy amongst the teachers. Table 4.36 demonstrates the result of the Spearman's correlation test of the constructs in which bias-corrected and accelerated bootstrap 95% CIs were reported in square brackets. The result shows that Self-efficacy significantly and positively correlated with Benefit, r_s (179) = .500, p = .000, and negatively with Constraint r_s (179) = -

.261, p = .000. Even though there was a significant relationship between peer observation perception and Self-efficacy, the r^2 result reported indicates a moderate and weak relationship of correlation coefficient between Self-efficacy and Benefit (.500² = .25, = 25%) and between Self-efficacy and Constraint (-.261² = .0681, = 6.81%).

Table 4.36: Correlation results POS and TSES

Correlation			
	1	**2**	**3**
PO Benefit	1	-.431**	.500**
PO Constraint		1	-.261**
Self-Efficacy			1

p^{**} < .001

4.4.4.4 Summary of Hypotheses results for Research Question Two

The relationships between the constructs of the study as hypothesised were all statistically and positively significant. Therefore, the H9 and H10 were accepted. There were three positive correlations found between the constructs of Benefit and Affective, Constraint and Calculative, and Benefit and Self-efficacy. However, three negative correlations were found between the constructs of Constraint and Affective, Benefit and Calculative, and Constraint and Self-efficacy. Table 4.37 demonstrates the summary of the analysis result for the Research Question Two.

Table 4.37: Summary of hypothesis results for Research Question Two

No.		Hypothesis	Result		Conclusion
1	POS and OCQ	There is a significant relationship between construct of Benefit and construct of Affective Commitment.	Significant	Positive Correlation	Accepted
		There is a significant relationship between construct of Constraint and construct of Affective Commitment	Significant	Negative Correlation	Accepted
		There is a significant relationship between construct of Benefit and construct of Calculative Commitment	Significant	Negative Correlation	Accepted
		There is a significant relationship between construct of Constraint and construct of Calculative Commitment	Significant	Positive Correlation	Accepted
2	POS and TSES	There is a significant relationship between construct of Benefit and construct of Teacher's Self-efficacy	Significant	Positive Correlation	Accepted
		There is a significant relationship between construct of Constraint and construct of Teacher's Self-efficacy	Significant	Negative Correlation	Accepted

4.5 Summary of the chapter

This chapter reported the results of quantitative analysis that contributed to the emergent issues and themes to discover in the next qualitative approach and analysis. The issues that were highlighted from the quantitative analysis are: i) the significant difference of perception on peer observation amongst teachers in different positions and school locations; ii) the evaluation issues of peer observation; iii) significant relationship between peer observation and self-efficacy, and organisational commitment; iv) the time constraints; v) negative situation in peer observation practice; vi) the benefit of peer observation practice, and; vii) commitment and satisfaction to work issues. Thus, the next chapter will discover in-depth the emergent issues regarding objectives and questions of the research.

CHAPTER 5

QUALITATIVE FINDINGS

5.1 Introduction

This chapter presents the qualitative findings, which are derived from semi-structured interviews that provides a further exploration explicitly on the new and significant circumstance found in the quantitative results at the first stage. This chapter also reports on the findings of the research questions regarding the role of Principals and State Officers on peer coaching, teacher's commitment, and self-efficacy. Additionally, this chapter considers all outcomes and opinions from the interviews in order to reach some recommendations and improvement of peer coaching practice. The interviews were conducted with 21 participants; 15 teachers, four Principals and two State Officers.

5.2 Themes identified from interviews

The interview transcriptions were analysed by thematic coding in order to discover the emerging themes after the coding (Flick, 2013). The themes were categorised according to the research questions and the issues, which arose from the survey analysis as suggested by Clarke and Braun (2013). Appendix O shows the table of the data coding after being categorised into seven themes to describe a whole perception of the participants on the peer coaching as a change tool of teacher's development. The themes identified from the interviews are shown in Figure 5.1.
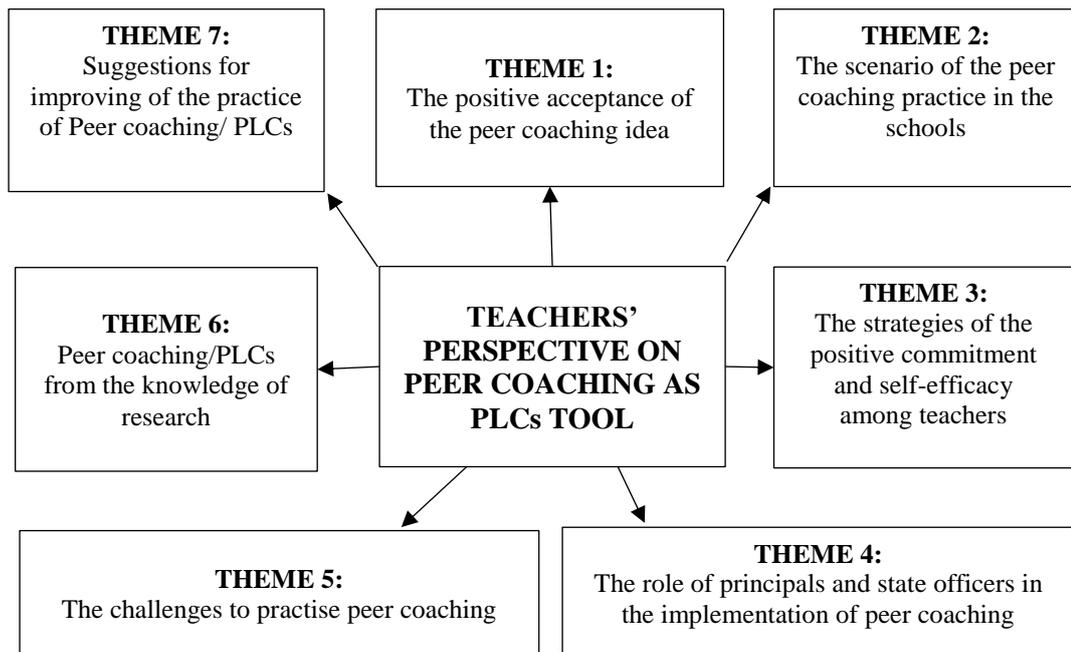
Figure 5.1: Themes identified from the qualitative finding

5.2.1 Theme 1: The positive acceptance of peer coaching idea

Theme 1 discovers the positive acceptance of the peer coaching concept amongst the participants. Moreover, the participants drew a high recognition on the idea of peer coaching in teachers' professional development practice. Theme 1 explores five sub-themes that support the notion of the positive agreement of peer coaching practice, which are:

    i)   Peer coaching as a helpful tool to upgrade teaching performance

    ii)   The influence of shared ideas in peer coaching

    iii)   The idea of giving positive feedback

    iv)   Peer coaching in identifying weaknesses

    v)   Peer coaching cultivates the culture of cooperation

5.2.1.1 Peer coaching as a helpful tool

Referring to Appendix O, the participants were in total agreement on the benefit of peer coaching and PLCs in helping teachers to develop their teaching skills and methods. Apart from giving assistance and guidance to improve teaching skills, the participants believed peer coaching developed in their observation and monitoring teachers' skills. Therefore, they assumed that the prominent objective of peer coaching is to help each other to improve. Teacher 4 explained in describing the aim of the peer coaching:

> *"I think peer coaching aims for helping each other. It is neither measurement nor an evaluation. It is more what we mention as trial and for improvement purpose."*
> **(Teacher 4)**

The essence of helping each other in peer coaching also occurred when dealing with a new approach and module or a new curriculum in a particular case. In order to overcome the challenge of adopting a new situation, peer coaching seemed to be an outstanding tool to improve teaching skill amongst the teachers. Teacher 3 insisted:

> *"Concerning peer coaching, it is one of the things that help a lot towards the improvement of our profession as teachers. Meaning that, whilst helping our friends we also learn teaching methods, sometimes this sharing is something truly crucial, what with 21st Century Learning (PA21) introduced that we have to deal with. There are all sorts of challenges and obstacles. However, with peer coaching, thus it is no other than helpful for us to keep accomplishing our job as best as possible."*
> **(Teacher 3)**

Similarly, the Principal 3 supported the argument when connecting the achievement of the peer coaching and PLCs programmes with the improvement of academic achievement in the school. As a Principal, he believed that the true essence of peer coaching would help the teacher to strengthen their commitment to the school's excellence, as he said:

> *"In my opinion, the improvement of academic achievement amongst the students in this school is an evidence for the effectiveness of PLCs programmes. When teachers discussed amongst themselves about the weaknesses and strength of their teaching and learning skills, this matter could become a better transformation for themselves. To me, this kind of good things is surely helpful to teachers in giving their commitment to the school."* **(Principal 3)**

In the meantime, the Officer 2 widened the essence of helpfulness in peer coaching and PLCs programmes from not only engagement between the teachers in a school, but also involvement amongst the colleagues in other schools in the District and State that support the programmes' achievement. Officer 2 explained:

> *"As far as what I am informed and understand about PLCs and peer coaching is how we could help our colleagues, be it at the school or District level. At school, teachers are responsible for discussing together regarding how to develop or improve (their) teaching or the teaching and learning process of the Arabic language. Not just that, (it is also concerning) what sorts of programmes can be done for the improvement of Arabic language subject performance."* **(Officer 2)**

5.2.1.2 The influence of shared ideas

The positive influence of peer coaching is synonymous with the notion of sharing amongst the teachers. All of the participants mentioned sharing as the principal characteristic in peer coaching practice. The sharing practice stated by the participants included the sharing of ideas, knowledge, techniques, experiences, teaching materials and modules. Teacher 2 demonstrated how the fact of sharing happened in the peer coaching:

> *"Peer coaching is, in fact, a sharing. In reality, everyone has his or her own opinions (and) ideas. Let's say we used to pursue a diploma, (or be it) an educational diploma, and perhaps there are our peers who have experiences in teaching, perhaps each of us has our techniques and strategies which sometimes we do not notice. There are times when we think ours is good enough; however, the moment we observe our friends' techniques in teaching, (new) ideas could pop up (in our mind)."* **(Teacher 2)**

Sharing ideas and knowledge happened in different situations. Fifteen participants realised that sharing ideas and knowledge always occurred in the pre-observation meeting and the feedback session. Therefore, Teacher 13 thought the most significant time of sharing is in the process of planning for teaching and learning activities, whilst Teacher 8 explained that teachers committed with the sharing idea in feedback sessions.

Meanwhile, Teacher 10 believed that teachers could share information in teaching and learning techniques with the formal peer coaching approach. However, in the informal situation, sometimes a problem emerged in the teaching process. Thus, the teachers would sit down and discuss how to

overcome the issue and suggest the solutions to each other. Likewise, Teacher 11 supported the idea of change in sharing session and recognised the positive impact on the teacher to change from old ways to a different approach with the new knowledge and ideas.

The other types of sharing methods and techniques revealed by eleven of the participants usually occurred when a teacher observes their peer teaching in the classroom. Teacher 5 insisted that sharing the techniques for understanding and practising is the most helpful one in order to maintain teachers' development processes. Moreover, Teacher 10 described how the methods and techniques of sharing were developing in the school:

> *"Up to this point, regarding sharing with other people, in the sense of our social relations, (I think), sharing leaves influence the most. With our friends exhibiting teaching aids, we could observe and do for ourselves. Students' effectiveness could achieve a satisfying level. Therefore, we can share and derive information (from friends) and do it too. In fact at my level, much of what I do in class, I tell friends (about) the methods and techniques."* **(Teacher 10)**

Furthermore, all of the participants including the Principals stressed the significance of the sharing concept in peer coaching. Nevertheless, Principals 1 and 4 highlighted the best advantage of the peer coaching was with beginning teachers who could grab the appropriate techniques and develop their skills from the experienced teacher. For that reason, Principal 4 thought:

> *"… because we see teachers could share their experience and ideas and then used again by other teachers in their respective classes during teaching and learning. However, what happens now is not many peer coaching activities are done precisely. If we could maintain it, peer coaching is the best especially when it involves new teachers and well-experienced teachers."*
> **(Principal 4)**

Differentially, the significance of sharing between teachers in peer coaching was only discussed in a simple context amongst the State Officers. Only Officer 1 indicated sharing ideas amongst the teachers in peer coaching when quoted:

> *"Peer coaching is all about how teachers could communicate amongst them; they help one another in making amendments amongst them through all sorts of the medium include meeting in person or other platforms which they could also use to discuss problems, share ideas and also improve their teaching and learning activities from time to time."* **(Officer 1)**

5.2.1.3 The idea of giving positive feedback

The crucial aspect of peer coaching is how the teacher gives feedback on the observation to their peer teachers. The techniques of providing feedback include how teachers are responding to each other, discussing, reflecting, commenting, criticising and suggesting to develop teaching performance. All of the participants highlighted the discussion as an aspect of presenting ideas and feedback. The discussion happened in two formats: formal or informal way. In the formal situation, teachers discussed their plans, information and

techniques in a meeting organised by the committee or school leadership. For example, Teacher 5 stated:

> *"There was indeed a discussion on the peer coaching of Arabic language. We had a meeting of our committee for the lower secondary level. Then, it was decided that Mr Z would be teaching."* **(Teacher 5)**

Meanwhile, teachers discussed any arising problem in an informal gathering to overcome the issues in better ways. Teacher 1 described how the discussion practice benefits teachers in their practice:

> *"We often get together to discuss to execute an effective teaching and learning process, specifically like in a meeting. The moment there is any arising problems, we would attempt to discuss and overcome the issues in the frequently held meeting and gathering."* **(Teacher 1)**

The positive side of the feedback was also stated by Teacher 2 as the opportunity to tell her opinion to the others and make a better suggestion for improvement. The suggestions will lead to a new input and add value to the strategies, techniques and knowledge. This thought was also shared by Teacher 5 who believed that teachers who engaged with peer coaching would provide a suggestion for improvement and amendment when observing their colleague in the classroom.

The positive feedback communication approach between teachers will create a reflective practice culture in helping each other to improve the learning process. Teacher 6 urged that comments and criticisms occur in a post-observation session aimed to amend the flaws detected. However, Teachers

5, 7 and 11 were still in doubt with the quality of the comments and criticisms achieved by the teachers. Teacher 5 questioned the intention of criticising or aiming to find a mistake that headed to the adverse situation when she said:

> *"The one who is observing must be positive, the one who is observed also should be positive. To me, it's like that. Because sometimes those who are in charge as an observer are supposed to be sincere as well. If they really intend to help instead of criticising or aiming to find mistakes, (thus) there will be no problem."*
> **(Teacher 5)**

Likewise, Teacher 7 worried that a teacher who is being observed would feel uncomfortable as the observer picks up on their mistakes. When the teacher feels uncomfortable with the comments and criticisms that have been given by the peer teachers, the feedback session will become worse and cannot benefit teachers themselves. Teacher 7 insisted:

> *"…But one thing, the person who acts as an observer has to be honest. If they want to tell something, they have to tell it. They want to criticise, and they just do it. Actually, not everyone could accept that. They would feel like their mistakes are picked on."* **(Teacher 7)**

Moreover, Teacher 11 doubted the level of knowledge and expertise in observing other teachers. Teacher 11 believed that teachers at least should have a particular qualification or experience whilst serving to observe the others. Thus, Teacher 11 supported the idea of expert coaches that means the expert who gains the respects of the teachers in their performance should do the observation.

5.2.1.4 Peer coaching in identifying weakness

One of the peer coaching objectives is to observe any weaknesses in teaching the students. The weaknesses during the lesson might be problems in the student learning and difficulty in the delivery of the session. Teacher 14 described this issue when he said:

> *"Why don't students understand? Because perhaps there are flaws which the teacher know nothing about. Hence, through peer coaching activities, other colleagues can respond to that particular teacher's flaws. Students will not tell about the flaws."* **(Teacher 14)**

Moreover, Teacher 13 gave an example of the flaws when a teacher always kept repeating the same words unconsciously spotted from the colleague's observation in the classroom. In this situation, the observer highlighted that particular weakness in the feedback session for the teacher's attention to find the solution and improve teaching skills in the classroom.

Likewise, Principals 2 and 4 agreed with the notion of observing the weaknesses with peer coaching practice. Hence, Principal 2 insisted:

> *"Indeed. After peer coaching programmes are done, the involved teachers know more about flaws and latest techniques in facilitating learning to be implemented and improved. The same goes for knowledge gained in teachers' sharing programmes; we could spot a lot of improvement."* **(Principal 2)**

Meanwhile, Principal 4 reminded teachers that they would assume the feeling of confidence and competence only when they were teaching alone. Principal 4 said:

> *"When we teach by ourselves, perhaps we think we are capable, but when we share, we could spot certain flaws and weaknesses which can be improved. Not for evaluation, but what sort of improvement that we could share and lead students to understand more."*
> **(Principal 4)**

Subsequently, the teachers would discuss ways to overcome all of the weaknesses identified during an observation session. Teacher 11 highlighted the modification and match within techniques and skills amongst the teachers to make it more interesting. Meanwhile, based on the Teacher 15 experience, the amendment of the teacher weaknesses helps a lot for improvement when it happens in a more relaxing and less formal manner. Whilst Principal 1 proposed the practice of peer coaching for overcoming teachers' weaknesses should be engaged in inter-subject committee programmes, Principal 4 linked the practice of sharing and making amendments in the peer coaching process with students' success and teachers' improvement.

5.2.1.5   Peer coaching cultivates the culture of cooperation

Another positive acceptance of the peer coaching amongst eleven participants is cultivating the culture of cooperation between teachers. As a form of teamwork, peer coaching appeared to be a tool to unite teachers in one task of improving themselves in teaching techniques. For instance, Teacher 4 viewed peer coaching as teaching where groups of teachers can

share every skill and any material with the other colleagues. However, Teacher 15 described the teamwork for peer coaching in his school focused more on the planning than teaching. Teacher 15 stated:

> *"Teamwork does exist amongst the teachers, but it's more focused on the preparation of module and teaching aids. Meanwhile, the teacher's unity is quite weak in the sense of students' data sharing and administration process for the school."* **(Teacher 15)**

Meanwhile, Principals 1 and 3 showed their dedication to the existence of teamwork between teachers that helps teachers in cooperating and collaborating with each other. Moreover, Officer 2 emphasised that the strong teamwork between teachers would improve academic performance amongst the students when he stated:

> *"Teamwork they build is very strong that the academic performance improves. If we observe schools like NRSS A, where Arabic language academic performance gets better, stemming from teamwork amongst teachers. All teachers are involved based on the students' level of capability. Students are categorised into several groups for improvement."* **(Officer 2)**

The essence of cooperation amongst the teachers also emerged in the spirit of peer coaching. Teachers 1, 8 and 15 recognised the existence of the cooperation essence in the community of teachers in their schools. Teacher 1 rated an excellent grade as he stated:

> *"To me, there is very strongly-bonded cooperation. Together we share ideas, guiding each other in the committee. I would rate us with A+."* **(Teacher 1)**

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Moreover, Teacher 8 gained good cooperation not only from the teachers but also increased kind hearted relationships with the students. Principal 4 acknowledged that the majority of the teachers contributed to the culture of cooperation and collaboration in the school. Meanwhile, Principal 2 agreed with the essence of the cooperation in the school when observing the Arabic language teachers by quoting:

> *"For a few committees like the Arabic language, I could see that there are teachers who sit together and cooperate amongst them. Some of the activities I observe are they often do discussions on the making of examination questions, the implementation of facilitating teaching and learning activities."* **(Principal 2)**

Furthermore, peer coaching was also highlighted as a collaborative sharing in one programme team. Teachers 3 and 6 described the collaboration activities supported by peer coaching such as sharing information and techniques with other colleagues for using it in different classrooms. Teacher 3 quoted:

> *"Peer coaching is a collaborative work done together to make our teaching and learning successful whilst we share the information and techniques we have. For example, when I have a certain technique, we share with friends to use the same technique even though sometimes the classes are located on different levels. But in general, as a result of peer coaching, we could share many techniques, which could be applied in all classes."* (**Teacher 3**)

Principal 1 discovered that teachers in his school cooperated a great deal and collaborated in the management aspect especially in organising their subject departments. At the same time, Principal 3 revealed the previous concept of teachers' learning in his school was called clinical supervision that might be rebranded into the peer coaching in PLCs idea. The practice of clinical supervision demands the teacher to join the classroom observation, either observing or being observed by another teacher and followed by post-discussion for improvement. In the extensive observation, Officer 1 discovered some unity amongst all Arabic language teachers in the schools within the state by citing:

> *"I discover that there is some unity amongst Arabic language teachers, and it gets stronger. Bonded understanding and teamwork could be seen through activities, which are done together as meetings, discussions, collaboratively organised programmes and others. These collaboratively-organised programmes succeed in inculcating esprit de corps amongst teachers beyond their respective schools; it is all focusing on the overall excellence of Arabic Language in this state."* **(Officer 1)**

5.2.2 Theme 2: The scenario of the peer coaching practice in the schools

Theme 2 describes the reality of what happened in the schools regarding peer coaching practice from the participants' perception. Appendix O highlighted a myriad of codes that were categorised into four sub-themes to elucidate the practice of peer coaching in PLCs programmes conducted in the schools. The four sub-themes for Theme 2 are:

i)   School-based programmes to support peer coaching and PLCs

ii)   Peer coaching as an assessment to evaluate teacher performance

iii)   The influence of the school location background

iv)   The influence of the teacher position

5.2.2.1 School-based programmes to support peer coaching

According to ten of the participants, school-based programmes such as In-school Training (INSET) and talks are amongst the activities most often conducted to support peer coaching practice in PLCs programmes. The INSET programmes included the exposure and briefing from the leaders such as Principal, lecturer or officer from the state department. For instance, Principal 1 insisted that INSET programmes were arranged to provide an explanation about PLCs and peer coaching and how they were to be executed amongst the teachers. Meanwhile, Principal 2 explained that INSET was conducted by inviting lecturers from the Institute of Teacher Education to share their expertise for implementation of PLCs and peer coaching with the teachers.

From the teacher's perception, Teachers 6, 10 and 12 shared their observations on INSET programmes that aimed to encourage teachers' skills and professional development. For instance, Teacher 10 explained:

> *"INSET was also held regarding the teaching techniques in the 21st century. We gain experiences through the exposure. The invited presenter (at that time) was once a lecturer from The Institute of Teacher Education A Campus and the Principal of NRSS B as well."* (**Teacher 10**)

Furthermore, Teacher 12 mentioned the practical training provided in the INSET session, which involved coaching and observing teachers, as she elucidated:

> *"It was a talk delivered by the school's management concerning PLCs, which is supposed to be executed at school. So at that moment we under Arabic language committee did the coaching to two teachers but not me, it's someone else." (***Teacher 12)**

However, Teacher 14 criticised INSET programmes, which did not lead to professional improvement, but was more about the management and administration done by a teacher. Teacher 14 claimed:

> *"The school would instead organise training to improve teachers' professionalism through INSET. They do it by groups, or as a whole, which involves all teachers. However, the topics discussed in INSET does not really lead to professionalism improvement, it is more into management and administration did by a teacher. Not so much training has been done for educational or teaching of facilitating learning purposes."* (**Teacher 14)**

At the same time, courses and training at the district, state or national level appeared as an occasional option provided to promote PLCs and peer coaching. As an Excellent Teacher, Teacher 7 voiced her experience as she was participating in a course conducted by a private consultant team. The course provided advance strategies and ideas to expose professional learning amongst teachers. Hence, Teacher 7 narrated:

> *"Last year, the Director of Education Department invited twelve of us (Excellent Teachers) to State C to see how the Education Department of Northeast of that State executed it at a girl's school. It was an elementary school but they invited a consultant-like team, which is called as Teach for Malaysia. Yes, they are an outside consultant. They were originally teachers. But as they pioneered the sophisticated PA21st, their ideas were all creative and advanced, so they quitted their profession as teachers."* (**Teacher 7**)

Meanwhile, Officer 2 reported a programme conducted by his unit in collaboration with the Institute of Islamic Educational, Scientific and Cultural Organisation (ISESCO) under United Nation (UN) that aimed to improve teachers' development in teaching and learning. Officer 2 explained:

> "*Some of them include what we have done like the course for the empowerment of Arabic language teaching and learning, how the teaching and learning session of Arabic language is supposed to run in class. We also recently contacted ISESCO, an association concerning the Arabic language at The United Nations. In Malaysia, they point out Selangor Islamic College University (KUIS) as the representative here. We have sent our teachers who are involved in the Arabic Language to a programme organised by ISESCO."* (**Officer 2**)

The formal or informal gathering during the school time also contributes to nourishing peer coaching essence. In formal gatherings such as programme team meeting and weekly assembly, teachers discussed the strategies and new inputs to improve teaching skills. Teacher 1 revealed that committee meetings were organised nearly every month to discuss and improve the issues. Meanwhile, Principal 3 introduced a weekly assembly every Wednesday for knowledge improvement, as he clearly explained:

> *"First, on Wednesdays evening every week, I organise an event for knowledge improvement where all staff and teachers are all gathered. During that particular event which runs for half an hour to 45 minutes, every single occurrence concerning current educational issues especially of those leading to teachers' professional development is discussed."* **(Principal 3)**

Discussion amongst teachers in improving their skills and teaching methods also improved in the informal situation. Teachers 4 and 7 noted the informal discussion within a group of teachers that happened when facing the issues regarding teaching approaches or when having a turn to be observed by Principals for instance. To explain the informal gathering situation, Principal 2 clarified:

> *"At this school, sometimes this matter does not happen in a too formal manner. Discussions amongst teachers could happen anywhere, even at the canteen, teachers always discuss toward the betterment of their respective teaching."* **(Principal 2)**

The practice of the Principal observing also plays a crucial role in implementing peer coaching amongst the teachers. Teacher 14 insisted the Principal supervises the peer coaching practice amongst the teachers to ensure all of them got the chances to choose suitable slots and arrangements to engage with peer coaching. Whilst, Teacher 2 indicated that the Principal requested to observe teachers randomly for their lesson, when she stated:

> *"Back then, when I was at NRSS A, we used to take turns in entering classes just to see the way our friends teach. Also, in there, we did the same thing too. Right here, around last year, the Principal request to observe the classes of the teachers who teach Islamic education and Arabic language."* *(Teacher 2)*

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Furthermore, Principal 3 remarked his duty to ensure the practice of peer coaching by going around supervising teachers and inviting them in person to provide some advice and feedback for the sake of teaching improvement.

5.2.2.2 Peer coaching as an assessment to evaluate teacher performance

Eleven of the participants mentioned that the feedback of giving marks and evaluation in peer coaching would provide them with an idea to improve and develop their skills and performance. The finding supports Stoll and Fink (1994) who characterised more successful schools with emphasising on assessment, monitoring and evaluation. Moreover, Teachers 8 and 9 thought that the assessment benefited both sides, the observer and observee. Therefore, Teacher 9 clarified:

> *"Yes, in my opinion, it is one of the methods for us to evaluate the teaching and learning method done by teachers and at the same time, it is an evaluation for us. For us to see the teaching and learning methods delivered to be accepted or not, embraced by students or not, and at the same time we could take the methods used for us to apply, for us to amend our teaching and to learn in the future."* **(Teacher 9)**

Meanwhile, Teacher 2 characterised peer coaching practice into three segments as he explained:

> *"It (Evaluation) comes down to thirty per cent. I can put it like this. It is not necessarily a must to do peer coaching by looking from the angle of evaluating. Evaluating is acceptable, but it is only relevant up to thirty per cent, which could be divided into three aspects. One third is of evaluation, another one third is of adding value in knowledge sense for ourselves, and the last one third is about techniques."* **(Teacher 2)**

Nonetheless, Teacher 11 accepted peer evaluation rather than student feedback, as the students would feel in an uncomfortable situation to criticise their teachers, as she stated:

> *"It can be so as well, I think. Can. Because we can evaluate them. Because if students become the observers, perhaps they could say nothing (to criticise us), they would feel that is disobedient. However, between friends, if we were open (minded), we would think it is relevant. We share that. Nevertheless, we ought to know what our flaws are."* **(Teacher 11)**

Furthermore, Principals 2 and 3 assumed that the measurement of the peer evaluation could assist teachers in seeing the extent of teachers' mastery of pedagogy in teaching and learning. Hence, both Principals 2 and 3 cited:

> *"Yes. Peer coaching, in my opinion, can become one of the measurements for teachers' performance. Teachers evaluate each other and regard the observing as current performance level which can be improved in the future."* **(Principal 2)**

> *"To me both of them (evaluation and improvement) are possible. Peer coaching, apart from for improvement, also covers the measure on teachers' performance. Regarding measurement, this coaching could help the school in evaluating a teacher's performance. Even though does not fully rely on that evaluation for teachers' performance, but to me, it does assist us to see the extent of our teachers' mastery of pedagogy in teaching and learning."* **(Principal 3)**

On the other hand, the other participants assumed that the purpose of peer coaching is not to evaluate the teacher but to help and guide them for improvement. For instance, Teacher 1 insisted that it is irrelevant to make any judgement solely provided by the teachers, as he believed:

> *"In fact, the purpose of this coaching is not to evaluate but to guide instead. However, at the same time, we would be able to evaluate more or less in the sense of capabilities as well as ethics of the particular teacher we are guiding. It is irrelevant to make any judgment by the sole guiding we are providing."* **(Teacher 1)**

Meanwhile, Teacher 4 viewed peer coaching as a tool to apply new techniques and improvement purpose, as he explained:

> *"I think peer coaching aims for helping each other. It is neither measurement nor an evaluation. It is more what we mention as trial and for improvement purpose. If we want to evaluate, it is something that requires complete preparation and all. Whereas this coaching is more for trial to try new techniques and the like."* **(Teacher 4)**

Teacher 7 suggested that only the school leaders such as Principals, Senior Teachers or committee leaders could do the performance evaluation, whilst peer coaching is to gain ideas and make improvements amongst their subordinates. Therefore, Teacher 7 asserted:

> *"Not really. Not necessarily. If it involves performance evaluation, usually our leader would be the one to do it. The Principal. Our Senior Teacher. Committee Leader. Therefore, for peer coaching amongst teachers, even our subordinates can come to observe us teaching. It is like the higher-ups look at the subordinates, and the subordinates look at the higher-ups. It is all to gain ideas for teaching and learning improvement."* **(Teacher 7)**

The same thought is also shared by the Principal 4, Officers 1 and 2 that the primary purpose of peer coaching is for sharing, not to measure the performance between teachers. In detail, Officer 2 highlighted why the peer coaching did not fit as an evaluation tool from his experience:

> *"If a teacher is assigned to evaluate other friends, the marking and evaluation probably would be unfair. We used to observe a few teachers who evaluated their other friends; we noticed that the marks they give did not fit in as compared to the marks given by the State Officer. The marks given by teachers were too high. The same thing happens at the administration level."* **(Officer 2)**

5.2.2.3 The influence of school location background

The teachers' commitment to the practice of peer coaching in the schools is somewhat influenced by the location of the school, whether it is in an urban or a rural area. The facilities provided in the urban area are amongst the reasons why teachers in urban area schools were committed to the job. Teacher 3 thought that these facilities would make teaching easier rather than in rural schools that are lacking in certain aspects, as he insisted:

> *"Undoubtedly, a school's location either in the urban or rural area would influence teachers' commitment in professional development. One of the reasons is the difference between urban and rural schools regarding necessity and facility. Facilities are indeed important, as it would affect teachers' commitment to doing their job such as equipment, utilities and so forth. If we observe, sometimes perhaps in rural schools, which are lacking in certain aspects at least give impacts on teachers in executing their responsibilities."* **(Teacher 3)**

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Teacher 7 asserted the commitment to the schools that are situated in the urban areas with many facilities within easy reach such as libraries, recreation centres and offices with the broadband internet access rather than the facilities found in the rural area. Hence, Teacher 7 clarified:

> *"Yes. I think a school's location is one of the major factors, which influence my commitment as a teacher. In a school near an urban area, there are many physical facilities within reach such as a library, recreation centre, offices, and stores. Besides, in the urban area, the Internet access is quite broader than the one accessed by students in the rural area. I see the students, also, are pretty open-minded and most of their parents come from a strong educational background."* **(Teacher 7)**

However, Teachers 5, 10 and 14 did not agree with the statement and believed that the commitment to the teaching practice and the school organisation depends on individual teachers. Therefore, Teachers 10 and 14 stated:

> *"I'm not sure. Perhaps the influence somewhat exists. But to me, as an exposure to the school environment, a teacher would try to give his or her level best commitment up to their ability no matter where they are."* **(Teacher 10)**

> *"I think location does not affect teacher's development. This is because to me teacher's commitment relies on his or her desire. The stronger the desire, the stronger the commitment. So the school environment does not affect a teacher's professionalism actually."* **(Teacher 14)**

Furthermore, Teacher 8 noticed that teachers in rural areas become more committed and creative in capturing students' interest so they would like the

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teachers and have a passion for learning in themselves. In this situation, Teacher 8 believed:

> *"I think each school's location would influence students' growth differently and of course, the way of teaching would also be varied. For my school, in the category of rural schools, we as teachers ought to teach using the approach of getting to know in depth because their minds are sort of less extensive in comparison to those in the urban area. So teachers would become more committed and creative to capture students' interest so that they would be fond of the teachers and have the very passion for learning in themselves."* **(Teacher 8)**

Meanwhile, Teacher 9 regarded the difference between school locations will encourage teachers to use their intelligence precisely. Consequently, the teachers will plan as well as possible to realise students' needs with the limited time and aids provided by the school according to the influence of the learning environment. In detail, Teacher 9 described:

> *"This is because not all students in rural schools, for instance, are able to catch up with the same learning phase as urban schools do. The receipt of certain educational data like the syllabus is the same, but the amount of time allocated to practise it is not the same at every school. It depends individually on teachers how to use their intelligence as a result of the influence from the learning and environment to use the time fixed by the school to plan out as good as possible towards realising students' wish."* **(Teacher 9)**

5.2.2.4 The influence of teacher position in the school

Teacher's current position in the schools is another aspect highlighted that influenced teachers' commitment and self-efficacy on the peer coaching and

PLCs programmes. Although being burdened by the extra responsibilities, the participants from the senior and Excellent Teachers still show a significant commitment to the teaching in the schools. Teacher 3 as the Head of Committee thought his commitment:

> *"Sometimes we are given the responsibility as a Committee Teacher, how we plan out the progress in Committee like file arrangement, surely gives us a sort of satisfaction after being able to accomplish our tasks, our success in managing the Committee well also would influence our commitment in our professionalism."* **(Teacher 3)**

Meanwhile, as a senior teacher, Teacher 5 was aware of his challenging responsibilities as an educator and the need to keep learning advance and not to be left behind. In the other situation, Teacher 6 as an Excellent Teacher believed the best commitment was to be an example to the other teachers, as he insisted:

> *"As an Excellent Teacher, of course, I have to show the best commitment to be an example to other teachers. Excellent teachers would be the centre of attention and hoped to become the catalyst in every responsibility assigned by the school."* **(Teacher 6)**

Furthermore, another Excellent Teacher, Teacher 7 insisted on the influence of position on her commitment that she had such opportunities to gain knowledge in the workshop at the higher level. Therefore, Teacher 7 stated in detail:

> *"This is because the Department of State Education would prioritise Excellent Teachers to be invited for related programmes or to be appointed as Main Trainers. For example like me now, at the state level, I have been assigned for three important positions including secretary of Excellent Teachers Council at State level. Through these positions, I had the chance to do paperwork presentations at IAB (Teacher's Training Aminuddin Baki Institute) and in UKM (Malaysian National University) in the year 2017."*
> **(Teacher 7)**

Teachers 1, 3 and 13 discussed the high motivation when appointed to the more senior position. Teacher 13 noticed to do the job two times harder with higher motivation and responsibility when assigned as senior position. Whilst teaching in the classroom as the ordinary teacher, Teacher 13 also needed to handle the group of colleagues as a leader of a team, as he stated:

> *"In general, the rank position does have its influence. Currently, I'm holding the position as the Senior Teacher of Form Six, so I have to be responsible and more honest in doing this job by handling and leading the colleagues under my supervision. In other words, I ought to work two times harder. I still have to teach. And I have to do the management work as well. Nonetheless, to me it does not affect my commitment as a teacher; moreover, I even get more motivated and excited to better my professionalism."* **(Teacher 13)**

In the meantime, Teacher 3 assumed a value-added for his experience in teaching and as a trust to keep excelling in himself within the educational field. Whilst Teacher 1 explained his opinion regarding being motivated by quoting:

"It increases more commitments and boosts up the motivation to improve our performance. It feels as if we are closely observed, that we could not do anything half-heartedly. When we feel like being watched on, we will tend to make amendments and maximise the good value in our teaching and service." **(Teacher 1)**

5.2.3 Theme 3: The effective strategies to practise peer coaching and PLCs

Theme 3 discusses the analysis of the effective strategies in peer coaching practice towards teachers' commitment and self-efficacy in teaching skills. Four sub-themes emerge to define the strategies applied in the schools recognised by the participants, which are:

i)   The existence of positive and growth mindset

ii)   The strength of willpower

iii)   The presence of supportive culture

iv)   The strategic of student-based learning

5.2.3.1 The existence of positive and growth mindset

The crucial part that helps teachers to commit to the learning process is the existence of a growth mindset amongst the individual teachers. With positive thinking, teachers prepared themselves to accept any inconvenient challenges when practising peer coaching. At that point, Teacher 1 thought that the guidance from the peer coaching practice conducted benefit teachers as they practise positive thinking and broad-minded, as he cited:

> *"This depends on individual insight. Even though in the case at the school I am in, such guidance is absolutely helpful as the teachers do practice positive thinking and they are broad-minded. They really benefit from this programme."* **(Teacher 1)**

The same opinion shared by Teacher 2 who recognises to learn new things and improve herself based on the suggestions from the peers involved in peer coaching practice. Teacher 2 quoted:

> *"In essence, it does seem to be a burden. But to me, peer coaching is good, from which we could acquire so many things if we could grasp its objectives. It will be negative if we look at it negatively. As a matter of fact, it is something positive. I take myself as an example. By participating in observing other teachers, I could actually learn many things. I am also teaching, and I would be able to improve based on the suggestions from the peer coach."* **(Teacher 2)**

The advantage of having a growth mindset also seems to be the solution when facing the workload and other extra responsibilities in the schools. Furthermore, Teachers 6 and 7 discussed the significance of changing mindset from the old style to the new paradigm of teaching skills and strategies. Even though Teacher 6 held multiple lists of responsibilities, related to either teaching or school management tasks, he believed in his commitment to shouldering the responsibilities given as much as he could do, as quoted:

> *"Apart from being given the responsibility to teach three classes of major examinations, I also hold the important positions in schools such as the Secretary of School's Parents and Teachers Association (PTA), Chairperson of Teacher and Staff Welfare, Head of Arabic Language Committee, and the committee member for the school PLCs. With Allah's will, so far I'm still capable of shouldering the responsibilities given even though not as too perfect as expected."* **(Teacher 6)**

Meanwhile, Teacher 7 suggested to the teachers for preparing themselves in order to face the new, different way of thinking amongst the students nowadays, when she mentioned:

> *"Moreover, we ought to change from the old styles; it is supposed to be so. All teachers should think that way. We can no longer enter the class bringing nothing and just open the textbook. It can't be like that anymore. We definitely must prepare a lot. Because students nowadays have the different way of thinking."* **(Teacher 7)**

The compelling case of having a growth mindset that happened with Teacher 11 when she expressed the willingness to get more feedback and comments from the other staff and loved to identify it, as she quoted:

> *"I think sometimes the observing is not really done truthfully to me at times those who are the observers tend to walk on eggshells, that's what I see. Therefore, they heard that we are great, but they are supposed to pick on us, help us to execute the right facilitating learning. So I see it be more into… it seems to be getting bashful. They give high marks. At times, I am not that kind of person. Therefore, we would love to know what we lack in, what our strength is. So that we could make it truthful."* **(Teacher 11)**

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Another evidence of growth mindset amongst the teachers highlighted by the participants is the existence of the voluntary attitude in improving teachers' learning and students' achievements. This voluntary attitude amongst the teachers was spotted by the Principals as the definite improvement in development programmes in the schools. Principal 2 revealed this situation as she cited:

> *"At this school, teachers even scramble over until night to open classes voluntarily for students for the sake of realising the goal of students' excellence in academics and attitude. In the situations where there is a drop in students' academic achievement level, teachers become more active in doing all sorts of facilitating learning activities with students even though they have to sacrifice their own school holiday."* **(Principal 2)**

Principal 3 acknowledged the teachers' voluntary involvement in his school as a kind of the positive mindset. Principal 3 cited:

> *"I could spot their acceptance, and there is an academic improvement, teachers' voluntary involvement in development programmes at school without any instruction to do, so I think all these are more to the positive side."* **(Principal 3)**

Another aspect affected by a growth mindset is the teacher's motivation and spirit in developing themselves. When teachers are motivated to learn, it will develop their self-confidence and enjoyment in work tasks. Teacher 13 highlighted the increase of self-confidence when being observed by colleagues, as he quoted:

> *"Self-confidence would emerge. Because teaching people without the observing is pretty different as compared to teaching whilst being observed by a friend. When we are often observed and overseen, then being accustomed to it would bring our confidence to get stronger."* **(Teacher 13)**

Principals 3 and 4 shared the thought of the motivation emerging from peer coaching. Even though Principal 3 connected the motivation with the enjoyment and exciting learning environment, Principal 4 related the motivation with the teacher's confidence and impact on students themselves, when she cited:

> *"At the beginning, this matter might cause teachers to be uncomfortable or disturbed. But when it happens a few times, teachers would get more confident and motivated. Perhaps this happens at the initial level; the teachers feel that people want to see or evaluate the way they teach, but after several times, then they would see what can be improved and upgraded in the sense of teaching and also boost up their confidence and give impacts on students themselves."* **(Principal 4)**

5.2.3.2   The strength of willpower

In the other aspect, that contributing to the actual effectiveness regarding peer coaching is teachers' willpower and intention. The willpower starts from the sincerity and honesty in order to implement peer coaching practice. Therefore, Teachers 3, 5 and 13 put the concept of sincerity in practising peer coaching as the key to excellence and the solution for the heavy workloads. For instance, Teacher 3 cited:

> *"First, it is our commitment amongst colleagues. If we feel responsible towards our job, we would want to give the full commitment. Thus peer coaching is one of the ways out. But if we take it for granted, no matter how great we plan to execute peer coaching, it possibly will not succeed. This is because the very first thing we need to have is our commitment and willpower."* **(Teacher 3)**

At the same time, Principal 2 contended in cultivating the strategy of working sincerely in providing services amongst teachers that will bring enjoyment and satisfaction. In addition, being passionate and motivated is a key in the teaching profession. Teacher 8 believed having a passion for teaching makes the heavy workload much lighter. Meanwhile, Teacher 9 explained:

> *"I'm comfortable with the current profession because teaching career has been my passion back since I was in my school days. Having the experience as an untrained substitute teacher provides me with a refreshing experience."* **(Teacher 9)**

Despite having a heavy workload to handle, Teacher 3 assumed that a passionate teacher would manage every single challenge and obstacle with a responsibility and effort to improve their role and commitment in the profession they have chosen. In addition, Principal 4 stressed the teacher's passion and desire for self-change that would be useful when facing challenges. Consequently, Teacher 14 thought the strong desire towards the teaching profession would strengthen teachers' commitment to teaching, as he stated:

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"I still believe that regardless of the position we are at, if we have strong willpower and desire towards teaching profession with overwhelmed passion, therefore, in fact, our commitment would get stronger." **(Teacher 14)**

5.2.3.3   The presence of supportive culture

Externally, the collegial school's culture also contributes to the effectiveness of school improvement (Hargreaves, 1995). In the research population, religious practice culture encourages teachers to feel at ease and give full commitment to the schools. Teachers 5, 6, 7, 8 and 12 mentioned the Islamic learning ambience in the schools suited their feeling and need for the workplace. Teacher 7 insisted the climate of religious ambience practice in the school suited her soul correctly, whilst Teacher 8 quoted:

> *"Thank Allah. I feel so comfortable serving at this school. One of the reasons why I say that is due to its atmosphere, which is iklim dini (Islamic learning ambiance) that suits the field I venture right now which is related to Islamic Education and Arabic language,"*
> **(Teacher 8)**

Meanwhile, Principal 2 clarified the religious practice in the school that strengthens teachers' knowledge on the philosophy of education in an Islamic context. According to Stoll and Fink (1994), this school's unique context and culture considered as one of the successful schools features. Therefore, Principal 2 explained:

> *"At the same time, at a more frequent rate, we organise usrah (team circle) amongst teachers, amongst staff. We also implement spiritual activities (Qiamullail) amongst teachers and staff. We schedule all these in the school year calendar for all teachers' information and preparation."* **(Principal 2)**

Furthermore, school culture with a supportive administration and friendly colleagues was one of the factors why the teachers remained at the schools. Teacher 5 commented:

> *"I really love working at this school. One of the factors why I feel comfortable being at this school is kind-hearted colleagues who always cooperate in every school program. Besides, the Islamic school atmosphere encourages me to stay at this school as compared to other schools."* **(Teacher 5)**

Teacher 12 explained that the main reason for her full commitment to the school is the kind-hearted staff who always take care of the teachers' welfare, as she insisted:

> *"So far I'm comfortable to stay working at this school. The main reason why I say that is because of iklim dini (religious ambience) that exists and the school atmosphere in which the administration takes good care of its people."* **(Teacher 12)**

Despite supportive culture amongst the teachers, school's location was also an important factor for some staff. Teacher 13 had taught in the same school for 14 years and stated:

> *"I'm grateful that most of my friends here are responsible, professionally skilled, and this makes me enjoy working and cooperating with them for the growth of this school. The school environment which is in a rural area and far from the hustle and bustle of the city makes it peaceful and calm all the time for teachers to do their job."* **(Teacher 13)**

5.2.3.4 The strategy of student-based learning

The current strategy of 21st Century Learning (PA21st) strategies introduced by the MOE stressed how facilitation and student-based learning plays a significant role that contributes to a teacher's commitment and self-efficacy. Accordingly, Teacher 6 insisted that the school leader is committed in supporting teachers to practise facilitating learning. Meanwhile, Teacher 9 encouraged his colleagues in teaching practice and managed the change in class management regarding the 21st Century Learning strategies. Teacher 9 cited:

> *"Malaysia has introduced Malaysia's Education Development Plan 2013-2025 (PPPM) which encourages teachers in Malaysia to make changes in the education policy in this new century. One of them, using the strategic 21st Century Learning, I could benefit class management systematically. Apart from using in-store teaching aids, teachers are also seen as employers to their employees who are the students themselves. Therefore, the employers ought to oversee and help them to work hard at what they do."* **(Teacher 9)**

Moreover, Teacher 7 mentioned the sharing strategies through the exchange experience activities inter-committee that provides a new experience to the teachers and improves their teaching skills and techniques. Teacher 7

demonstrated the practice of sharing strategies in discussion with the colleagues to support facilitating teaching and learning that implies latest teaching methods. Teacher 7 explained:

> *"Through that method, they come in to observe someone else teaching. Mrs N used to come in and observe, and then Mrs A also did the same. So, they could gain ideas from that. When we teach "Comprehension" we divide students into groups, and there would be presentations done by every student, then all students have the chance to share their answers instead of just sitting down at their seats and writing. Yes, it is student-based learning."* **(Teacher 7)**

5.2.4   Theme 4: The role of Principals and State Officers in the implementation of peer coaching

Theme 4 responds to Research Question Three regarding the role that Principals and State Officers play in supporting PLCs and peer coaching in the school environment. Four sub-themes emerged on the role of Principals and State Officers, which are:

i)   Supporting and encouraging teachers for improvement

ii)   Managing development programmes and allocating the budgets

iii)   Providing guidance for programmes implementation

iv)   Observing teachers and the practice of peer coaching

5.2.4.1 Supporting and encouraging teachers for improvement

Five of the teacher participants responded that Principals were supporting the practice of peer coaching amongst the teachers in the schools. For instance, Teacher 14 stated:

> *"(They) really do. The Principal and school management team totally support the implementation of peer coaching. They not only support but also prioritise and make it compulsory for all teachers to do peer coaching. That's why there is supervision from the Principal."* **(Teacher 14)**

In the meantime, Teacher 8 viewed that the Principal instructed all teachers to implement peer coaching activities as an instrument in the evaluation provided by the ministry when she explained:

> *"In my opinion, the administration really encourages this programme. For your information, starting from 2018, every teacher is instructed to execute PLCs activities with other teachers, and this is included as an instrument in the evaluation of SKPMg2 (Standard for Quality Education in Malaysia 2)."* **(Teacher 8)**

The scenario of supporting and encouraging the practice of peer coaching is demonstrated by the efforts of the Principals and management teams in arranging a series of PLCs workshops and talks in INSET programmes. These school-based programmes are organised by the Principals in introducing and spreading the idea of peer coaching in the school environment. Principal 3 shared his approach on encouraging peer coaching by organising training sessions to improve knowledge, talks related to PLCs, providing examples related to PLCs like video clip, and also encouraging

teachers to write lesson plans with colleagues in their department. Principal 2 concentrated on the implementation of PLCs in INSET programmes by inviting external speakers for promoting and explaining the practical ways of peer coaching in the school's context.

5.2.4.2 Managing development programmes and allocating budgets

Although in the recent gloomy economic situation where some of the allocations of organising courses has been frozen, the Principals seemed to manage the programmes such as INSET to promote PLCs and peer coaching amongst teachers. Teacher 3 claimed that schools still have specific budget allocations in boosting up teachers' professional needs such as INSET programmes. Meanwhile, Teacher 5 thought that school management runs the teachers' professionalism course for peer coaching with indirect allocation, as he explained:

> *"I'm not pretty sure about this. Even though as far as I concern, the school often organise courses for teachers related to teachers' professionalism. For example the course on Teaching in the 21st Century. Therefore, I think we do have the budget indirectly."* **(Teacher 5)**

Teacher 7 stated that the budget allocation for INSET programmes was not only obtained from the Department of State Education, but it also came from the Parents Teachers Association (PTA) funding. In detail, Teacher 7 insisted:

> *"The budget is obtained from the allocation for INSET (In-Service Training) courses from The Department of State Education and PTA funding. I am involved as the school's Main Trainer in INSET courses, and there are about 4 times in which INSET is executed in a year according to the school's calendar on every Saturday or in the afternoon during schooling days."* **(Teacher 7)**

Furthermore, Officer 2 explained that there was no financial source allocated to his Unit specifically for activities of teachers' development because of the unstable financial situation. However, Officer 1 explained an alternative for the school management by using the annual allocation for the Arabic language subject or by using the Teacher Training Unit, which is supposed to be in charge of organising teachers' developmental programmes in school level. Therefore, Officer 1 explained:

> *"Back then, Islamic Education Sector (SPI) in State Education Department used to have the allocation for organising courses to improve Arabic language teachers' skills. But lately, in this quite gloomy economic situation, the allocation has been frozen and could no longer be executed the way it used to be before. SPI could only organise internal, limited, focused programmes in a short period of time. Such as meetings, discussions amongst teachers and so forth directly or indirectly."* **(Officer 1)**

Moreover, Officer 2 appealed for aid from Non-Government Organisations (NGOs) like the Malaysian Teachers' Association or The Foundation of Taqwa in order to implement additional courses for teachers involved. As a result, a course for Arabic language teachers has been supported in the state level with the collaboration from College University of Insaniah (KUIN). Meanwhile at the school level, Officer 2 recommended:

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> *"At the school level, in fact, there is a budget of per capita grant (PCG) based on students and Arabic language subject, but until this moment of time, we have never applied to use it to implement programmes at the state level."* **(Officer 2)**

5.2.4.3   Providing guidance for programmes implementation

Another role-played by the Principals and State Officers is to provide the guidance to the teachers for developing their teaching skills and knowledge. The officers in the state department are responsible for providing guidance and modules for Principals to deliver it amongst the teachers. For example, Officers 1 and 2 highlighted a module of "*Loving the Language*" prepared by the MOE in order to improve teacher's skill and techniques in teaching. Officer 2 explained that he had provided a briefing to Principals concerning observing in which Principals have to execute it at the school level when he explained:

> *"For specific programmes at school, SPI is not involved much actually. But we have the programme of Tahbib Lughah (Loving the Language) which is in fact under the instruction of MOE to be implemented at the school level. SPI only reshow the instruction on the implementation of that particular activity as guidance and to be noted by teachers at school."* **(Officer 2)**

5.2.4.4   Observing teachers and the practice of peer coaching

Principals and State Officers supported teachers' improvement by observing and supervising their teaching skills in the classroom. For that purpose, Teacher 14 mentioned that the Principal did supervise in order to ensure that

all teachers participate in peer coaching practice. However, teachers have a choice in deciding the suitable slots for implementing peer coaching and being supervised. Meanwhile, Teacher 7 thought that the observation from Principals, senior teachers or committee leaders is a performance evaluation. Teacher 7 explained:

> *"But like the culture here in this school, the Principal would tell us two or three days before entering the class to observe, instead of coming in abruptly in the morning."* **(Teacher 7)**

Furthermore, the routine of supervision from the State Officers appeared to be standard practice to ensure the teachers prepared for their teaching sessions. This standard is related to the teachers' performativity notion defined by Ball (2003), which provided themselves an opportunity to either make a success or threaten inner conflicts, inauthenticity and resistance. Officer 2 stressed that their approach to observing the schools usually involved lower performing schools, as he cited:

> *"The important part is the execution of teaching and learning in class. So SPI approaches other than courses approach and teaching methods, we also go to schools for observing sessions especially schools with lowering Arabic language academic performance. More focus will be given more seriously on schools under good level especially with respect to the execution of teaching and learning in class, students' academic management, headcounts and teachers' empowerment at the school itself."* **(Officer 2)**

In order to make an equal standard of observation, Officer 2 explained that they used the Standard for Quality Education in Malaysia (SKPM) and

focused more through the aspects of methods, approaches, and strategies used by a particular teacher. In the meantime, Officer 1 also highlighted that observation is one of the roles that he played in order to ensure the quality of the teacher's skill and professionalism in teaching. This situation represented one type of performativity work as suggested by Ball (2003) that is as a disciplinary system of judgements, classifications and targets towards which schools and teachers must strive through which they are evaluated. Officer 1 demonstrated the practice of observation, as:

> *"My Unit (SPI) has a plan to go to schools by deciding on targets to observe a few teachers in the observing process every year. The observing is done by staying together with teachers in class and overseeing the teaching and learning executed. Then after that, we would do discussions with all teachers of that particular subject. Before that general meeting, we would see the teachers who are observed to discuss the inputs for their improvement. We also share those things with other teachers in discussions of a larger scale."* **(Officer 1)**

5.2.5   Theme 5: The challenges to practise peer coaching

Theme 5 describes the negative side of participants' perception of peer coaching and PLCs, which is the challenges to practising it in the real school culture. Theme 5 also responded to the Research Question Four concerning the potential barrier in implementing peer coaching practice and PLCs programmes in schools. Appendix O shows the coding that defines the Theme 5 categorised into four sub-themes, which are:

i) Time constraint

ii) Teachers' burdened by workload

iii) Individualistic and personal attitude

iv) Unsupportive environment

In detail, these challenges reflected to the notion of teaching as personal activity by Nias (1987) who emphasised teacher 'self' and teaching work as an unique behaviour that be a crucial element in construing the nature of their job. Moreover, Nias (1996) found that teachers' feeling and their emotional reactions influence their own improvement in teaching skills. Therefore, these challenges drew attention of teachers' own feeling and perception on the PLCs and peer coaching implementation in their own school's culture.

5.2.5.1 Time constraint

All of the participants highlighted time constraint as the largest obstacle to practise peer coaching in the schools. Teachers already have a limited time to spend in teaching sessions, therefore it is hard to implement peer coaching practice that consumes more of their time. Teachers 5 and 9 explained how time was consumed in peer coaching practice that made it difficult to be implemented as they claimed:

> *"Time. Frequently, to spare time for discussion and do peer coaching, we cannot just dive right in. To me, in order to produce good peer coaching practice, in fact, we, too, need to discuss with friends who might be teaching the same subject like us. We can discuss how to do it. We plan it together beforehand, only then we execute it. Yes. To do so, we need to discuss. But time is often limited and insufficient. In the end, it doesn't become peer coaching as expected."* **(Teacher 5)**

"Time is limited. Moreover, at times, indeed, we could not deny that there are some flaws that we encounter after our discussions. When we do it in front of students after the discussions, there are a few obstacles and constraints." **(Teacher 9)**

Meanwhile, Teacher 13 felt stress as he thought that it is difficult to find the same free time with the other friends, as he complained:

"The first constraint is time. Because at the moment we want to do peer coaching activities, we must ensure other friends are also free at that particular time. This is quite stressful. Even though, the school, in my opinion, would always give their support if this is for the sake of teachers' improvement themselves." **(Teacher 13)**

Teacher 14 found that time allocated for peer coaching would interfere with teaching sessions when he insisted:

"One more thing is the time allocated for peer coaching would cause teaching and learning session with students to be interrupted. Especially when students are sitting for the examination. I think this peer coaching activity consumes quite a lot of time if it involves more teachers." **(Teacher 14)**

Moreover, Principal 1 from GARS school did agree with the situation when he mentioned the problem in allocating time for peer coaching sessions partially because a large curriculum had to be delivered. Hence, Principal 1 stated:

> *"It's just that we have a problem regarding time constraint. The amount of time we have at hand is quite limited to be allocated for peer coaching. As we know, peer coaching requires a long period of time. At this school, specifically, we have abundant of curriculum to keep up with; it somehow slows down peer coaching process. Nonetheless, we still put effort into implementing peer coaching at our best."* **(Principal 1)**

On the positive perspective, Principal 2 proposed to arrange schedules like additional classes to avoid overlapping with other activities and programmes, as she mentioned:

> *"The school ourselves try to overcome the problem of time constraint by arranging schedules like additional classes. Even so, there are still some teachers who are not satisfied with the amount of time allocated and willing to do additional classes out of the scheduled periods for students' academic excellence."* **(Principal 2)**

From the view of the educational department, Officer 2 thought that teachers estimated peer coaching as an additional responsibility, which requires more time, he insisted:

> *"At the same time, they see peer coaching as an exclusive matter, requires a period of time, ought to involve a slot to gather, takes one specific day, sometimes it is to the extent of allocating weekends for courses, that's what becomes a burden, and teachers feel heavy to handle."* **(Officer 2)**

Although Principal 4 did not deny the challenge of managing time in order to engage with peer coaching practice, she comes up with the solutions such

as ensuring flexible time to perform peer coaching and dividing teachers into groups regarding their free times. Moreover, Principal 4 noted:

> *Even though, we admit that it is kind of difficult to implement peer coaching frequently. But with a flexible arrangement according to teachers' free time by a peer coaching coordinator cause the programmes to be done well somehow. That particular coordinator would ensure that other teachers would take part in peer coaching activity the next time. We appoint this peer coaching coordinator specifically to provide specific training at the District and State level."* **(Principal 4)**

Therefore, time constraints as a barrier in implementing PLCs and peer coaching is related with the notion emphasised by Nias (1995) who

5.2.5.2   Teacher's burdened by workloads

All of the teacher participants described workloads as the most challenging factor to practising peer coaching after the time constraints. The participants mentioned teachers are burdened with workloads and described it as the worst situation happened in the schools. Reyes and Imber (1992) explained that the differences in workload amongst the teachers might create an environment of inequality, which has the potential to produce feelings in some teachers that they are being treated unfairly.

Teachers 5 and 6 insisted the extra work that increased teacher's workload. Teacher 5 claimed:

"Frankly speaking, I would say that it feels burdening due to too many tasks assigned which pile up non-stop. Consequently, I could hardly focus on facilitating learning because other tasks are overloaded like the coordination for Text Book Unit, file updates and other administrative tasks. That's yet to include other teachers' responsibilities such as online data system and the like. This gross burden could somehow affect the quality of facilitating learning done by a teacher in class." **(Teacher 5)**

In the meantime, Teacher 14 described the constraint of the teacher's job as

harder as they are always assigned more duties:

"The constraint encountered is regarding teachers' job which gets more fulsome. Other workloads cause peer coaching activity hardly done. For example, additional classes, non-stop meetings, administration tasks and so forth. If teachers are only assigned to teach, then it might be possible. But now with co-curricular activities for students, teachers' involvement at the district and state level, all this bring teachers to be under stress to do peer coaching activity." **(Teacher 14)**

Moreover, Teacher 10 complained about the lack of teachers in his school but

they are still expected to have a number of job roles, as he quoted:

"It's like this when we are lack of teachers, but the school still want to establish abundant of committees just like other larger schools. Thus there would many responsibilities shouldered by one teacher. Perhaps a teacher would be forced to hold almost 10 to 15 positions. These abundant roles, sometimes even though some of them are not that heavy but still lead teachers to become passive and to have no time to do the planning more perfectly professionally." **(Teacher 10)**

Teachers 12 and 15 believed that heavy workloads did not allow teachers to concentrate on peer coaching practice and therefore they did not cooperate with others in practising peer coaching. They insisted:

> *"To me, if it's about teaching, there's no problem. Just one thing; that is teachers' workload gets heavier when administrative tasks pile up which have nothing to do with a teacher's real responsibility, which is teaching."* **(Teacher 12)**

> *"On the contrary, this programme would be interrupted if there were teachers who refuse to cooperate. Perhaps those in that group are burdened with other workloads, or it could be that they are not able to concentrate on the peer coaching programme itself."* **(Teacher 15)**

However, the Principals had a different perception when pointing out that the teachers themselves have to note the awareness and desire for self-change in order to overcome the workload. In a confident tone, Principal 1 insisted that workload did not obstruct teachers from doing peer coaching as the purpose of peer coaching itself is to help teachers, as he quoted:

> *"In my opinion, the workloads does not really inhibit teachers from doing peer coaching. This is because the purpose of peer coaching itself is to help them implementing pedagogy in class, managing classes and providing ideas towards the improvement of facilitating learning activities."* **(Principal 1)**

Principal 3 shared his tips in overcoming heavy workloads by not making the process too formal and having less detailed reports and plans, as he explained:

> *"In fact, here we do not really do peer coaching in a too formal way that teachers have to prepare reports and plans in precise details. We give them an understanding that peer coaching is actually too simple. When teachers meet up with each other and discuss their teaching and learning, just jot down a little bit and that's what peer coaching is all about actually."*
> **(Principal 3)**

5.2.5.3   Individualistic and personal attitude

Another barrier that gives negative influence in practising peer coaching is the teacher's attitude. Individual negative attitude that emerged from the participants' perspective included a fixed mindset, shyness, embarrassment, lack of confident, misunderstanding, being forced and pressure. Teachers who have a fixed mindset see peer coaching negatively and dislike being helped out. Although Nias (1997) considered teachers' feeling as the unique behaviour that influences their work, she argued that teachers should care more about their own professional skill and the impact upon their students' learning. Therefore, these attitudes described by the participants presented the negative side of the emotions which hindering teachers' development in teaching skills.

Teacher 5 insisted that negatively minded teachers refused to engage with peer coaching and were not willing to help others. Meanwhile, Teacher 10 noticed that negative thinking teachers are less interested in sharing their skills and modules with the others, as he reported:

> *"It is just that they all act as the tribulations for us. Sometimes we have so little material; our friend has more than we do. So maybe they are less interested in sharing, it relies on individual attitude. However, there is nothing we can say. It is theirs. The biggest challenge that I could see, the first one, is our own attitude."* **(Teacher 10)**

Besides, Teacher 15 stressed that those types of teachers showed no interest and refused to cooperate with the others when involving observing and coaching process in their classes. Teacher 15 criticised:

> *"The main one is teamwork. The value of teamwork does not exist between teachers, and it brings upon problems in executing peer coaching activities. Some teachers who are individualistic seem not to be interested in sharing and cooperating with other teachers. In addition, when it involves observing and coaching process in class, there are undoubtedly some teachers who show no interest and refuse to cooperate."* **(Teacher 15)**

Principal 2 also noted that some teachers are reluctant to participate in peer coaching practice with other teachers, as she stated:

> *"One of the challenges that I could spot is teachers themselves. Teachers, individually, have the reluctance to do peer coaching activities together when it involves the observing."* **(Principal 2)**

Meanwhile, Officer 1 explained the situation by thinking that the attitude of negativity they bring to the class can make the teacher being observed feel uncomfortable. Officer 1 cited:

> *"First, it is about our teachers' attitude. The attitude of detesting how other friends come into their class. If it is done by SPI, they might feel obliged since it is instructed by the superiors. But within the circle of colleagues, there could be some sorts of uncomfortable feelings to be observed by friends. Observing culture is yet to be cultivated amongst our teachers."* **(Officer 1)**

The feeling of shyness and embarrassment when first being observed needs to be recognised. Teacher 6 explained:

> *"One of them, our shyness. When people want to come observing we teach, usually it becomes difficult. But when we are used to it, I bet there will be no problem whoever comes. It is just for the first time that we feel shy about it. That's the first one."* **(Teacher 6)**

Being too bashful not only concerns the observed teacher but also the observer. They feel challenged to give thoughtful feedback so as not to alienate them. In that case, Teacher 8 added that it would be a different situation if the observation involved the superiors or Excellent Teachers, as she quoted:

> *"It's because we befriend with our friends, it's definitely hard. We have a bashful feeling between friends. However, if the superiors like the Department, SPI or Excellent Teachers observe us, we'd feel that the marks given are reasonable, but amongst friends, it becomes a bit different. Perhaps our friends would feel reluctant, the bashful feeling. To show to other friends. It becomes like that. Our self-confidence ends up being less stable, but it's different if the Department is the one in charge. That's the problem."* **(Teacher 8)**

Officer 2 agreed with the emerging issue of embarrassed teachers but insisted that the observation should not only involve Principals or administrators, but it also ought to happen amongst the teachers as well. Hence, Officer 2 stated:

> *"It's just that right now the emerging issue is concerning how teachers are pointing out each other to stand out, and get embarrassed when they are to be observed. It is supposed to happen. We should not expect only the Principal or administrator to be in charge of observing. It ought to happen amongst teachers as well."* **(Officer 2)**

The feeling of shyness and embarrassment leads to an unconfident emotion amongst the teachers. Teacher 12 admitted that she did not feel entirely confident when people observed her in the class, as it does not happen frequently enough. However, Principal 4 stressed the requirement of building up self-confidence amongst the teachers in order to implement peer coaching activity. Principal 4 shared her experience when facing the Senior Teachers who had a hard time in accepting the form of peer coaching implementation until requested to move to other schools when feeling disqualified to teach students in that school. Principal 4 explained:

> *"… I advised them that actually all teachers have been trained with skills and mastery in teaching certain subjects. It's just that sometimes in terms of the way we deliver in class might not achieve the target due to the methods used. We can learn to teach ways and methods. That's the real purpose of peer coaching, to seek for the best method of how to execute teaching in class and give impacts on students' achievement."* **(Principal 4)**

The misunderstanding of the purpose of peer coaching made it challenging for teachers to accept. Teacher 14 revealed that some of the teachers thought of peer coaching as wasting time and burdening themselves. Teacher 14 cited:

> *"Besides, teachers' oneness in a group becomes a challenge. For instance, there are those who do not cooperate and uncommitted in the activity implementation. In conclusion, it's challenging to make teachers understand the importance of improvement. Amongst teachers, there are people who see this as wasting time and burdening. Thus these are the hurdles which cause this activity not to happen."* **(Teacher 14)**

Nonetheless, Teacher 2 believed apart from the first time the teacher being observed which can be quite daunting, the process should be helpful. Teacher 2 insisted:

> *"Understanding may exist in other than first-time coaching. When there is first-time coaching, followed by the second and the third, then there would be some differences in the environment as compared to the first one. The subsequent coaching that follows will create a feeling of comfort. Even though, during the coaching that is executed for the first time, this would cause a shock if the concept is not properly comprehended."* **(Teacher 2)**

The Principals also admitted the existence of the group of teachers who do not understand and are unwilling to change their attitude. However, Principal 1 realised there are only a few teachers that think like this, as he mentioned:

> *"One of the negative aspects that we could see, a small number of teachers who do not understand and are unwilling to change their attitude. For a majority of teachers who understand, there's no problem. Thus, we need some time to make those problematic teachers understand."* **(Principal 1)**

Meanwhile, Principal 3 explained the two possible causes of misunderstanding amongst the teachers, which are failing to get real recognition for peer coaching, and teachers are not encouraged by the management leader, as she stated:

> *"First, it becomes a challenge when teachers do not receive a real exposure about it. Second, they are not encouraged, and the management must supervise after providing the exposure to know what is going on after the exposure given. Whether it happens according to plan or so on. We actually do not hope for these peer coaching practices to happen on a large scale, it would be sufficient if it happens in a minor and moderate context but give impacts on teachers."* **(Principal 3)**

Nevertheless, Officer 1 blamed the schools' management teams or programme teams for not understanding the concept of peer coaching, when he cited:

> *"Negative aspects might happen if schools' management teams or committee of subjects do not understand the concept of peer coaching accurately or take this matter lightly. Perhaps they regard it as a trifle and common, and take the process of implementing it for granted; therefore the progress of the activity could not run appropriately."* **(Officer 1)**

The polemic of serving unwillingly due to the factor of job opportunity also contributed to the negative attitude amongst the teachers. Teacher 3 insisted:

> *"Perhaps it is another story regarding teachers who sometimes serve unwillingly due to the factor of job opportunity whilst they actually are interested in something else. Thus, they force themselves to be passionate about it. This type of teachers, at the initial level, might encounter some problems and difficulties as compared to those who are committed and passionate in teaching, in which therefore they boost up their perseverance in improving their service performance the best they could."* **(Teacher 3)**

Officer 2 highlighted that the main issue amongst the teachers under his supervision was that they did not have a background in Arabic language study at the Bachelor's degree level such as *Syariah* (Islamic Jurisprudence) and *Usuluddin* (Theology). These teachers are obliged to teach the Arabic language. Moreover, Officer 2 quoted:

> *"Sometimes there are cases in which new teachers teach Arabic language and also cases where teachers are forced to teach the Arabic language. So in schools with lowering achievement become so due to weak teamwork."* **(Officer 2)**

The other personal reason that contributes to the difficulties in practising peer coaching is the feeling of stress amongst the teachers. Teacher 12 focused on the teachers who are going to be observed, who get stressed out having to prepare materials when having someone come to observe them in the class. Consequently, teachers will become anxious and the activity will become pressured. Meanwhile, Teacher 5 explained:

> *"What is important is that do not let it becomes a pressure. If peer coaching is executed too often during hectic days, it is most likely that it will become a pressure."* **(Teacher 5)**

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5.2.5.4 Unsupportive environment

Despite the internal reasons for the challenges of peer coaching practice, the external causes also contribute to the difficulties in its implementation. School culture and environment influenced teachers in order to improve and develop their teaching skills. Teachers 10 and 11 were in small schools, which meant they had other responsibilities as well as teaching. They stated:

> *"Being in my current position, I could spot the influence. In the situation where the school is minor with a small number of teachers, job overlapping happens. Sometimes our commitment towards teaching responsibility gets weaker; this is a negative effect to me."* **(Teacher 10)**

> *"Well, this school is small. When I was at MMAS back then, I was in charge of the Arabic language only. Now I have to pay attention to everything. Like this school, it is small, yet the management is just like any other schools. That is what I see to be a burden. Therefore, we cannot focus on students."* **(Teacher 11)**

The teachers' relationships in the schools somehow influenced the commitment to implement peer coaching amongst the teachers. The stereotypical relationship between the junior and senior teachers, beginner and veteran teachers, becomes a hurdle to the implementation of peer coaching. Teacher 13 insisted:

> *"Besides, the relationship between junior and senior teachers could somehow become a hurdle to the implementation of peer coaching. For example, senior teachers are less interested to be observed by junior teachers, and they are also frequently assigned with administrative positions."* **(Teacher 13)**

Senior teachers needed to be involved with the system as Teacher 9 mentioned:

> *"Nevertheless, we still consider the opinions of the veteran teachers that are to be prioritised and so forth, what must be retained or not. It depends on current situations as well."* **(Teacher 9)**

At this point, Officer 2 was concerned with the deficiency of Arabic language teachers in the particular schools that influenced students' achievement, when he cited:

> *"It is not only teamwork if there is a situation where Arabic language teachers lack in number at that particular school; it would absolutely affect students' achievement."* **(Officer 2)**

The issue of teamwork amongst teachers in the school also inspired the success of the peer coaching practice. Teacher 4 remarked that the absence of teamwork and relationships between teachers negatively influenced their performance, as he cited:

> *"If there is no teamwork amongst friends, it might make a teacher embarrassed or bashful and so on when they feel they are lacking, with the presence of unconstructive friends."* **(Teacher 4)**

5.2.6   Theme 6: Peer coaching and PLCs from the knowledge of research

Theme 6 is based on the response within the knowledge of the research amongst the respondents regarding the issue of PLCs and peer coaching in

the school context. The knowledge listed shows the understanding of the practice and the connecting with other ideas amongst the teachers. Three sub-themes appeared under Theme 6, which are:

i)   Expert coaching and observation

ii)   Lesson study and lesson plan

iii)   Microteaching and clinical supervision

5.2.6.1   Expert coaching and observation

The term most used and referred to by the participants is about expert coaching. Despite the teachers of the same level that were engaging in peer coaching, the expert teacher or superior observation was still required to validate the feedback and comment. Teachers 8 and 11 preferred being observed by the expert than their peers as they viewed that the mark and evaluation given by the experts will be reasonable. On the other hand, it is hard to evaluate their friend if the observation is run by their peers at the same level with regard to the feeling of being hurt, bashful, reluctant, and befriended. For example, Teacher 11 urged:

> *"However, just one thing apart from truthfulness, we want the experts to do the observing. I am not from language stream, but I can teach. Nevertheless, there are people whom I see when we want to do peer coaching, we are open-minded, but we do not know their hearts, afraid that they could feel hurt."* **(Teacher 11)**

Meanwhile, Principals 3 and 4 insisted that expert coaching would convince the teachers and avoid the lack of trust and confidence amongst themselves.

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For example, Principal 3 mentioned how the coaching and mentoring by the expert teacher from the District Office, SISC+ (School Improvement Special Coaching Plus) in his school, influenced teachers when he mentioned:

> *"I think the most impactful on teachers is coaching and mentoring by SISC+. Our teachers regard SISC+ as special ones and experts. So when their expertise is shared with teachers, thus the teachers could put the input into practice in their teaching and learning."* **(Principal 3)**

Furthermore, Principal 4 shared the experience with the expert from District Office, School Improvement Partner (SIP) who came to give a talk and workshop on the effective ways of teaching that can lead to improving student achievement in that particular subject. Principal 4 explained:

> *"If it is only between teachers, perhaps there'll be lack of trust and confidence. But when it is delivered by an expert, this matter could convince teachers more. For instance, back then, I saw a SIP officer coming to this school to give a talk on the ways of using the calculator in Mathematics subject to teachers. Not only that, but he also entered the class and showed a teaching example to students witnessed by certain teachers. As a result, students' achievement in that particular subject has improved."* **(Principal 4)**

5.2.6.2   Lesson study and lesson plan

Another aspect of knowledge research highlighted by the participant is the lesson study and lesson plan, which is an idea that is being implemented in PLCs. Teachers 12 and 14 were concerned with the idea of sharing in peer

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coaching that related to the lesson study practice. Therefore, Teacher 12 cited:

> *"On the other day what we did was two male teachers had to teach in one class, other teachers observe from the back. Besides we also did a lesson study."* **(Teacher 12)**

In the meantime, Teacher 14 demonstrated the practice of sharing in creating effective lesson plans by discussing and going into the class together, when he mentioned:

> *"As far as I am concerned, PLCs or peer coaching is a sharing between colleagues in the same subject. For instance, in executing a teaching session, we share how to create an effective lesson plan, then go into the class together with other friends and provide suggestions and ideas for improvement which involves all teachers."* **(Teacher 14)**

Furthermore, Principal 4 recognised the relation between lesson study and peer coaching when discussing the issue of the failure of peer coaching; teachers would refer back to lesson study to investigate weaknesses and make correction or improvement. Hence, Principal 4 insisted:

> *"Here, PLCs is executed in a quite thorough manner covering lesson study and peer coaching. For instance, just in case our peer coaching becomes a failure, thus teachers would refer back to the lesson study to investigate weaknesses. We refer to teachers' books of records, the spots that need correction and the like."* **(Principal 4)**

5.2.6.3 Microteaching and clinical supervision

Teacher 2 suggested microteaching as the most influential technique to improve teacher's learning. The difference between microteaching and peer coaching is the situation of microteaching occurred in workshops and practice amongst themselves, whilst the peer coaching happened in the real situation in the class observation. Teacher 2 quoted:

> *"Microteaching. Actually, no need to do in-class coaching. We set up a course like the one we are brainstorming. For instance, we give a topic. Like in a case where a teacher does workshop teaching. So, he could share his techniques in teaching, and other people could share theirs."* **(Teacher 2)**

Furthermore, Principal 1 considered the implementation of peer coaching as a part of self-evaluation for teachers in order to evaluate their knowledge level and the extent of their need to improve, as he insisted:

> *"In my opinion, the implementation of peer coaching is a part of self-evaluation for teachers themselves as we look at the content of discussions amongst teachers in peer coaching also indirectly measures their knowledge level and the extent of their need to improve and gain more pedagogical knowledge especially in class."* **(Principal 1)**

Moreover, in explaining the process of peer coaching, Officer 2 stressed on the clinical supervision cycle concept of three stages, which are the discussion pre-teaching, the observation during teaching sessions and the feedback sessions post-teaching. In detail, Officer 2 explained:

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"Before the teaching session, we should have discussed amongst teachers how to capture our students' interest, what activities would be suitable during the teaching and learning session, and what we need to plan out in order to make it interesting. Then, after teaching, reflection is crucial as well. Peer feedbacks from other teachers could be discussed together to improve the teacher's flaws. If only all these three concepts could happen at the school level, teaching and learning would be better, and the quality would be much improved." **(Officer 2)**

5.2.7   Theme 7: Suggestion for improving the practice of peer coaching and PLCs

The last theme is regarding the suggestions by the participants of improving practice in peer coaching and PLCs in the schools. Therefore, Theme 7 categorised the suggestions into three points that have a responsibility to improve the PLCs practice which are:

i)   Individual teacher's improvement

ii)   School management improvement

iii)   Ministry of Education's responsibility

5.2.7.1   Individual teacher's improvement

From the teachers' part, the understanding of the idea of peer coaching must be clearly explained and provided by the administration. Teacher 13 suggested that when teachers comprehend that the purpose of peer coaching or PLCs is not for evaluating but rather for teachers' quality improvement, the process of peer coaching will run smoothly and successfully, as he quoted:

> *"On the other hand, amongst co-workers, a clear understanding must be provided so that everyone could comprehend that the purpose of peer coaching or PLCs is not for the observing or evaluation but rather it is for teachers' individual quality improvement."* **(Teacher 13)**

Moreover, Teacher 14 mentioned that the understanding of the importance of peer coaching would lead to the process of growing teachers' professional self-development, as he insisted:

> *"We ought to overcome the constraints mentioned just now one of the ways is to provide understanding to all teachers about the importance of peer coaching, for instance, we could see the impacts of peer coaching on the teachers themselves in the process of growing teachers' professional self-development."* **(Teacher 14)**

Teacher 2 claimed that understanding the improvement is not only focused on the peer coaching, but also engaging with the need amongst the teachers to understand each other. Therefore, the school administration should organise more programmes that could inculcate an interest in understanding each other as between an experienced teacher and a contract teacher. In-depth, Teacher 2 explained:

> *"Like between an experienced teacher and a contract teacher, there is no guarantee that the latter is not good at teaching. Everyone has certain roles to play. These sorts of programs are supposedly possible to be held in order to boost up the element of understanding and collaborating; such as usrah (team circle) and the like."* **(Teacher 2)**

Moreover, Teacher 6 believed when the relationship between the teachers works best, everyone will be motivated and highly committed to the activities planned by the committee. Consequently, Teacher 11 recommended that the teachers need to sit down together and discuss making teaching materials together to reduce workloads, rather than doing it alone when will become more burdensome.

5.2.7.2   School management improvement

From the school administration point of view, the Principal and the middle leaders need to improve their understanding in order for the peer coaching process to be successful. The crucial task that administration needs to improve is to establish a PLCs task force at the school level as recommended by Teacher 6. This task force will arrange a schedule for the implementing of peer coaching and supervise the process. The support of school management to improve teachers' development is consistent with the view of neoliberalism in educational reform that invests in the individual teachers to improve their skills and knowledge in pursuit of maximising their human capital and potential (Savage, 2017).

Therefore, Teachers 4, 9, 10 and 12 thought that the peer coaching practice should be done more often at specific times. Teacher 4 suggested at least one hour in a week should be spent for a meeting with the team department, whilst Teacher 10 insisted on scheduling peer coaching practice once in a month for every department. Meanwhile, Teacher 9 suggested peer coaching

practice needs to be implemented more often in order to enhance teachers'

capability. Similarly, Teacher 12 suggested:

> *"A suggestion from me is to create a space of time for teachers to gather around. The schools have to allocate a specific time for teachers to gather and do discussions. In the current situation, time is compact, and teachers are assigned for teaching and learning sessions for almost 31 periods in a week."* **(Teacher 12)**

At the same time, Teacher 5 recommended the role of the Excellent Teacher

to show the example of excellent teaching and being observed by the others,

rather than just pointing to other teachers randomly, as she quoted:

> *"If new ones (teachers) are in charge to teach and to be overseen, how can we take them as an exemplary? This does not only involve the Arabic language, but other subjects such as the English language are also like that as well. These young ones are also less experienced. I think PLCs needs to open up a chance for senior first before new (teachers)."* **(Teacher 5)**

Principal 4 supported the thought by suggesting a representative from the

District or State level deliver a particular module to teachers in teaching

simulation, and teachers do the observing, as she mentioned:

> *"To me, I would suggest that the implementation of PLCs is not 100% solely assigned to teachers. We need a certain module to deliver to teachers, for example, a representative from the District or State level through SIP (School Improvement Partner) who is appointed to do teaching simulation and teachers do the observing."* **(Principal 4)**

The most significant recommendation to improve peer coaching and PLCs is to make it a school priority and change the school culture as explained by Teacher 7. The Officer 1 also shared the same view when he highlighted on the best way to practise peer coaching as part of the school culture by publicising it to all, and letting all staff know it as part of their life. It will become something meaningful when every teacher can accept the practice of peer coaching as one of the methods to improve their teaching skills and knowledge in an educational environment. In order to establish the culture of peer coaching and PLCs in the schools, Teachers 13 and 15 thought that it needs to create a happy and not stressful environment amongst teachers.

> *"We ought to create a joyful and not stressful environment amongst teachers, for example, today we observe them, and on the next day they would come to observe us."* **(Teacher 13)**

Whilst, Teacher 15 suggested doing video recording or individual coaching to support self-evaluating and improving amongst the teachers, as he cited:

> *"Peer coaching process also needs to be done in a more relaxing way which will not stress the teachers out. For instance, we could do it via video recording, individual coaching and so on."* **(Teacher 15)**

Furthermore, Teacher 10 considered the coaching practice as a value added in teaching skills that supported student-oriented learning by planning programmes together and sharing information amongst the teachers. In the meantime, Teacher 6 suggested the school management to organise a demonstration for all teachers and arrange an implementation schedule.

Moreover, Teacher 6 also proposed to organise a competition between the committees in order to encourage teachers to practise more peer coaching, as he quoted:

> *"Once an orderly schedule is created, if peer coaching is fixed to be done at, we could overcome the time-constraint by doing so. If possible, we might as well organise a competition between the committees. The committee, which has previously done lots of peer coaching, could organise the competition at the school level and the awards are given based on the activities of peer coaching done."* **(Teacher 6)**

Meanwhile, Teacher 1 thought that the idea of peer coaching should be familiarised during the training of teacher service for the young teachers as early as possible, as he insisted:

> *"The second point is, when they come to the schools, it would be best if the administration could 'grab' them as early as possible. Do not let them get accustomed to their own ways of dealing with things, as it would take much time to change that."* **(Teacher 1)**

5.2.7.3 Ministry of Education's responsibility

The impact of workload also is one of the challenges to the school administration and the MOE at the same time. Although neoliberalist policy is to establish the transformation of national education systems (Savage, 2017), the critical engagement in supporting school improvement and teachers development is still lacking. For instance, Teacher 9 believed that the superiors especially the school management team are supposed to consider teachers' welfare whilst being appointed to the other extra works.

Teacher 15 insisted that teachers' workloads have to be reduced in the aspect of administration and data preparation. Therefore, Teacher 15 cited:

> *"Teachers' burdening workloads have to be reduced in the aspect of administration and data preparation. More materials and modules from MOE ought to be taken for teachers' teaching and learning process."* **(Teacher 15)**

Principals 2 and 4 also mentioned the same suggestion when they highlighted that significant attention should be paid to teachers' workload. Principal 2 cited the difficulty of the workload that burdened teachers who are only allowed to go home late in the evening, which makes them tired, as she asserted:

> *"I have only one suggestion that teachers' workload must be seriously paid attention to by the authority. Now, a teacher's teaching period of time has reached almost 30 more slots in a week (20 hours) due to a change in the latest KSSM curriculum. Teachers are only allowed to go home late in the evening which causes them to be exhausted and have not enough energy."* **(Principal 2)**

At the same time, Principal 4 suggested that the MOE should to reinvestigate teachers' teaching time and administrative workload so that they could concentrate on their teaching and learning activities. Hence, Principal 4 quoted:

> *"One more suggestion is teachers' time, and administrative workload could be reinvestigated at the ministry level so that teachers could do their teaching and learning activities in a more focused and efficient way again."* **(Principal 4)**

In a broader context, Teacher 14 suggested the practice of peer coaching could be prolonged at the District and State level. The connection between teachers' inter-schools could be made by creating social media groups such as *WhatsApp* application to aid in the communication between teachers so that it will be more professional and lead into improving teaching techniques and methods. Therefore, Teacher 14 mentioned:

> *"If it's only done at the school level, perhaps students' level would be different. All teachers in a particular District can be gathered, and peer coaching can be done in a focused manner. Hence the inputs learned from the activity can be implemented at their respective schools."* **(Teacher 14)**

5.3   Summary of the chapter

In summary, the qualitative finding discovered emerging themes that related to the research questions and the quantitative survey results conducted in the previous chapter. Theme 1 explained that teachers are at the highest level of belief in peer coaching to influence improvement in teachers' development. Meanwhile, Theme 2 exposed the usual practice of peer coaching in the schools that were mostly focusing on school-based programmes such as INSET. Moreover, most of the participants still assumed peer coaching to be an assessment tool to evaluate the teacher's performance and commitment, which was influenced a lot by the teachers' position rather than school location.

Likewise, Theme 3 concentrated on the approaches of peer coaching including teachers' strength and supportive culture that supported the

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teacher's commitment and self-efficacy. Furthermore, Theme 4 highlighted the administration's role in order to develop peer coaching amongst the teachers that included the encouragement, budget and programmes management, guidance and observation.

In another perspective, Theme 5 revealed the challenges such as time constraint, workload, personal attitude and unconstructive environment that put barriers on the implementation of peer coaching in the schools. Besides, Theme 6 pointed out the knowledge of the educational issue and research amongst the teachers that convey to the Theme 7 of the suggestions for peer coaching improvement that involved MOE, school administration and teachers themselves. In the next chapter, the researcher will discuss all the results and findings connected to the peer coaching and PLCs issues then make recommendations related to the discussions.

CHAPTER 6

DISCUSSION

6.1   Introduction

Chapter 4 and 5 presented quantitative survey data and qualitative interview findings extensively on the research regarding peer coaching and PLCs implementation amongst secondary school teachers. This chapter discusses the main findings from both datasets and considers how this relates to some of the theoretical literature and perspectives focused on peer coaching in PLCs programmes. As outlined in detail earlier in the submission, the purpose of this research was to explore the concept of peer coaching amongst Malaysian teachers and how it influences teachers' commitment and self-efficacy.

Predominantly, research situated around peer coaching suggests a number of distinctions, which can be linked to developing a series of values, beliefs and specific types of knowledge concerning teacher's professional development (Joyce and Showers, 2002; Robbins, 2015, and; Sinkinson, 2011). Four main research questions guided the research: How do teachers use the peer coaching process as an element of educational change in school? How significant is the effectiveness of peer coaching on teachers' commitment and self-efficacy to engage in PLCs? How do administrators and Principals support the implementation of peer coaching as an element of

PLCs in the school? What are the challenges faced by the teachers in implementing peer coaching practice in schools?

Significantly, a conceptual framework for peer coaching, which was designed to explore aspects of a peer observation process amongst Malaysian teachers and their commitments and self-efficacy, informed these questions. Similarly, semi-structured interviews were utilised to observe and explore how teachers experienced the implementation of peer coaching and how they expressed their commitment to the school organisation. Subsequently, the last part of the discussion is related to the findings of the study with regards to the research questions that motivated it. The key discussion points identified from the key themes were:

i)   Peer coaching as a focus of teacher's CPD programmes.

ii)   The relationship between teachers' perspective on peer coaching, teachers' commitment and self- efficacy.

iii)   The essence of instructional leadership amongst school leaders to encourage peer coaching practice in the schools.

iv)   Challenges faced by teachers in implementing PLCs and peer coaching practices.

6.2   Peer coaching as a focus of teacher's CPD programmes

6.2.1   Positive acceptance and belief amongst teachers

The pertinence of peer coaching as an alternative tool in CPD programmes for in-service teachers has been noted many times since such an approach

facilitates teachers' ability to translate knowledge and skills into actual classroom practice (Joyce and Showers, 2002, and; Renner, 2015). The participants in this study also perceived peer coaching as an approach, which can benefit them in practical circumstances. In the survey, the participants agreed with the benefit of peer coaching and were ready to implement it in their current teaching and learning sessions. The high level of agreement with the peer coaching concept in the survey (90%) considered teachers' readiness to develop their skills and professionalism.

Moreover, in the interview findings, Theme 1 discovered the supporting notion and agreement of peer coaching including helpfulness, giving feedback, collaboration and improving weaknesses. The finding is consistent with Darling-Hammond (2017), Sinkinson (2011), and Zwart et al. (2007), who insisted that peer coaching is a collaboration and consists of observation, reflection and exchange of experiences or mutual problem solving that enables teachers to apply new things they had learned before. Meanwhile, Becker (2011) realised those positive notions as increasing teacher's ability to analyse their own classes and improve the learning progress.

All of the participants in the interviews highlighted that peer coaching practice helps them in improving their skills and knowledge. Likewise, Slater and Simmons (2001) discovered that peer coaching offered help and companionship for the participants as opposed to having negative feedback from students and the administrators of the schools. In their findings, Ma, Xin and Du (2018) indicated that personalised peer coaching is more significant

in helping in-service teachers to identify their questions and needs, and in adapting their teaching plans.

The participants from different demographic backgrounds viewed the helpfulness of PLCs and peer coaching practice in several perspectives such as in applying new strategies and ideas (teachers), strengthening teachers' commitment to the schools (Principals) and organising sharing and developmental programmes inter-schools in the district level (State Officer). Moreover, peer coaching practice is defined as a helpful concept of collaboration work that promotes teachers' learning and professional development (Foltos, 2013; Ning, Lee and Lee, 2015; Robbins, 2015, and; Ronfeldt, Farmer and McQueen, 2015). Hence, teachers who engage in better quality collaboration, improve at higher rates and support student achievement improvement (Ronfeldt, Farmer and McQueen, 2015).

The other aspect mentioned by the participants is the concept of sharing in peer coaching that influences positive motivation amongst teachers. The sharing practice noted by the participants included the sharing of ideas, knowledge, techniques, experiences, teaching materials and modules. This sharing practice not only involves the positive experience, but the participants also felt that they could share their negative experiences in developing a higher awareness of how they act in the classroom (Vidmar, 2005). Moreover, Chen et al. (2016) found a significant relationship between shared practices and a collegial trust amongst the teachers. Chen et al. (2016) insisted that the sharing notion with supportive leadership, collegiality, and

trust relationship, could help school members collectively learn, collaborate, innovate, inquire, reflect and give feedback in the form of sharing practices.

The survey conducted indicates teachers were happy to be observed by their peers after considering all aspects of peer observation skills and values in order to improve new ideas and their own practices. Bryan (2014) highlighted gaining new ideas as the most crucial area regarding what teachers like about observations. Likewise, Robbins (2015) mentioned building new skills and sharing ideas between teachers as part of peer coaching definition and objectives.

However, in the qualitative element of the study, Teacher 5 showed her worries when questioning the level of observation skills and ability to give positive comments and feedback amongst the peers. Similarly, Teacher 11 also doubted the level of knowledge and expertise amongst the teachers in observing the others. The situation can be explained by the lack of formal peer coaching skills by some of the teachers (Robbins, 2015). The trusting relationship between teachers still needs to be developed in informal collaboration work form before engaging in formal peer observation in the classroom (Robbins, 2015).

6.2.2 School's implementation of PLCs and peer coaching

Despite the positive agreement on the benefit of peer coaching, the practical implementation amongst the teachers was still at the early stages. Most participants pointed out that peer coaching practice is still at an early stage in their current schools. It was suggested that the schools are in transition

from the traditional approach of supervision to the new dimension of the peer coaching practice (Bowman and McCormick, 2010). This can be supported since 50% of the participants highlighted the INSET programmes, are still used to promote and expose the understanding of peer coaching. Principals also emphasised the exposure and briefing sessions to explain how peer coaching will be implemented. As explained by Robbins (2015), the peer coaching process should start by having collaboration work as the first stage of the process. However, teachers and Principals are struggling to cultivate trust and collaboration notions amongst themselves.

Only three out of ten schools indicate their use of the practice of peer coaching formally that involved classroom observation, mostly from NRSS schools that are organised fully under MOE. Meanwhile, GARS schools as newcomers (since 2006) in MOE are still struggling to implement the idea of PLCs and peer coaching in the schools. This effort of learning to increase teachers' competence and enhance student learning requires sufficient time to be proficient at something new and finding new meaning in the way of carrying it out (Guskey, 2002). Most of the participants from GARS schools connected peer coaching with the supervision done by the Principal or the Officer, which was considered as an assessment to measure teachers' performance in a traditional supervision practice (Bowman and McCormick, 2010).

Furthermore, the peer coaching practice developed as a performative culture in these schools emphasises the performance of teachers to serve as measures of productivity or output in order to represent the quality of an

individual or school organisation within a field of judgement (Ball, 2003). At the same time, the findings reflect the notion of performativity by Tan (2008) who highlighted the contribution to a devolved environment where the schools are to take responsibility for transforming themselves by making themselves different from one another, organising themselves as a response to targets, indicators and evaluations under state regulation.

In the quantitative survey, there was a significant difference in teachers' perceptions of peer coaching between urban schools and rural schools. Specifically, the result suggested that teachers in rural schools have more positive perceptions concerning peer coaching than their urban counterparts. The result is similar to the findings of the study by Shetzer (2011), which found a sense of frustration, lack of vision direction and lack of collaboration amongst the teachers in an urban high school in order to practise PLCs in their school. Shetzer (2011) suggested the negative phenomenon of the PLCs implementation in the urban high school related to the unauthentic implementation of PLCs in the school such as the "*top-down*" enforcement that unsatisfied teachers.

However, in the semi-structured interviews, seven of the participants insisted that wherever the school is located, the commitment and support of the learning and teaching development still remain high if the teachers are motivated and aware. Regarding school location, Johnson and Fargo (2010) noted that teachers in urban schools faced many distractions such as transport issues and urban home living regulation, which are occurring on a daily basis and they struggled to engage learners whilst applying teachers'

professional development. Nevertheless, the participants from the urban schools in the research suggested that their school location gives them more advantages because of appropriate facilities and convenience to promote teachers' learning and student enhancement.

Another significant difference found from the demographic background is the teacher's position in the schools between the senior teachers, normal teachers, and in-training teachers. The senior and in-training teachers indicated more positive perception to the peer coaching than the normal teachers. Research focusing on in-training teachers or student teachers also found a positive impact through peer coaching practices (Arday, 2015; Forbes, 2004, and; Prince, Snowden and Matthews, 2010). Nonetheless, Arday (2015) and Forbes (2004) indicated the peer-mentoring model is a support mechanism to develop teachers' confidence and experience professional growth. As well as developing in-training teachers' confidence, peer coaching practices also had a positive impact in equipping them with strategies for the classroom practice (Prince, Snowden and Matthews, 2010)

Regarding those in senior positions, most of the participants in the interviews accepted the benefit of being promoted to higher position ranks in the school management, which gives the teachers self-motivation and the feeling of responsibility for the tasks. Meanwhile, Sardar and Galdames (2018) suggested that when senior teachers were supported by coaching, they perceived an improvement in their performance and higher levels of resilience. The support in the form of coaching or having any senior mentor was identified as one of the critical sources of support and enabling senior

teachers to build self-evaluation practices, share ideas and reconsider goals and visions (Sardar and Galdames, 2018).

6.2.3 Evaluation and non-evaluation form of peer coaching

Gosling (2002) categorised peer observation into three models, which are; i) evaluation; ii) development, and; iii) peer review. The evaluation and development models involved the expert and senior teachers in evaluating and assessing teachers' competencies, whilst the peer review model is a non-judgemental process that focuses on mutual reflection (Gosling, 2002). According to the survey result, most of the respondents (75.8%) viewed peer observation practice as an evaluation assessment instead of a self-developmental process. Nevertheless, Siddiqui, Dwyer and Carr (2007) argued that the evaluation and developmental models are not actually peer review models in existing power relationships in both of the models. Meanwhile, Robbins (2015) described the vital concept of peer observation as a non-evaluation notion, which is promoted voluntarily and free to teachers in order to improve their learning.

Moreover, from the interview findings, most of the participants mentioned that feedback by giving marks and evaluation in peer coaching would provide them with a measure to improve and develop their skills and performance. The situation can be viewed as the possibility either that teachers preferred expert coaching or they were confused between the terms of peer coaching for the developmental process and the evaluation for teachers' assessment. Darling-Hammond (2017) suggested expert coaching plays a role in helping

to guide and facilitate teachers' learning in the context of their practice, especially in modelling strong instructional practices, supporting group discussion and collaborative analysis of student work. Notably, the participants mentioned expert coaching and superior observation several times in order to validate the feedback session or post-observation meeting.

Glickman (2002) recommended that it might be useful to put experienced teachers with new ones, superior teachers with adequate ones, or adequate teachers with struggling ones coaching including how to overcome shyness, '*oneness*', and isolation. Therefore, all of the Principals in the interviews insisted that expert coaching would lead to convincing the teacher and avoid the lack of trust and confidence amongst themselves. For example, Principal 3 mentioned the role played by the expert teacher from the District Office and SISC+ (School Improvement Special Coaching Plus) which influenced teachers in their practice of teaching and learning skills.

According to Ostovar-Nameghi and Sheikhahmadi (2016), a lack of training and promoting the essence of peer coaching might lead to the misunderstanding and confusing phenomenon amongst the teachers. Therefore, some practitioners might believe coaching is a method of evaluation, not a collaboration. The absence of the prominent form of peer coaching such as a trusting relationship and confidentiality amongst the teachers was also obstructing the implementation of peer coaching. Therefore, without the trusting relationship, the negative feelings such as being bashful remain as the barriers in peer coaching practice. Consequently, Robbins (2015) suggested if trust amongst professional colleagues is not well

developed, coaching efforts should begin with collaborative work such as sharing stories, analysing videos of teaching practice, solving problems, having a conversation focused on student work and planning lesson plans together.

6.3 The relationship between peer coaching and teacher's commitment and self-efficacy

In order to improve student learning, Glickman, Gordon and Ross-Gordon (2017) set two goals that were combined in their model of instructional supervision, which are; i) school/community goals, and; ii) individual goals. Moreover, Osman (2009) defined the school's goals as teacher's commitment to the organisation and the individual goals as teachers' self-efficacy in delivering the lesson in the classroom. Therefore, this research uses teachers' OCQ and TSES to measure teachers' behaviours regarding their profession. Then, the results were being tested to examine the correlation between teachers' commitment and self-efficacy with teachers' perception on the peer observation and how they related to the peer coaching in building PLCs in the schools. In general, the findings in this study support Glickman et al. (2017) and Osman (2009) who reported significant correlations between the commitment and self-efficacy with the perception on the peer observation.

6.3.1 Teachers committed to accomplish school's achievement and personal efficacy

From the quantitative survey, respondents presented a high level of commitment and self-efficacy to their current schools. About 86.6% of the respondents recognised their school as a great organisation where they felt honoured to be part of their current school's staff. The positive commitment amongst the respondents led to the high level of self-efficacy that shows the outstanding level of confidence in their own competence to deliver teaching and learning activities in the classroom. This strong commitment influenced teachers' willingness to be involved in collaborative, reflective and critical practice (Crosswell and Elliot, 2004). Despite the high positive commitment, 30% of respondents described the negative statement when prioritising to move to another school more than being loyal to their current schools as long as they kept working at the same job in the new school without any additional tasks or changes.

Likewise, all of the participants in the interviews presented a positive commitment and self-efficacy to their current schools. The most popular reason why teachers gave their full commitment to the schools is the presence of a supportive and constructive culture within the schools. If we pursue this further, we should note that participants highlighted Principal support and peer collaboration in teamwork as the reason for their commitment to the schools. The teachers who feel a sense of collegiality amongst their counterparts and have opportunities to learn indicated as the most committed to their schools (Hausman and Goldring, 2001). In addition,

Collie et al. (2011) found that the promotion of a positive school climate is amongst the key actions that school can take to foster a greater teachers' commitment.

In this study, one important finding was that the existence of a unique religious culture in the research population also contributed to the teachers' commitment. Wekke and Sahlan (2014) listed the valuable religious culture practiced by the schools' community such as smiling, greetings, mutual respect, tolerance, fasting on Monday and Thursday, performing *Zuhr* prayer in congregation, reciting the *Qur'an* and praying together. Meanwhile, a study by Suhid, Fakhruddin and Roslan (2015) found that most teachers in religious schools in Malaysia had a high commitment to their schools, duties, and responsibilities as a result of their schooling system that is based consistently on Islamic law and steadfastness to produce individuals with the positive character as a servant of God. In other religious school backgrounds, Squillini (2001) and Cho (2012) also found a significant relationship between Catholic faith schools and teachers' commitment, in which it was suggested that faith and belief in God placed in the centre of school culture created an intrinsic motivation for their school lives and activities.

Another element that supports teachers' commitment to the school is the concept of sharing amongst themselves. The participants interviewed emphasised that sharing of practice occurred in various methods such as ideas, knowledge, techniques, experiences, teaching materials and modules. However, 23% of the respondents in the survey demonstrated a disagreement in sharing the same value with their own schools. Although

previous researchers such as Stegall (2011), have found a significant positive relationship between teacher self-efficacy and shared leadership, this finding shows a different pattern when the participants concentrated more on sharing their practice than sharing their values with the schools. Moreover, none of the participants mentioned shared leadership that inspired responsibility for a shared vision, empowered decision-making, and inclusivity of staff as suggested by Hipp and Huffman (2000).

Furthermore, the high level of self-efficacy found in the survey led to the self-motivated teachers delivering their teaching and learning practice, even though the others are observing them. Likewise, the participants in the interviews also presented a positive response with the growth mindset when willing to get more feedback to improve their practice. Meanwhile, Dellapena (2017) insisted the stronger efficacy would lead teachers to collaborate amongst themselves. By expecting observation as a supportive practice, teachers' motivation will increase when the school climate provides a supportive, well-structured and warm working environment for teachers as suggested by Van den Berghe, Ros and Beijaard (2014).

Nevertheless, in responding to the various kinds of job stress in the quantitative survey, 12% of the respondents demonstrated less efficacy whilst being challenged by administrative problems. The result supported the findings of Schwarzer and Hallum (2008) who found that job stress significantly has an adverse effect on the self-efficacy amongst the teachers. The finding from the qualitative interviews also highlighted that administration works burdened teachers' authentic practice in teaching and added to the job

stress. This topic will be analysed further in the discussion of the sub-topic of challenges faced by the teachers.

6.3.2 The centralised authority structure in Malaysian Education department contributes to the teachers' commitment and self-efficacy

Malaysian education culture with a strong centralised structured under National Ministry Authority may contribute to the teachers' commitment and self-efficacy. Commencing with the teachers' recruitment, specific curriculum, in-service teachers' development courses, wages, teachers' position, placement, and more other things consider the Malaysian education style as a strong centralised hierarchical system that is common in other Asian countries (Hairon and Dimmock, 2012; Musa, 2003; and, Rao and Jani, 2011). In the government's structure, Malaysian teachers are the largest group of government staff in number. Consequently, the teachers' welfare and employment are secured and taken seriously by the MOE. Moreover, the Global Teacher Status Index 2018 described teachers in Malaysia as highly respected by the society, and are acknowledged at the same level as a medical officer status (Dolton et al., 2018).

Therefore, 72% of the respondents in the quantitative survey demonstrated a positive commitment on staying in their current schools and refused to move to another school either with the same job or for the reason of changing personal tasks. The strict procedure for teachers' employment and position with the approval from the top management in the MOE does contribute to

the teachers' commitment to the schools. Teachers who intended moving to another school need to apply the replacement through online that centralised under MOE, and need to have strong arguments and reasons to be approved. Hairon and Dimmock (2012) indicated that this traditional pyramid structure of hierarchical "*command and control*" was reinforced by the Asian value of "*respect for authority*". Likewise, only one of the participants in the interviews demonstrated his readiness to move to another school in order to experience more skills and knowledge within a different environment. Meanwhile, Rao and Jani (2011) also observed that the Malaysian highly centralised system in education reduced the opportunity for the teachers to transfer or to move to another school without any concrete reason in order to refresh their knowledge and skills in teaching practice.

Although teachers' promotion is strongly connected with school policies and management, the majority of the respondents in the quantitative survey found there was not a major issue regarding their commitment to the schools (86%). Moreover, the participants in the qualitative interviews viewed the promotion and position in the school management hierarchy increased their commitment and efficacy to the schools. For instance, Teacher 6 as an Excellent Teacher believed he should be as an example to show the best commitment to the schools. In the similar observation, Lee and Li (2015) found that as well as the school Principal, the senior teachers also played an exemplary and leading role in shaping a high-quality school culture for professional development.

6.3.3 The significance of the relationship between peer coaching and teachers' commitment and self-efficacy

Self-efficacy and organisational commitment have been recognised by researchers (Glickman, Gordon and Ross-Gordon, 2017; Osman, 2009; and, Zeb and Nawaz, 2016) as interdependent critical factors that contribute to improving student learning. It is likened to a kind of instructional supervision, where peer coaching is developed as a cultural task in building the community towards student learning improvement (Glickman, Gordon and Ross-Gordon, 2017). Based on the supervision as a developmental model by Glickman, Gordon and Ross-Gordon (2017), this research explores how the peer coaching as a building community task is connected with the teachers' self-efficacy and teacher's commitment to the school organisation. Figure 6.1 demonstrates the correlation results from the quantitative survey between teachers' perception on peer coaching, and self-efficacy and commitment to the school organisation.
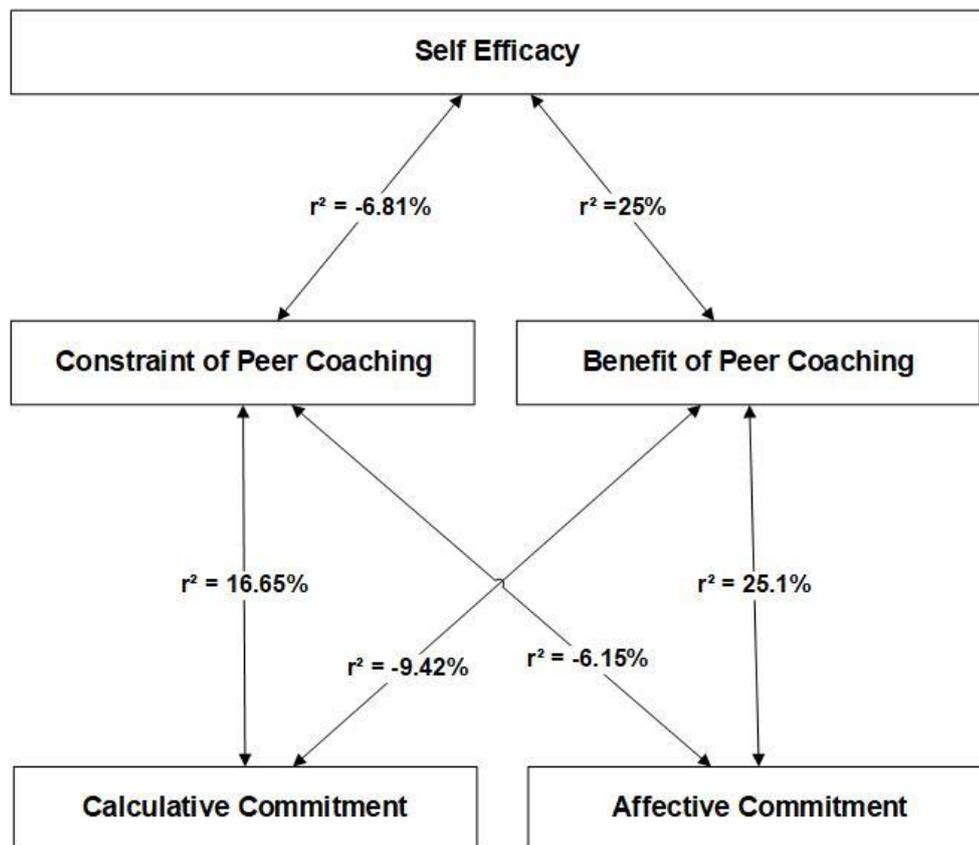
Figure 6.1: Correlation results from quantitative survey

Figure 6.1 shows the significant correlation between teachers' perception on peer coaching and self-efficacy. In detail, a moderate positive relationship was found between teachers' self-efficacy with the construct of Benefit in peer coaching (25%), and a weak negative relationship between teachers' self-efficacy with the construct of Constraint in peer coaching (-6.81%). This can be explained since when the teacher's trust in peer coaching is increasing, their self-efficacy in teaching also rises. This result is consistent with the majority of previous findings that indicate peer coaching has a significant correlation with the teacher's self-efficacy (Bruce and Ross, 2008; and, Zonoubi et al., 2017). Although Cahill (2018) found peer coaching did not significantly influence teacher self-efficacy, the specific areas of self-efficacy

in relation to student engagement, instructional strategies, and classroom management have shown compelling influence by peer coaching.

The research suggested that a teacher's self-efficacy is influenced by the construct of Benefit in peer coaching, which contained positive terms such as motivation, collaboration, feedback, new ideas and improves teachers' learning. However, in relation to the construct of Constraint, a weak negative correlation explained that the negative aspects in peer coaching such as interruption, lack of class control, time consumption, and worries, did not influence teacher self-efficacy on a large scale. In a similar observation, Bruce and Ross (2008) recommended teacher engagement with peer coaching increased concerning the quality and value of teacher collaboration that led to their positive self-efficacy in teaching. Teachers' self-efficacy also reported improvement in terms of their teaching skills and language proficiency as suggested by Zonoubi et al. (2017).

Meanwhile, in the interview sessions, the participants demonstrated confidence and self-motivation whilst connecting their practice in the classroom with the peer coaching elements. The positive acceptance of peer coaching amongst the teachers as a tool of development with which they can help each other collaborate, share, give feedback and be aware their weaknesses, proved the robust connection between peer coaching elements and teacher self-efficacy. The same qualitative findings by Cahill (2018) supported that there were clear distinctions about factors that influence teacher self-efficacy.

Regarding the correlation between teachers' perception on peer coaching and organisational commitment, only the result between Affective commitment and construct of Benefit showed a moderate positive relationship (25.1%). Although the correlation between Calculative commitment and construct of Constraint was positive, it only showed the 16.7% of the relationship. Meanwhile, two negative correlations, which were between Affective commitment and Constraint, and Calculative commitment and Benefit, showed weak relationships (6.15% and 9.42% respectively).

The correlation result between the peer coaching and organisational commitment demonstrates a slight influence of peer coaching practice on teacher's organisational commitment. The Affective dimension, which measures teachers' belief and acceptance of the school's values and goals and the willingness to remain in the school, showed the influence of peer coaching practice. This correlation result supports the findings by Woo (2017) who perceived a moderate and positive relationship between managerial coaching and organisational commitment in South Korea. Focusing on the Malaysian context, Gan and Chong (2015) reported that the commitment to the organisation significantly influences coaching effectiveness. Furthermore, in qualitative findings, the willpower demonstrated by the participants becomes a key factor to the teacher's achievement and a solution to compromise the workloads. However, the participants were not insisting on sharing the same mission, vision, and value with the organisation.

The Calculative commitment, which refers to how teachers reflect with the concept of exchange between individuals and organisations such as their

willingness to move into another school and their loyalty to the schools, showed a weak influence on the peer coaching practice. Nevertheless, much of the previous research concentrated on the organisational commitment to the school leadership and environment (Davies and Davies, 2011; Sezgin, 2010; and, Yoruk and Sagban, 2012), peer coaching practice seems to have less interest to the leadership notion. However, the qualitative findings discovered the sense of commitment to the peer coaching practice arose amongst the teachers when they were being promoted to the leadership positions.

Furthermore, the participants in the interviews who showed a strong commitment to their current schools have a resilient positive belief in the practice of peer coaching. One of the participants (Teacher 14) highlighted the peer coaching practice as one of the important aspects that was concentrated on by the Principal in order to achieve the school's goal. This opinion that viewed peer coaching practice as a key element in training is consistent with the Bashir and Long (2015) study, which found a significant and positive relationship between the components of organisational commitment and teacher learning.

6.4 The essence of instructional leadership amongst school leaders to encourage peer coaching practice in the schools

Another underlying aspect in the research is how the Principal and State Officer contribute to the implementation of peer coaching in the schools. The role of Principal as instructional leaders in the school organisation is as

important as to encourage teachers in improving themselves in professional development programmes (Ebmeier and Nicklaus, 1999; Hallinger et al., 2017; Moss, 2015). Accordingly, the State Officer, as school district administrator, also has a role in supporting Principals to promote teachers' development and peer coaching practice. Therefore, this research found evidence of at least three items from the instructional leadership functions developed by Hallinger and Murphy (1985), and Hallinger, Wang and Chen (2013) related to peer coaching practice, which are promoting professional development, supervising and evaluating instruction, and communicating the school's goals.

6.4.1 Promoting professional development

Instructional leaders cultivate a sense of sharing in the school climate and environment that encourages teachers to improve and develop in teaching and learning practice. Therefore, the participants in the interviews highlighted the Principal's support in encouraging them to develop knowledge and skills. For example, Teacher 14 admitted that his Principal was always prioritising and caring more for the peer coaching practice in enhancing teachers' quality and achievement. The positive task in promoting excellence and equity amongst the school leaders can be described as part of the instructional leadership (Zepeda et al., 2013). Similarly, Robbins (2015) put forward the vital role played by the Principals to support peer coaching by collaborating with teachers and demonstrating the peer coaching process.

From the interviews, Principals shared their own practices in order to encourage teachers in practising peer coaching by managing a myriad of workshops and briefings that occurred in INSET programmes. Moreover, Principal 4 focused on the development programmes by inviting experts from outside to explain the knowledge and practical way to involve peer coaching practice. The Principal effort to foster professional development by internal research-led teaching activities and external resources met the one major dimension of an initial model of instructional leadership constructed by Qian, Walker and Li (2017).

Indeed, the State Officer engaged in order to observe the Principal's work in developing teachers through INSET programmes as part of their routine tasks. However, Officer 2 revealed his concern that there are Principals who did not have adequate ability and knowledge to deliver the essence of peer coaching to their teachers. As a result, teachers misunderstood and refused to be involved in peer coaching practice in the schools. Therefore, Mannan et al. (2016) suggested the Malaysian secondary school Principals should have further and well-organised training based on learning and teaching improvement to enhance their instructional leadership.

Even though the budget allocated for teachers' development programmes was being cut due to economic issues, Principals used their experience and competence to solve the problem by searching alternative sources and minimising the usage of expense in order to organise the programmes. Teacher 7 shared her Principal's solution to organise the workshop and courses by using donations and funding from the Parents Teachers

Associations, whilst Officer 2 raised funding for teachers' development by building a collaboration with the higher education institutes. Likewise, Harris et al. (2017) observed that Principals in Malaysian schools have a core responsibility for promoting the professional learning and development of teachers that is reinforced through their key performance index for Principals.

In general, State Officers do not have direct access to being involved in teachers' CPD programmes in schools. However, as a policymaker, the State Officers must provide Principals with guidelines and observe Principals in managing the teachers' development programmes. In particular, the State Officer acts in a managerial role as an intermediary between Principals and the MOE. Nevertheless, when Officer 2 realised the concern on the limited budget, times and effort that can be implemented by the Principals, he engaged in providing a workshop and courses with focus on teachers themselves at the state level.

6.4.2 Supervising and evaluating instructional session

Teachers' supervision is one of the routines run by the Principal in order to guide the teachers. In practice amongst the Malaysian schools, supervision was normally carried out by either the Principal or the senior teacher empowered by the authority to guide, upgrade and facilitate teachers for improvement (Yunus, Yunus and Ishak, 2010). However, half of the participants (50%) in the interviews believed the supervision by the leader is an evaluation tool to assess teachers' achievement in instructional session. The findings support Harris et al. (2017) that found the Principals in Malaysia

are heavily involved in a routine range of monitoring and supervisory practices in formal evaluated assessment.

State Officers also play a vibrant role in supervising teachers' preparation and teaching in the classroom despite managing the meetings with the school administrations. This type of supervision is mainly being carried out on specific occasions such as on the first day of school term or when there are reports on the decreasing of student achievements in academic or examination results (Officer 2). According to Whitworth and Chiu (2015), the State Officer as a district leader played a significant role to support teacher improvement. Therefore, some of the participants expressed their confidence with the superior observation from the State Officer, as they believed the State Officer has such experience and authority to give feedback and response to teachers' practice.

It is however inaccurate to view the Principal and State Officer supervision as normal peer coaching practice since the procedure of position and power will affect teachers' behaviour. Although the State Officer has the appropriate knowledge and information to observe, the essence of peer coaching would not emerge if the teachers still feel a lack of trust and inferiority whilst being observed. In addition, some teachers who prefer this superior observation influence relate this with the evaluation of performance. Conversely, Yunus, Yunus and Ishak (2010) supported the task of Principal supervising when they found a significant correlation with the improvement of teachers' professionalism. Nevertheless, Kraft and Gilmour (2016) found that tasking Principals with primary responsibility for conducting evaluations resulted in a

variety of unintended consequences, which undercut the quality of evaluation feedback they provided. Besides, the Principal observation itself cannot improve teaching practice due to limited time and access (DuFour and Mattos, 2013). Therefore, this study found that the practice of peer coaching, which developed from the essence of it being voluntary, trusted and free from evaluative procedure is still limited amongst the participants.

Furthermore, this study also found that the Principals supervised the practice of peer coaching amongst the teachers only in various circumstances. Principal 3 reported that they approached targeted teachers personally and encouraged them to improve their practice in confidential meetings. Notably, though Principal 4 authorised one coordinator amongst the teachers to set up the peer coaching practice sessions. The coordinator as a peer coaching leader or facilitator should be available to peer teams as a resource person (Glickman, 2002). Therefore, Principal 4 asserted that the coordinator should be well prepared with the adequate knowledge and skill to foster peer coaching practice amongst the teachers.

6.4.3   Communicating the school's goals

Another aspect that is highlighted by the participants according to the instructional leadership amongst the Principals is the readiness to have a collaborative communication with teachers, collectively and individually towards the school's goal. For instance, Principal 4 shared her experience with a senior teacher that she had felt stressed and felt disqualified with the new curriculum approach. In the meantime, Principals 2 and 3 highlighted

weekly short meetings as the opportunity to elaborate the school's goals and provide space for teachers to communicate and collaborate literally within each other. Robbins (2015) asserted that when the Principals showed their example of collaborative meeting with teachers to avoid the feeling of isolation, the feeling of sharing and togetherness would be cultivated at the same time.

According to Hallinger (2005), one essential in effective communication amongst the teachers is to create a shared sense of purpose in the school, including clear goals focused on the student learning. In this research, the sense of communication amongst teachers was found in formal or informal meetings. The formal meeting as a weekly gathering organised under the Principal's observation, provides the discussion of the strategies and new inputs to improve teaching skills, whereas the informal meeting happens when some of the teachers find the difficulties or issues regarding their instructional works or student learning. Ronfeldt, Farmer and McQueen (2015) discussed informal meeting as a collaboration in an instructional team that supports student achievement.

Furthermore, effective instructional leaders also provide cohesion amongst the practice needed to build an instructional programme that links the vision and mission of the school to establish collegial relationships with the teachers (Zepeda et al., 2013). In accord with this, from the interview findings, Principals and State Officers acknowledged preparing with guidance for the teachers in engaging with the instructional programmes to improve teachers' skills. Peer coaching practice, which involved the teachers in communicating

and collaborating, is one of the effective plans that can be connected to the school's vision and missions.

Teachers' teamwork is one of the positive cultures that also contribute to the effective communication found in the research. As teamwork, teachers described sharing their personal skills and materials with other friends. Moreover, Officer 2 observed the strong teamwork found in the schools that improved teachers and students performance. This finding supports Ronfeldt, Farmer and McQueen (2015) who suggested student achievement would improve by promoting teacher collaboration about instruction in teams. Moreover, DuFour and Mattos (2013) recommended instructional leaders to organise teachers into meaningful collaborative teams that take collective responsibility for student learning and work independently to achieve shared goals with their mutual sense of accountability.

Precisely, Teachers 1, 5 and 13 described the teamwork amongst the teachers in the subject committee as a strongly bonded cooperation. The cooperation and collaboration amongst the teachers was not only engaged in the instructional purpose, but it was also connected in managing subject committees such as organising events and committee programmes. In that case, Zepeda et al. (2013) listed the positive results from the nurtured teamwork such as reduced isolation, regeneration and refinement of ideas and approaches, and synergies from working together whether they agree or disagree with each other.

6.5 Challenges faced by the teachers in implementing PLCs and peer coaching

It appeared that there was almost an infinite number of challenges amongst the teachers relating to implementing the idea and practice of peer coaching in the schools. For example, Lofthouse and Leat (2013) argued that the peer coaching practice struggled to be implemented according to the contradiction between the coaching objective activity and the current school dominant activity, which focused more on examination targets. In this study, the challenges can, however, be categorised into internal and external barriers. The internal barrier emerging from the individual teachers themselves was a fixed mindset and negative attitudes. Meanwhile external barriers were defined as the outer challenges that were out of teachers' control such as time constraints, job workload, and unsupportive school culture.

6.5.1 The difficulties to change negative attitude amongst teachers

The transition from traditional development programmes to a new professional development required the complete effort from the individual teachers in changing their belief, thought and practice. Fullan (2006) suggested that the change process is very complex and teachers must experience a paradigm shift in philosophy. Although a series of workshops and briefings were conducted regarding explaining the strategy and practice of the new teacher's professional development approach, the negative attitudes amongst the senior teachers cannot be avoided. From the survey, nearly 30% of the respondents considered peer coaching practice would

interrupt their lesson plan to be completed and assumed that peer coaching does not help them to face the challenges in implementing the new curriculum. This type of fixed mindset might be traced to the negative feeling of the anxieties about being observed and uncertainties about its purpose whilst receiving negative feedback on their practice (Todd, 2017).

Meanwhile, many researchers (Adshead, White and Stephenson, 2006; Hammersley-Fletcher and Orsmond, 2004; and, Manson, Dubielzig and Singh, 2012) found the fixed mindset attitude on the peer coaching amongst the teachers concentrated on how they will be judged, criticised, what comments they will receive and feeling under scrutiny after being observed. Moss (2015) perceived that trust and stress are amongst the main barriers to peer coaching to be implemented. Instead of demanding to reduce teacher's stress, one of the participants was afraid that the implementation of peer coaching will pressure teachers who have already been burdened by other workloads mostly when it was conducted in a hectic day.

Moreover, Rajab (2015) observed that fixed mindset attitude amongst the teachers came from their lack of self-confidence in their practice, especially for the new teachers. Therefore, this research supports Rajab's (2015) finding when observing negative statements that resulted in self-confidence amongst the teachers being diminished such as embarrassment, shyness, bashful and difficulty befriending with the others. However, eight of the participants (40%) in the interviews connected the negative attitude of unwillingness to practise the peer coaching to the lack of understanding or having misunderstood the purpose and information of the programmes.

Regarding the lack of understanding on the peer coaching practice amongst teachers, Darling-Hammond, Maria and Gardner (2017) asserted that the professional development programmes conducted are less rigorous to what teachers need. Therefore, peer coaching practice as a professional development programme will not be as active as it should be without organising it to meet teachers' needs (Darling-Hammond, Maria and Gardner, 2017). The survey conducted demonstrated the immense lack of training involved by the teachers that can result in the misunderstanding about the peer coaching programme itself. Most of the respondents (78%) indicated that they were not involved in any peer coaching training, workshop or seminar.

In addition, the Principals and State Officer in the interviews suggested that the management leader failed to convey the idea of peer coaching in their exposure and in a worst-case scenario the leaders themselves did not understand the peer coaching concept accurately and were not being serious in its practice. Likewise, one of the teachers in the interview criticised that the INSET programmes arranged concentrated more on the management and administration tools rather than to improve teachers' professional development itself.

6.5.2 Limited time obtained by teachers to implement formal peer coaching practice

Previous research findings in teachers' CPD indicated time management as one of the challenges to the implementation (Adshead, White and

Stephenson, 2006; Arday, 2015; Bryan; 2014; Donaldson, 2015; Donegan, Ostrosky and Fowler, 2000; Hooker, 2013; Robertson, 2005; Todd, 2017, and; Wong and Nicotera, 2003). Similarly, the research observed limited time allocation as one of the external reasons why the teachers did not engage with the peer coaching practice successfully. Despite the majority of responses on the adequate time to give and analyse feedback from the others, some of the respondents (30%) considered peer coaching as an interruption to completing their lesson as they planned.

Likewise, all of the participants in the interviews highlighted time constraints as the major obstacles to implementing peer coaching amongst teachers. The limitation in time occurred in such time to plan clinical supervision that included pre-observation, observation and feedback session. One of the participants also suggested that peer coaching needed the allocation of extra time, which would interrupt his teaching session, especially when it involved a critical class such as an examination class. Hooker (2013) observed that finding the time to meet could be a challenge in practising peer coaching, mostly when teachers do not sit near to each other or when meeting time is not included in their workload allocation.

The time constraints also connected with the failure to manage teachers' timetable effectively. Consequently, teachers faced the difficulty to find proper time together to implement peer coaching. Furthermore, one of the participants claimed that her teaching hours given had consumed most of her time in the week (18 hours) that diminished chances to practise peer coaching. In addition, Principal 1 highlighted having an abundance of the

curriculum (additional religious subject lessons) in their school might slow down the practice of peer coaching.

Although Robbins (2015) encouraged Principals to manage substitute teachers in order to support peer coaching, this solution is an uncommon adoption in Malaysian school culture. Teachers' substitution in the school is only implemented in the absences, meeting, management tasks or special occasions that are not related directly to the teaching and learning practice. Besides, in some cases, teachers involved in peer coaching practice should have extra class out of the scheduled periods that might make multiple teachers' workload (Principal 2).

In order to solve the problem, Principal 4 endorsed the use of a coordinator that was assigned to manage and plan peer coaching sessions amongst the teachers. The coordinator acted on behalf of the school administrator in reallocating and restructuring of the school to ensure an effective programme of teachers' development (Wong and Nicotera, 2003). However, the peer coaching coordinator task still has a limited access that needs to be improved.

Apple (2017) argued that the teacher's development in the concept of neoliberalism tend to form a competition in school's improvement. Therefore, the task of coordinator is to deliver competitive culture amongst teachers to improve and develop themselves in teaching skills. However, Giroux (2002) disputed that neoliberalism is the most dangerous ideology in education which promoting a commercialisation, privatisation and deregulation under corporate culture. Hence, the finding demonstrates that the reform agenda in

Malaysian education still considers the state authorities engagement in order to ensure teachers' welfare and professional development.

Another view was that of the State Officer who perceived that peer coaching practice is still being estimated as a traditional programme of teachers' development that required specific time out of the school time such as on the weekend or after class courses. Sharing the same thought, Bryan (2014) stated the tasks of observation in peer coaching were unclear amongst the teachers and at the same time, the explanation to understand the tasks might take teachers' time and commitment.

6.5.3 Current job workload in school management that burdens teachers

Time constraints to practise peer coaching somehow related to the overwhelming amount of workload of the teachers. The balanced responses between positive (53%) and negative (47%) responses to the workload overwhelming defined how teachers reflect with the workload. The finding is aligned with Sellen (2016) who stated that in about 60% of teachers in England were affected by the workload issue in accessing professional development. Similarly, the respondents were equal between positive and negative responses when they claimed the involvement in other non-teaching activities made it a difficult situation to practise peer coaching.

The response on a difficult situation reflected teacher's feeling when experiencing workload and burnout with the extra tasks that not related with the teaching job. Nias (1996) stressed the importance of teachers' individual

consideration to allow themselves for improving and developing their skills. However, according to the finding, teachers were restricted in being involved in extra workload when on a tight teaching schedule (about 18 hours per week). Not only the restriction of the curriculum to be delivered, but teachers also being burdened by the management tasks, which make them more stressed and exhausted. The finding supported the Teaching and Learning International Survey (TALIS, 2013) that reported Malaysian teachers spent 17 hours per week teaching and 29% of their working hours on non-teaching tasks such as administrative jobs. The administrative jobs mentioned by the teachers include their role on school committees that are not related to teaching, marking attendance, surveying schools' asset, managing school's safety, and organising school events.

The issue of teachers' workload become worse in the smaller schools that have a limited number of teachers and staff. Teacher 10 voiced his worries to the administrative practice that is still willing to establish abundant committees just like the larger school, even though the school was a small size population. In her research, Rajab (2015) also found the same issue and noted that teachers were overwhelmed by the amount of administrative work they have to do which was not related to teaching. As a result, teachers felt exhausted and refused to give cooperation with the others to practise peer coaching.

On the other hand, Principals offered a different perspective on the issue of the workload when they pointed back to the teachers who did not have awareness and desire to change themselves in order to overcome workloads.

The Principals insisted that the peer coaching practice itself was to help teachers achieve for better performance and development. In the same thought, Haep, Behnke and Steins (2016) found nearly 64% of the Principals did not pay particular attention to the topic of stress and strains amongst the teachers regarding the practice of classroom observation. Nevertheless, Principal 2 showed little concern to the teachers' stress when they also recommended the MOE to revise the new curricular approach for the teachers especially in the teaching time allocation.

6.5.4 Unsupportive school culture demotivated teachers' performance

An unsupportive school culture that inhibited peer coaching practice in the schools according to the findings is including the school administration policy, absence of communication between teachers, lack of training and having no trust amongst each other. To cultivate the essence of positive peer coaching, Robbins (2015) highlighted the essential of learning-focused collaborative cultures and administrative support as amongst the significant features. However, Hargreaves and Dawe (1990) argued that peer coaching fosters contrived collegiality rather than collaborative culture. In contrived collegiality, school administration contrived interactions amongst teachers where they meet and work to implement the curricula and instructional strategies developed by others (Hargreaves and Dawe, 1990).

In the context of Malaysian education, the findings demonstrate that the schools in the population tend to practice contrived collegiality in peer

coaching implementation due to the current practice of centralised education administration under MOE. Even though participants scored agreement highly for sharing the same value with the school's administration (76%), the level of teachers' involvement in learning activities remained as the issue. The deficiency of training attendance focused on peer coaching once again led to the failure of the implementation of peer coaching practice (Rajab, 2015). The emphasis on the peer coaching training is still inadequate, even the schools recorded to organise more than four INSET in a year. Aderibigba and Ajasa (2012) asserted that the inadequate training and financial problems appeared to be highly rated as potential impediments to the use of peer coaching.

The budget cuts mentioned by the participants somehow affect the teachers' development programmes to be implemented effectively. Responses by the State Officer and Principals described that the unstable financial situation was the reason why the budget was cut for the teachers' development programmes. Meanwhile, Wong and Nicotera (2003) stated that many schools and districts have limited access to funding for teachers' professional development programmes.

In another issue of school policies, job overlapping and the procedure of peer coaching practice became the challenges of the practical implementation. Job overlapping in the minor schools and less procedure in peer coaching practice such as the teacher autonomy to choose peer coaching structure seemed to be the barriers of the peer coaching practice. Although school leaders were suggested to give teachers the opportunity to identify their peers

for peer coaching (Bovill et al., 2010; and, Robbins, 2015), it was not familiar practice in the schools currently. Principals and their assistants are responsible for choosing and allocating the team and pairs for the practice of peer coaching.

This situation might lead to the lack of trust and communication amongst the teachers in order to engage with the peer coaching practice. In a worst-case scenario, teachers need to deal with the stereotype of a culture that senior teachers must be respected and have less interest in peer coaching practice. Lofthouse and Leat (2013) discovered the peer coaching practice implemented might clash with managerial cultures that demanded accountability and surveillance that did not align with trust-based coaching partnerships. When the meaning of the relationship between teachers is still unclear, the teamwork and collaborative work cannot be established as the presence of the unconstructive friends (Teacher 4). Nevertheless, Robbins (2015) asserted that building trust amongst teachers was a powerful building block for sustaining professional learning community amongst the teachers.

6.6   Summary of the chapter

Gradually, the definite idea of peer coaching practice is being embraced amongst Malaysian secondary school teachers. The high expectation of the responses on the peer coaching portrayed teachers' readiness to change from the isolation to the collaboration in improving their professional development. With supportive instructional school leaders and the strong commitment to the school communities, teachers can overcome their barriers

such as workloads, time constraints and negative culture surrounding them. A high level of self-efficacy and its positive relationship with the peer coaching practice was demonstrated in teachers' motivation and confidence to transform the level of teachers' CPD programmes. Even though teachers were committed to their school organisations, the administration works that is not related to the teaching professionalism decelerate their effectiveness toward the school improvement. In cultivating the culture of peer coaching practice in the school, Malaysian teachers tend to practise expert coaching for better feedback and reflection on the classroom observation. The significant different perception between teachers in the urban and rural area, and amongst different positions of teachers may attract the attention of the policymakers to utilise the opportunities for teachers' development programmes.

CHAPTER 7

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

7.1   Introduction

This last chapter summarises the research findings and proposes fundamental conclusions and recommendations for practice. It also elucidates the implications ascertained from the research and outlines the theoretical and methodological contribution to knowledge of the study. Finally, some recommendations for future research are suggested together with reflection on the researcher's own Ph.D. research journey.

7.2   Summary of the research findings

The previous chapter discussed the findings relating to the research questions highlighted at the beginning of Chapter 1. In summary, the findings explore the practice of peer coaching amongst teachers on how they perceived and implemented this practice to professional development in relation to school culture, as well as the challenges that may obstruct the practice. Meanwhile, the findings also elucidated the association of peer coaching practice with other variables such as teacher self-efficacy, organisational commitment, and instructional leadership in the schools.

7.2.1 The practice of peer coaching amongst teachers

The findings relating to Research Question One emphasised three significant issues regarding peer coaching practice, which are; i) teachers' beliefs and perceptions; ii) the actual practice of peer coaching in schools; and, iii) school strategies in implementing peer coaching practice.

In general, the participants recognised the idea of peer coaching as an advantageous and positive element of their CPD. The participants also believed peer coaching practice inculcates positive notions including helping one-another, giving and receiving positive feedback, sharing ideas and experiences, collaborating, and overcoming weaknesses. Moreover, the participants described themselves as being fully prepared to practise peer coaching in improving their skills after considering the discussion before and after the observation. Regarding participants' demographic backgrounds, the significant difference was found between the participants from different school locations (urban and rural) and teacher's position (in-training, normal and senior teachers). Despite teachers' positive acceptance of the peer coaching practice, most of the participants still viewed formal observation in peer coaching practice as an evaluation process or as an assessment to recognise teacher's performance in teaching skill.

Yet we should note that the practice of peer coaching in the research population is still at the beginning of the process. The formal coaching of classroom observation was only found in NRSS schools, whilst the GARS schools are currently struggling to implement the notion of peer coaching practice amongst the teachers. Although the schools' leaders have made

significant efforts to cultivate peer coaching practice, the practice of peer coaching only achieves success at the informal collaborative level such as discussing students' problems, sharing experiences and modules, and planning lesson study. Moreover, the participants have a tendency to practise expert coaching that provides feedback, marks and evaluates measurement to improve and develop their skills and performance.

In order to cultivate the essence of peer coaching practice in the schools, Principals organised a series of INSET sessions to promote peer coaching. Workshops and briefings are amongst the most popular programmes organised by the Principals to establish the notion of this important initiative in their schools. Some of the schools even invited external coaches to explain and demonstrate the practice of peer coaching. Some of the Principals arranged a weekly meeting to encourage collaboration and positive communication amongst the teachers. In the progressive schools that have organised formal peer coaching, a coordinator has been appointed to arrange schedules amongst teachers practising peer coaching and become a team leader or facilitator to promote peer coaching. In some circumstances, Principals are using a personal approach to encourage teachers by advising and reflecting on the teachers' instructional practices.

7.2.2 Teachers' self-efficacy and organisational commitment in relation to the peer coaching

The findings of Research Question Two found a significant relationship between the perception on the peer coaching and teacher's self-efficacy as

well as organisational commitment. Although the significant relationships were found only at the moderate and weak level, the results indicated the connection of self-efficacy and organisational commitment with peer coaching in improving teachers' development and students' achievements. A high level of commitment emerged amongst the teachers related to the support of school leaders and colleagues, religious culture in the schools, and the MOE centralised hierarchy structure. Meanwhile, a high level of self-efficacy was found amongst the motivated teachers who demonstrated a growth mindset and positive behaviour for self-improvement to change.

7.2.3 Instructional leadership amongst Principals contributes to peer coaching practice

Research Question Three focused on the role of school Principals in instructional leadership to encourage the practice of peer coaching in the schools. The Principal as an instructional leader played the role in encouraging teachers to be involved in CPD programmes. Moreover, PLCs as the CPD implementation offered the ultimate changes in school environments, especially through the peer coaching practice. From the research findings, it was clear that instructional leadership notions emerged in order to support the practice of peer coaching, either directly or indirectly. Indeed, the instructional leadership functioned to promote professional development amongst the teachers. Principals highlighted INSET and briefings as the events organised to promote peer coaching in the schools. Indirectly, the research found Principals supervising and monitoring peer coaching practice by managing a support team and using a personal

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approach to evaluating and observing targeted teachers for improvement. Furthermore, Principals demonstrated a sense of sharing and collaboration by communicating the school's goals amongst teachers in weekly meeting or discussions with the teachers.

7.2.4 Challenges that hindered peer coaching from being implemented in schools

In response to the Research Question Four, negative attitudes emerged as an internal barrier to practising peer coaching amongst the teachers. Attitudes such as shyness, embarrassment, being unconfident, being forced, pressure, and misunderstanding obstructed the peer coaching to be embraced amongst teacher's practices. Furthermore, time constraints, workload, and unsupportive school culture appeared as external challenges to practising peer coaching in the schools. The administrative jobs that were not related to the instructional practice amongst the teachers contributed to the teacher's workload and consumed a considerable amount of time from the teachers. Meanwhile, the participants also recognised a senior-junior conflict, and minor school dilemma was amongst the unsupportive school culture that affected the implementation of peer coaching practice.

7.3 Implications of the study

The key findings of this research have implications for education policy as well as practice concerning teacher CPD programmes in Malaysian secondary schools. Generally, there is a need to consider positive change in teacher development programmes in the Malaysian secondary school

context. The recommendations from this research concentrate on the teachers and peer coaching practice that is based on the interpretations of the findings of the current research as well as the literature.

7.3.1 Implication for Ministry of Education policy

The improvement of peer coaching practice should be started from the underlying policy made by the MOE itself. The MOE must take responsibility in twofold strategies; the first one is to promote the practice of peer coaching, and the second one is to handle the external barriers to the peer coaching. In order to promote peer coaching practice in schools, an appropriate number of training activities and briefings should be performed to introduce and indicate the significant skills and approach of peer coaching. MOE should consider increasing funds for teachers' training, especially for in-service teachers. The Teachers' Training Institutes such as IAB (Aminuddin Baki Institute) create peer coaching courses not only for the Principals or school leaders, but which should involve the potential teachers such as Excellent Teachers in the schools across the departments. Meanwhile, the initial training of teachers should integrate peer coaching practice practically whilst they are still attending their Teacher Training Institutions.

Moreover, clear understanding and accurate information on the peer coaching practice such as the purpose of the developmental process not evaluating teachers must be provided within the teachers. The exact techniques and skills to perform coaching such as feedback skills, classroom observation approach, and lesson plan should be applied amongst the

teachers. From the research findings, the lack of information that led to the misunderstanding about the peer coaching practice inhibited the effort of the development in the school culture. On the other hand, teachers were found to be ready and interested in developing their professional tasks. Therefore, teachers are expected to boost their improvement when gaining adequate knowledge on the practical peer coaching practice.

Recently, the MOE has been concentrating on adopting the 21st-century learning in Malaysian education policy. The 21st-century learning that highlighted the encouragement of knowledge sharing amongst communities of practitioners, using face-to-face, virtual and blended communication (Hashim, 2014) is in line with the essence of peer coaching practice. Therefore, Teacher 14 suggested prolonging the peer coaching practice across the schools at the District and State level by connecting teachers through social media groups such as *WhatsApp* in order to improve teaching techniques and methods. Whilst Teacher 15 recommended the use of video recording in classroom observation that supports the productive discussions in feedback sessions. Gaudin and Chalies (2015) concluded that video viewing is a unique and potentially powerful tool to generate a collaborative space of teacher education and professional development.

At the meantime, MOE as a stakeholder for teachers is responsible for handling the barriers highlighted in the research findings such as workload and time constraints. It is recommended to reduce the teacher's burden by providing teaching assistants to manage school administration tasks that are not related to instructional practice. In the findings, some of the participants

stressed that trivial committee tasks added to the teachers' burden such as school inventory units, canteen committees, and textbook allocation. Therefore, to create an enjoyable culture of teaching and learning, teachers must have more space and time to engage with the collaborative work that focuses on student learning and teachers' performance.

Due to the abundant lesson hours that burdened teachers, MOE is recommended to review and reinvestigate the curricula especially for Arabic language lessons to make it more effective and manageable for teachers and students. Teaching time is suggested to be not more than 17 hours per week to allow a teacher to spend more time on teamwork and dialogue with their colleagues within the schools (TALIS, 2013). Peer coaching practice must also be practised in school time to enhance teachers' commitment rather than as part of after school activities. Principals should allocate time and space for teachers' collaboration to discuss the lesson plan and giving feedback on the observation. For that purpose, Principals should consider implementing teachers' substitution when they are involved in peer observation sessiond. Finally, teachers' involvement in formal observation should be considered as part of the evidence of school effectiveness.

7.3.2   Implications for school leaders

The findings recommend the Principal as a school leader to support peer coaching practice and PLCs as teachers' CPD in their school. The encouragement and support of the Principal in managing and supervising teachers' teamwork will strengthen teachers' motivation and commitment. In

order to enhance teachers' understanding of peer coaching, the Principal should deliver the fundamental notion and practice of peer coaching. It is suggested that the Principal should appoint a coordinator from amongst senior teachers to manage peer coaching practice in the school. A regular discussion and meeting between the Principal and the coordinator as part of teamwork is proposed to analyse the effectiveness of peer coaching practice by referring to the information and feedback from the teachers.

From the research findings, teachers in Malaysian secondary schools are interested more in informal peer coaching practice than formal peer observation. The Principal should encourage the sharing of sessions between the teachers and ensure teachers are involved in lesson planning sessions. If these collaborations work, they will increase teachers' connectivity and build trust in one another. The INSET programmes should be focused more on enhancing teachers' instructional skills by demonstrating practical situations and providing adequate resources and information. Teachers are interested more in the expert coaching, the Principal should consider managing programmes with the external and expert coaches such as Excellent Teachers, lecturers from the Teachers' Institute, and the Officers from the Education Department. Despite an expert coaching approach, teachers should be trained progressively to be effective in peer coaching observation.

As an instructional leader, the Principal must pay more attention to teachers' welfare and distribute job tasks equally amongst the teachers to avoid excessive workload and burden. Due to the report on negative cultures such

as the unsupportive colleagues and senior-teacher relationship, the Principal must be sensitive and solve it perfectly. The important features in peer coaching practice are the confidential process for the development of individuals. Therefore, the Principal should gain teachers' respect by protecting their confidentiality especially involving the negative issues and teachers' weaknesses.

7.3.3 Implication for teachers

Teachers are the primary users affected more in peer coaching practice. After considering the benefit and advantage of peer coaching practice, teachers should consider implementing the essence of peer coaching practice for their professional learning. Teachers need to change their approach and strategies from being negatively isolated themselves to a new environment of working collaboratively with their colleagues.

Teachers are instructed to differentiate peer coaching practice as a personal developmental programme from the peer assessment for their performance evaluation. When teachers realise the peer coaching practice as the improvement process, not an evaluation assessment, it should increase their commitment to the practice. Although the change of mindset will take a considerable time to be adopted, the results will be satisfied when improving teacher and student learning. At some point, the evaluation assessment amongst the teachers needs to be reduced. Hence, this argument is not to contradict the importance of teacher's evaluation at all, but it intends to increase the collaboration in the teacher's development. The superior or the

school leaders should do the teachers' assessment, whilst the teachers should be encouraged to practise peer coaching amongst themselves.

In order to adopt the essence of formal observation, teachers are advised to engage in active collaborative work amongst themselves such as lesson planning, problem-solving, students' work discussion, case study and module sharing. Teachers are also encouraged to join any of the CPD programmes conducted by the schools or MOE to develop their skills in learning and teaching practice. These collaborative approaches should be implemented to gain teachers' trust and confidence in each other that lead to the formal peer observation practice. In the meantime, teachers must use their own initiative to manage their time for teaching as well as their CPD.

7.4   Contribution to knowledge

The current research contributes to the knowledge regarding the peer coaching practice in PLCs programmes amongst the secondary school teachers. First, the research fills the knowledge gap in the literature on peer coaching in the Malaysian secondary school context. To the researcher knowledge, this research is the first study conducted in Malaysia to explore the effectiveness of peer coaching practice in PLCs programmes amongst secondary school teachers and to investigate the perception and barriers of the practice as an element of educational change. It is expected that this research will attract the attention from the PLCs and CPD researchers either in the Malaysian school context or from the broad perspective.

Second, at the level of educational research, this study contributes to the CPD and PLCs research development in the Malaysian context. Most studies in peer coaching for teachers' development focus upon the higher education level of universities as discussed in the research literature review (Fernandez-Chung, 2009; Manson, Dubielzig and Singh, 2012; and, Sanif, 2015). However, this research as a pioneer discusses the phenomenon of peer coaching practice in the Malaysian secondary school context.

Third, studies on peer coaching practice have frequently implemented intervention and observation of the programme implementation using a qualitative approach (Arday, 2015; Papaoikonomou and Valor, 2016, and; Moss, 2015). However, this research provides an element of a quantitative approach of the peer coaching perception amongst the participants that can be utilised in the larger population of study. Moreover, this research provides a set of peer coaching questionnaires with the constructs that can be implemented in a different study.

Fourth, using a sequential mixed methods research design combining both quantitative and qualitative research in the form of questionnaires and semi-structured interviews has not, to the researcher knowledge, been broadly utilised in Malaysia. Therefore, this research provides the stimulation for future research on using the mixed method approach for better findings. Finally, this research proposes a model of peer coaching study developed by the researcher from the literature and current research findings. The proposed model will be discussed in-depth in the following section.

7.4.1 Theoretical contribution

The findings conclude a research model of peer coaching amongst Malaysian secondary school teachers as presented in Figure 7.1. The model of peer coaching combines two established concepts of teachers' CPD, which are the model of Supervision for the developmental approach (Glickman, Gordon and Ross-Gordon, 2017) and the functions of the Instructional Leadership model (Hallinger and Murphy, 1985; and, Hallinger, Wang and Chen, 2013). Considering peer coaching as an element of PLCs of shared personal practice (Hord, 1997), this research developed the framework by focusing peer coaching as building community of cultural task in Glickman, Gordon and Ross-Gordon (2017) and connected with the school's goals (organisational commitment) and individual goals (teacher's self-efficacy) to improve student learning. The elements of peer coaching practice are modified from the items by Rajab (2015) that include two groups of Benefit and Constraints constructs of peer coaching practice. The model connects the relationships between peer coaching constructs with the teachers' self-efficacy and organisational commitment.

Moreover, instructional leadership functions developed by the research findings in the connection between the peer coaching practice and the Principal's task as a school leader. The instructional leadership functions found in the research are how Principals were supporting, managing and monitoring the peer coaching practice as PLCs programme in the schools. The research model also emphasises the challenges on the practice of peer coaching in the Malaysian secondary schools' context. The four main

challenges highlighted in the research findings, are the teacher personal negative attitudes, time constraints, job workload, and the unsupportive school culture that demotivated them from practising peer coaching.

The findings also indicate two main elements that appeared in the research, which are the positive acceptance amongst the teachers and the school's experience with the peer coaching practice. The positive acceptance element is including the idea of sharing, collaborative, growth mindset, and the positive feedback, whilst the school's experience element consists of the expert coaching, teacher's position and school's location that influence the peer coaching implementation. The end target of the model as suggested by Glickman, Gordon and Ross-Gordon (2017), directs to improve student learning that is influenced by teachers' learning improvement.
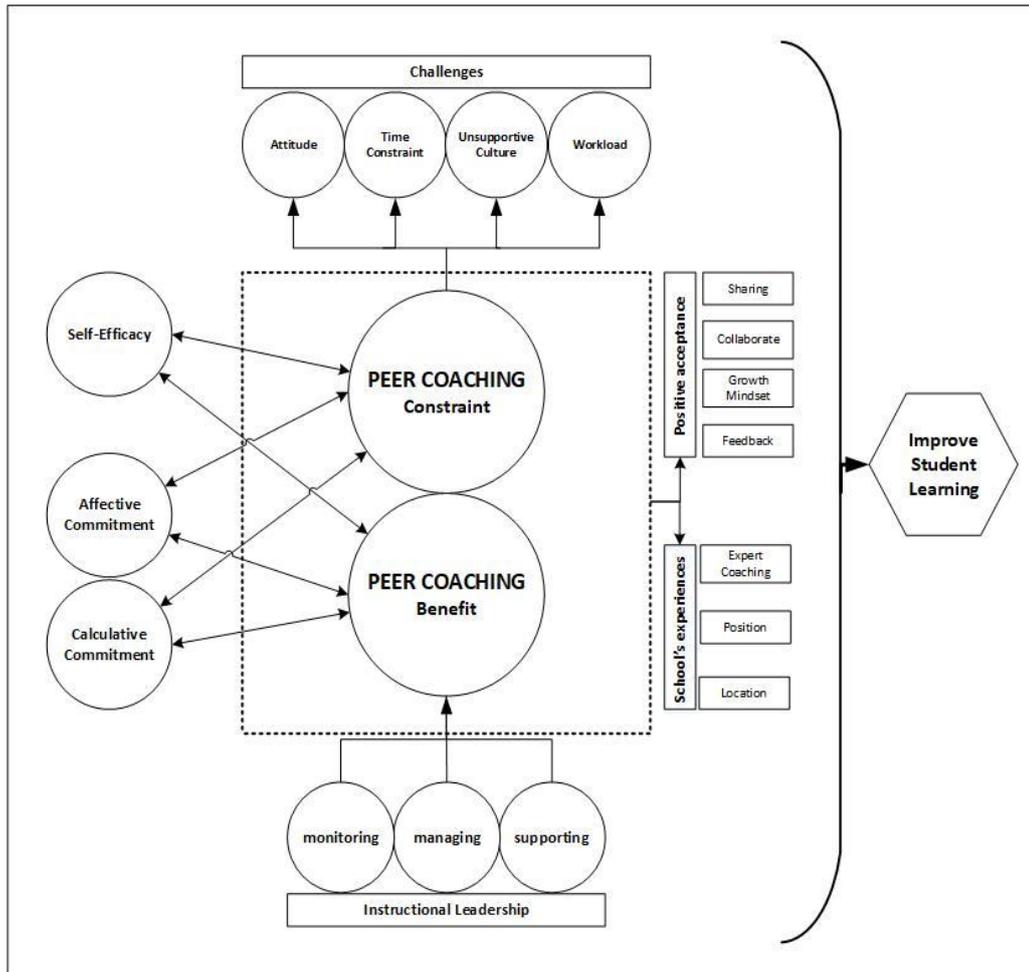
Figure 7.1: Research Model of peer coaching practice

7.4.2 Methodological contribution

In terms of the methodology used in the research, the originality in the project is to be seen in the reconstruction of the questionnaire for peer coaching practice by Rajab (2015). Using exploratory factor analysis (EFA), the modified questionnaire of peer coaching is categorised into two significant constructs, which are Benefit and Constraint. These two constructs emerged as the concept of peer coaching perception amongst the teachers that contribute to the deeper understanding on how teachers observe the peer

coaching practice in the schools and what is the challenge that is encountered by the teachers in order to implement peer coaching practice. The construct of Benefit consists of 12 positive items of peer coaching, whilst the construct of Constraint contains ten negative items of the peer coaching elements. Figure 7.2 shows the items developed in both constructs.

The items of Benefit consist of how teachers perceive of peer coaching practice to generate new ideas on teaching skills, enhance and improve learning, fulfil teacher's professional needs, contribute and benefit teacher's knowledge, exchange expertise between teachers, sufficient spare time for feedback session and evaluate teaching for teachers' development. Meanwhile, the items of Constraint includes the negative aspects of peer coaching such as interrupt lesson study, lack of control during classroom observation, ineffective and no improvement for teacher's learning, cause stress and worries amongst the teachers, job overwhelming and waste teachers' time in practical tasks, unhelpful for teachers' needs, and having no right to select own observer.
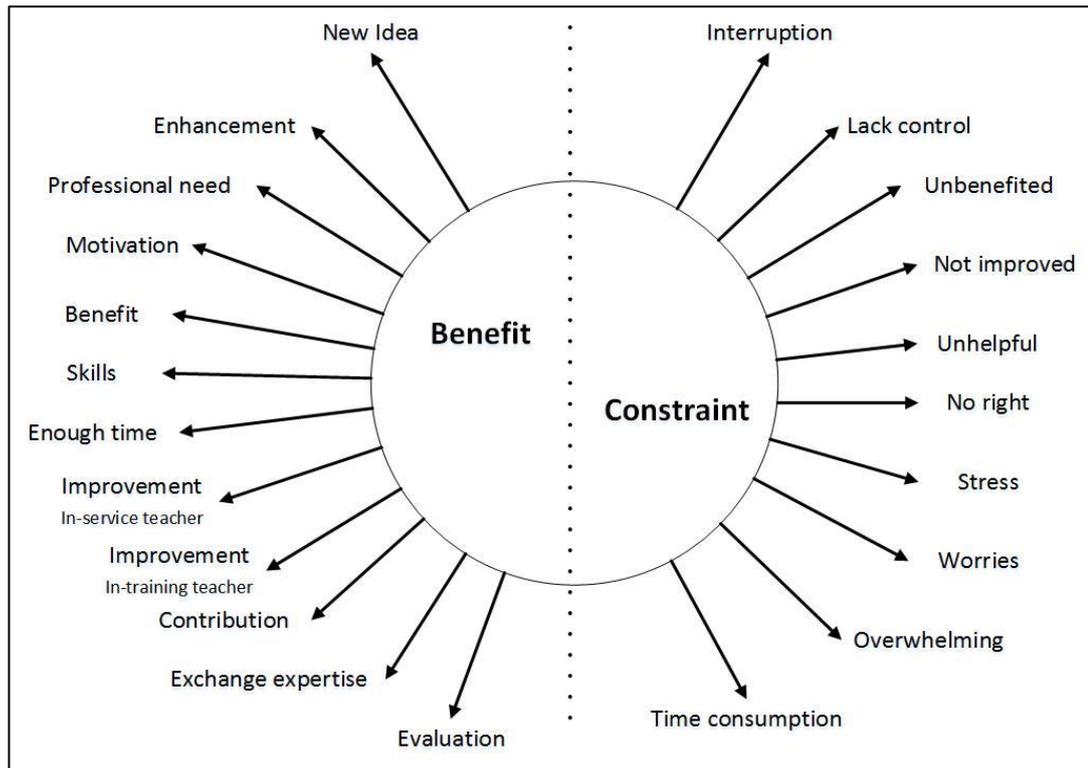
Figure 7.2: Items of constructs in the perception of the peer coaching

7.5 Limitations of the study and recommendations for further research

Several recommendations are suggested for the future research after responding to the research limitations. Despite the limited sample size, the research findings provide insight into the challenges and advantages of the peer coaching practice implementation in Malaysian secondary schools. The first recommendation for further research is to expand replication of the research to a larger population and to different types of schools. This current research utilised the homogeneous sample approach that focuses only on the Arabic language teachers in NRSS and GARS due to the limited time and

distance. It is better to enlarge the population of study heterogeneously to the different departments and multiple types of schools for clear understanding.

Second, the researcher had limited time to explore the peer coaching practice and focus more on the formal observation. It is recommended for the researcher in CPD and PLCs to broaden the investigation to the collaborative work of peer coaching that involves the informal coaching which occurred in the school culture. Informal coaching is essential to exist in the school culture as to develop a sense of trust and confidentiality in the communication that will support the practice of formal coaching.

Third, this research used a survey and interviews to investigate the phenomenon and perception of peer coaching amongst the teachers. For further research, the study is suggested to utilise the observation model on the implementation of peer coaching by experience in the research population. Finally, this research employs the OCQ by Mowday and Steers (1979) and TSES by Schwarzer, Schmitz and Daytner (1999) to observe the correlation for the quantitative data. Therefore, for further research, it is recommended to utilise the different scales of commitment and self-efficacy to observe different results and compare with the current study for a broader perspective.

7.6   Final remarks and conclusions

Based on the current research and my own observation, I believe in the potential of peer coaching practice as the professional development amongst the teachers in the Malaysian secondary schools to be developed. This is

based on the results of a quantitative survey and qualitative interviews that identified the teachers' readiness to practise the actual concept of peer coaching. Well-managed steps should be taken to organise the peer coaching practice wisely in order to obtain better results in teachers' achievement. The use of instructional leadership approaches and teachers' commitment should be considered to nurture the collaborative environment of peer coaching. At the same time, all aspects of the challenges highlighted in the research should be handled in positive solutions for better results.

As discovered from this research, teacher evaluation should be redefined and restructured to obtain more spaces for teachers' engagement in sharing and collaborative practice. When teachers are given the opportunities to collaborate and share their practice, the school culture will change to be a learning organisation as mentioned in PLCs concepts. The collaborative culture amongst the teachers is also in line with the Islamic principle that is a basic concept in NRSS and GARS schools. Speaking as a Muslim, we are taught to consistently maintain a positive relationship with each other and strive to be the best for each other.

The positive collaboration between human beings is consistent with the message sent from the Almighty Allah in the Holy Quran as an Islamic primary source:

وَتَعَاوَنُواْ عَلَى ٱلۡبِرِّ وَٱلتَّقۡوَىٰۖ وَلَا تَعَاوَنُواْ عَلَى ٱلۡإِثۡمِ وَٱلۡعُدۡوَٰنِۚ

Meaning: "… And cooperate in righteousness and piety, but do not cooperate in sin and aggression..." **(Quran, verse 5:2)**

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This message reminds us to cooperate and collaborate consistently in a positive way to improve and develop ourselves. At the same time, it warns us not to cooperate in the negative circumstance such as encouraging hostility amongst the groups. Moreover, the encouragement to collaborate and cooperate between the teachers in peer coaching also focuses on how someone reflects with their colleagues in the feedback sessions. As another Islamic primary source, the Prophet Muhammad (Peace being upon Him) encouraged humans to be always reflecting each other, when he said:

الْمُؤْمِنُ مَرْآةُ أَخِيهِ، إِذَا رَأَى فِيهَا عَيْبًا أَصْلَحَهُ

Meaning: "A believer is the mirror of his brother. When he sees a fault in it, he should correct it." **(Quote 238 in Bukhari, 2005)**

From this message, it is clear that the best concept in the relationship with the others is giving feedback that includes reflecting the arguments with a sense of honesty, accountability and confidentiality for the improvement. Therefore, this research found peer coaching practice as an alternative for the teachers to communicate and develop themselves with the essence of trust, responsibility, collaboration, and sharing the practice amongst each other. As a result, teachers who adopt this will develop their instructional skills and contribute to improving student learning and achievement in the schools.

7.7   Reflection on my PhD research journey

I started my Ph.D. journey with the passion and determination to improve knowledge and interest in learning. At the beginning of receiving the offer to

pursue my study, my anxiety continuously remained in my soul, whilst my mind kept worrying about looking forward to the challenges that were to come. Central to these concerns was whether an ordinary secondary school teacher in the smallest state in my country, could change his destiny to be an extraordinary teacher pursuing study at the highest level of education.

It took me several months after the first meeting with my supervisor to adapt to the different culture and new environment in the university department. Gradually, with inadequate knowledge on the research knowledge and skills, I challenged myself to explore as much as I could to gain sufficient sources to familiarise with the research area. My English language proficiency at that time was at a moderate level. I had only limited experienced of quantitative research whilst doing a Masters degree in the Malaysian University a few of years before.

However, after having a conversation and taking advice from my supervisor and friends, I started to explore the qualitative research approach that was dominant in social research studies. Therefore, I proceeded to plan my research as a mixed-method approach that combined both quantitative and qualitative data. From that time, I realised that there is no limit to knowledge exploration in the world of the research study. As well as mastering the quantitative data analysis, I improved myself to learn the qualitative data skills and analysis. Now I can see the exciting and interesting findings emerging from the qualitative research. At the same time, my supervisor did encourage me to use manual techniques rather than using a computer-based

programme to interpret qualitative data until I can feel the satisfaction and gain substantial experience.

When I managed to get past the MPhil defence that is a requirement from the university to pursue the Ph.D., my self-motivation increased unexpectedly. I believed only with hard work and strong will, I could survive in this long journey of Ph.D. life. My observation of research improved over time. Previously, it was hard for me to understand the journals and articles as well as to highlight the vital issues and problems. Currently, the journals and articles exploration is part of my routine every day. My level of writing in research is also improving steadily. In every chapter written, I always learn and improve my writing skills and techniques.

Fortunately, my supervisors have always been at my side to support and encourage me since the beginning of the meeting even though having an abundance of management tasks and responsibilities in the university. I became more critical and focused on my research area with my supervisors' guidance and support. At the beginning of my study, I aimed to explore PLCs as teachers' CPD in the schools. However, when I explored and concentrated on the issues and gaps, I decided to investigate deeper on peer coaching practice that included part of PLCs elements. From time to time, my focus got too narrow to discover the essence of collaborative and peer observation in my study. This is as an example of how my study started to emphasise and be more explicit on the issues and problems that emerged.

Amongst the strategies that I applied to conduct this study is to always challenge myself and put goals beyond the boundaries. Every single

milestone set up, I tried harder to complete as earlier as I could. This effort required full commitment and sacrifice in my whole life. Presenting in academic conferences was one of the challenges that changed my paradigm into the world of research. Despite experience with the other researchers, my presentation skills also developed comprehensively. Meanwhile, writing articles for journals revealed me to the academic world with the excellent methods of systematic reviews and writing methods.

Whilst conducting data collection in the research field, I went to almost all of the schools in the population to distribute the survey on my own. The experience of meeting with the teachers, Principals, and State Officers in different backgrounds was my precious moment in the study. I enjoyed having the conversations and interviews with the participants as they provided me with much information and new knowledge regarding my study. Regardless, there were difficulties such as schools' distance, uncompleted surveys, teachers busied with their workloads and time constraints that challenged my patience and intensity. At that time, the positive thinking and growth mindset always saved my day. I also implemented fully positive and practical communication skills in order to secure relationships with the interview participants.

Starting with the quantitative data exploration that was the most stressful period in my works. Quantitative data interpreting is a vital process that needs full skills and techniques capability, especially regarding Factor Analysis interpretation. Luckily, my supervisor provided me with the assistance and expertise with the quantitative data analysis. On the other side of qualitative

data analysis, I tried with my instinct after considering the analysis steps given by my supervisor to coding the themes from the interviews transcriptions. I revised and reviewed almost more than ten times each transcription to familiarise myself with the data and input emerged from the interviews. Finally, after three attempts to organise themes, I succeeded into putting the emerged themes in possible and rational categories.

My real secrets of success in my Ph.D. journey are the full commitment of the works and full dependency on my God, Allah the Almighty that brought me strength and patience to confront with all of the challenges. Sometimes, when I felt down in doing my research, I started to read and listen to the success stories of other surviving Ph.D. candidates that increased my self-motivation and produced a positive vibe for me to pursuit my determination. Although I acknowledge that this research is not perfect, I can declare that my research and professional skills have developed extensively and will be translated into new possibilities as an academic scholar and teacher educator.

Concerning the reflection above, this is the time for me to bring in a research culture amongst my colleagues. My concern for the next chapter in my life is to share all of my experience in knowledge learning, positive working and research collaborating during my study in the UK. In line with the essence of collaboration and sharing in peer coaching, I hope this effort will contribute to upgrading the level of teachers' learning in Malaysia.

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Appendix A: Participant information sheet and questionnaire

| | LIVERPOOL JOHN MOORES UNIVERSITY PARTICIPANT INFORMATION SHEET AND QUESTIONNAIRE |

Title of Project:
Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Programme for Arabic Language Secondary School Teachers

Name of researcher   : Khairul Anuar bin Saad
Position   : PhD Student
Faculty   : Faculty of Education, Health and Community (School of Education)

"You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. You will be given ONE WEEK from the time you receive this survey to decide if you want to take part or not."

What is the purpose of the study?
The study aims to explore the implementation of peer coaching in Professional Learning Community (PLC) as teachers' continuous professional development tool. It is also to investigate the effectiveness of peer coaching on teacher's commitment and self-efficacy. Finally, the researcher will examine any potential barriers in implementation of peer coaching in school and recommendations to address the problems.

Do I have to take part?
No. It is up to you to decide whether or not to take part. You will be given one week to make a decision. If you do you can proceed to fill the questionnaire honestly from your experience and views. One week more will be given for that purpose. If you don't, feel free to contact me personally or tell your subject head panel about it. It is my pleasure you can contribute with the research. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights.

What will happen to me if I take part?
If you wish to take part then I would be grateful if you could complete the questionnaire, keep it in the envelope given. I will then collect the questionnaire by myself after a week from now or you may mail me personally by post if necessary.

Will my taking part in the study be kept confidential?
The information provided in questionnaire is totally confidential. No names will be reported in any research publications. You also will not be asked to write your name on the questionnaire. Similarly, direct quotations when used in research reports will not be traceable to individuals or schools. Data stored on the investigator's computers will be password protected. Written files will be kept in locked cabinets. Tape recordings of interviews will be stored in locked cabinets and destroyed after transcription.

This study has received ethical approval from LJMU's Research Ethics Committee: **16/TPL/010**

Personal information collected as part of the study will be retained for a period of 5 years following completion of the study after which it will be destroyed.

If you any concerns regarding your involvement in this research, please feel free to discuss these either with myself or my supervisor using details below.

If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.

Contact Details of Researcher:
Name   : Khairul Anuar bin Saad
Telephone   : 07-521246921
Email   : anuar_saad@yahoo.co.uk
Address   : Liverpool John Moores University, IM Marsh Campus, Barkhill Road
                  Liverpool L17 6BD

Contact Details of Academic Supervisor *(student studies only)*
Name   : Dr. Barbara Walsh
Telephone   : 0151 231 5319
Email   : B.Walsh@ljmu.ac.uk
Address   : Liverpool John Moores University, IM Marsh Campus,Barkhill Road
                  Liverpool L17 6BD

Participant declaration:

"I have read the information sheet provided and I am happy to participate. I understand that by completing and returning this questionnaire I am consenting to be part of this research study and for my data to be used as described in the information sheet provided"

(This form completed in two copies which one copy of this form for participant and one copy for researcher)

Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Programmes for Arabic Language Secondary School Teachers

This questionnaire assesses your perceptions about the implementation of peer coaching in Professional Learning Communities (PLCs). Moreover, there are two parts of Organisational Commitment Questionnaire (OCQ) and Teacher Self-efficacy Scale (TSES) to measure your organisational commitment and self-efficacy toward your school.

There are no right or wrong responses. This questionnaire contains a number of statements about practices, which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement.

Key Terms:
Colleague / Peer : other teacher in same subject and panel
Teamwork   : members in same subject Panel
Organization   : School

Scale:
1 = Strongly Agree   (SA)
2 = Agree   (AG)
3 = Disagree   (DA)
4 = Strongly Disagree   (SD)

A: BACK GROUND INFORMATION *(Tick the right of each statement about yourself)*

1) Gender		2) Age Group	
Male		Under 35 years	
Female		35 – 44 years	
		45 years and above	
3) Years of class teaching experience		4) Years of experience with peer observation	
1 – 3 years		1 – 3 years	
4 – 6 years		4 – 6 years	
7 – 9 years		7 – 9 years	
10 years and over		10 years and over	
5) Highest level of Education		6) What is your current position (officially) in school?	
Diploma		Senior Teacher	
Bachelor		Normal Teacher	
Master/ PhD Degree		In-training teacher	
7) What type of your school?		8) Where is your school located?	
Government Aided Religious School		Rural Area	
National Religious Secondary School		Urban Area	

B: PEER OBSERVATION SURVEY

No	Item	SA	AG	DA	SD
9	I feel motivated when having someone observing me while I am teaching.	1	2	3	4
10	Practicing peer observation strategy causes delay in the school curriculum.	1	2	3	4
11	Practicing peer observation contributes in developing teaching and learning process.	1	2	3	4
12	It is difficult to me practicing peer observation because I am overwhelmed by the amount of administrative work, which is not related to teaching.	1	2	3	4
13	Lots of time and efforts expended in preparing for peer observation.	1	2	3	4
14	I learn from my colleagues more than workshops.	1	2	3	4
15	It is difficult to me practicing peer observation because I am not the one who chooses teachers to observe my teaching.	1	2	3	4
16	Peer observation is for exchanging expertise.	1	2	3	4
17	I have specific time for feedback.	1	2	3	4
18	It is difficult to me practicing peer observation because I am involved in many school committees, activities and projects.	1	2	3	4
19	Peer observation is evaluative.	1	2	3	4
20	I feel worried and stressed when having someone observing me while I am teaching.	1	2	3	4
21	Practicing peer observation decreases pupils' participation in the classroom.	1	2	3	4
22	Peer observation enhances and enriches methods of instruction.	1	2	3	4
23	I benefit from reciprocal visits implemented by school teachers.	1	2	3	4
24	Peer observation in my school is not to enhance and improve the teachers' professional development.	1	2	3	4
25	Peer observation helps me to gain new ideas from watching my colleagues teaching.	1	2	3	4
26	Peer observation doesn't facilitate the challenges which I face in implementing the new curricula.	1	2	3	4
27	Peer observation improves and develops the vocational career of new teachers.	1	2	3	4
28	I do not benefit from reciprocal visits implemented by cooperative school teachers.	1	2	3	4
29	Peer observation improves and develops the vocational career of in-service teachers.	1	2	3	4
30	Peer observation is not based on my professional needs.	1	2	3	4

C: ORGANISATIONAL COMMITMENT QUESTIONNAIRE

No	Item	SA	AG	DA	SD
31	I am willing to put in a great deal of effort beyond that normally expected in order to help this school be successful.	1	2	3	4
32	I talk up this school to my friends as a great organization to work for.	1	2	3	4
33	I feel very little loyalty to this school.	1	2	3	4
34	I would accept almost any type of job assignment in order to keep working for this school.	1	2	3	4
35	I find that my values and the school's values are very similar.	1	2	3	4
36	I am proud to tell others that I am part of this school.	1	2	3	4
37	I could just as well be working for a different school as long as the type of work was similar.	1	2	3	4
38	This school really inspires the very best in me in the way of job performance.	1	2	3	4
39	It would take very little change in my present circumstances to cause me to leave this school.	1	2	3	4
40	I am extremely glad that I chose this school to work for over others I was considering at the time I joined.	1	2	3	4
41	There's not too much to be gained by sticking with this school indefinitely.	1	2	3	4
42	Often I find it difficult to agree with this school's policies on important matters relating to its employees.	1	2	3	4
43	I really care about the fate of this school.	1	2	3	4
44	For me this is the best of all possible schools for which to work.	1	2	3	4
45	Deciding to work for this school was a definite mistake on my part.	1	2	3	4

D: TEACHER'S SELF-EFFICACY SCALE

No	Item	SA	AG	DA	SD
46	I am convinced that I am able to teach successfully all relevant subject content to even the most difficult students.	1	2	3	4
47	I know that I can maintain a positive relationship with parents, even when tensions arise.	1	2	3	4
48	When I try really hard, I am able to reach even the most difficult students.	1	2	3	4

No	Item	SA	AG	DA	SD
49	I am convinced that, as time goes by, I will continue to become more and more capable of helping to address my students' needs.	1	2	3	4
50	Even if I am disrupted while teaching, I am confident that I can maintain my composure and continue to teach well.	1	2	3	4
51	I am confident in my ability to be responsive to my students' needs, even if I am having a bad day.	1	2	3	4
52	If I try hard enough, I know that I can exert a positive influence on both the personal and academic development of my students.	1	2	3	4
53	I am convinced that I can develop creative ways to cope with system constraints (such as budget cuts and other administrative problems) and continue to teach well.	1	2	3	4
54	I know that I can motivate my students to participate in innovative projects.	1	2	3	4
55	I know that I can carry out innovative projects, even when I am opposed by skeptical colleagues.	1	2	3	4

E: TEACHERS' TRAINING:

Kindly answer the following questions by putting (X) in the appropriate box:

56 / Did you access training courses related to peer observation skills? ☐ Yes ☐ No

If your answer is yes, please fill out the data in following table.

Field of training	Course	Duration	Date	Place
Special training course(s) for peer observation skills				

It is the end of questionnaire. I really appreciate your collaboration and involvement in this research.
Thank you.

Appendix B: Participant information sheet for interview procedure
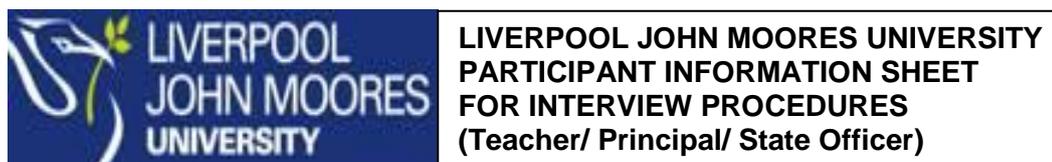
	LIVERPOOL JOHN MOORES UNIVERSITY PARTICIPANT INFORMATION SHEET FOR INTERVIEW PROCEDURES (Teacher/ Principal/ State Officer)
LIVERPOOL JOHN MOORES UNIVERSITY	

Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Programmes for Arabic Language Secondary School Teachers

Name of researcher   : **Khairul Anuar bin Saad**
Position   : **PhD Student**
Faculty   : Faculty of Education, Health and Community (School of Education)

"You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. You will be given **ONE WEEK** to decide if you want to take part or not."

What is the purpose of the study?

The study aims to explore the implementation of peer coaching in Professional Learning Community (PLC) as teachers' continuous professional development tool. It is also to investigate the effectiveness of peer coaching on teacher's commitment and self-efficacy. Finally, the researcher will examine any potential barriers in implementation of peer coaching in school and recommendations to address the problems.

Do I have to take part?

No. It is up to you to decide whether or not to take part. You will be given one week to make a decision. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights.

What will happen to me if I take part?

If you wish to take part, then I would be grateful if you could complete the consent form and return it in the envelope provided. I will then contact you to arrange a suitable day and time for a short interview. The interview will take place in a quiet room within your school and will last approximately 20 to 30 minutes.

Are there any risks / benefits involved?

No risks are envisaged by participation in this study. The interview will give you an opportunity to contribute your views and experiences to a research study into school's effectiveness. The study aims to improve and develop the effectiveness of school administration and so contribute to an important area of teachers' development.

Will my taking part in the study be kept confidential?

The information provided in interviews is totally confidential. No names will be reported in any research publications. Similarly, direct quotations when used in research reports will not be traceable to individuals or schools. Data stored on the investigator's computers will be password protected. Written files will be kept in locked cabinets. Tape recordings of interviews will be stored in locked cabinets and destroyed after transcription.

This study has received ethical approval from LJMU's Research Ethics Committee: 16/TPL/010

Personal information collected as part of the study will be retained for a period of 3-5 years following completion of the study after which it will be destroyed.

If you any concerns regarding your involvement in this research, please feel free to discuss these either with myself or my supervisor using details below.

If you wish to make a complaint, please contact researchethics@ljmu.ac.uk and your communication will be re-directed to an independent person as appropriate.

Contact Details of Researcher:
Name   : Khairul Anuar bin Saad
Telephone   : 07-521246921
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Address   : Liverpool John Moores University. IM Marsh Campus, Barkhill Road
**   Liverpool L17 6BD**

Contact Details of Academic Supervisor (student studies only)
Name   : Dr. Barbara Walsh
Telephone   : 0151 231 5319
Email   : B.Walsh@ljmu.ac.uk
Address   : Liverpool John Moores University, IM Marsh Campus, Barkhill Road
**   Liverpool L17 6BD**

Appendix C: Interview participant consent form

LIVERPOOL JOHN MOORES UNIVERSITY
LIVERPOOL JOHN MOORES UNIVERSITY **PARTICIPANT CONSENT FORM** **(Teacher/ Principal/ State Officer)**

Title of Study:

Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Programmes for Arabic Language Secondary School Teachers

Name of Researcher   : Khairul Anuar bin Saad
Faculty   : Faculty of Education, Health and Community (School of Education)

I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

YES		NO	

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason, and that this will not affect my legal rights.

YES		NO	

I understand that any personal information collected during the study will be anonymised and remain confidential.

YES		NO	

I confirm that I agree to be interviewed and understand that this interview will be tape-recorded (this tape will be destroyed once the interview is transcribed).

YES		NO	

I understand that 'direct quotations' made during my interview may be used in research reports, but that these will be anonymised and not traceable to myself or my school.

YES		NO	

I agree to take part in the above study.

YES		NO	

Name of Participant   : _____
Date   : _____
Signature   : _____

Name of Researcher   : Khairul Anuar bin Saad
Date   : _____
Signature   : _____

(This form completed in two copies which one copy of this form for participant and one copy for researcher)

Appendix D: List of Interview Questions (School teacher)

Variables	Dimensions	No.	Questions
Background	Experience	1	How long you have been working as a teacher? How long you have been working in this school?
Peer coaching	Understanding	2	Explain your understanding of the purpose of peer coaching?
	Experience	3	What are your experiences and the procedures of a peer coaching strategy in your school?
	Training	4	Have you been informed of or had training of peer coaching?
	Impact	5	Discuss any positive aspects of your peer coaching experience. Discuss any negative aspects of your peer coaching experience.
Professional Learning Communities	Understanding	6	Explain your understanding of the purpose of PLCs?
	Experience	7	What are your experiences with the PLCs strategy in your school?
Commitment	Impact	8	Did participating in peer coaching affect your commitment to your school? If yes, please explain how your commitment was affected. If no, why?
Self-Efficacy	impact	9	Can you explain how did your level of confidence and efficacy regarding teaching in the classroom with peer participation?
General	Barrier	10	From your point of view, what are the potential barriers that make it difficult to implement your practise of peer coaching in your development?
	Recommendation	11	What do you recommend to improve the implementation of peer coaching and PLCs?

Appendix E: List of Interview Questions (Principals)

Variables	Dimensions	No.	Questions
Background	Experience	1	How long you have been working as a principal? How long you have been working in this school?
Peer coaching	Understanding	2	Explain your understanding of the purpose of peer coaching in a teachers' development?
	Implementation	3	How does the school benefit with the implementation of peer coaching?
	Development	4	Can you explain briefly on peer coaching strategies and in-service training for the staff development in your school?
	Impact	5	Discuss any positive aspects of peer coaching implementation in the schools. Discuss any negative aspects of peer coaching implementation in the schools.
Professional Learning Communities	Understanding	6	Explain your understanding of the purpose of PLCs?
	Development	7	How does your school implement PLCs strategies for teachers' development?
Commitment	Team work between teachers	8	Does participating in peer coaching affect teachers' commitment in your school?
Self-Efficacy	Personal Supportive	9	Does participating in peer coaching affect teachers' efficacy in your school?
General	Barrier	10	From your point of view, what are the potential barriers that make it difficult to implement the practise of peer coaching in teachers' development?
	Recommendation	11	What do you recommend to improve the implementation of peer coaching and PLCs?

Appendix F: List of Interview Questions (State Officers)

Variables	Dimensions	No.	Questions
Background	Experience	1	How long you have been working as an officer? What is your job scope on Arabic language teachers' development?
Peer coaching	Understanding	2	Explain your understanding of the purpose of peer coaching amongst teachers in the schools?
	Supportiveness	3	How does the education department support teachers to implement the peer coaching strategy in the schools?
	Development	4	Does the education department allocate a budget and plan for teachers' development focusing on peer coaching? If Yes, how it is going, and if No, why it is not?
	Impact	5	Discuss any positive aspects of peer coaching implementation in the schools. Discuss any negative aspects of peer coaching implementation in the schools.
Professional Learning Communities	Supportiveness	6	Explain your understanding of the purpose of PLCs in schools?
	Development	7	In what area does the education department support the implementation of PLCs in the schools? And how is it going?
General	Barrier	8	From your point of view, what are the potential barriers that make it difficult to implement practise of peer coaching in teachers' development?
	Recommendation	9	What do you recommend to improve the implementation of peer coaching and PLCs in the schools?

Appendix G: The amendment of the problem items in questionnaire

No	Item	Current Item	Rephrasing/ Rewording	Reason
1	8	Practicing peer observation strategy causes delay in the school curriculum.	Practicing peer observation strategy may interrupt my lesson plan in completing the syllabus.	*Causes delay* may confusing the respondent about planning the lesson or teaching in the class.
2	12	I learn from my colleagues more than workshops.	I get more ideas and skills from my colleagues sharing a session than participating in workshops and seminars.	*Learn from colleagues* is very wide term of learning. Specify to get idea and skills more relevant according to colleagues.
3	13	It is difficult to me practicing peer observation because I am not the one who chooses teachers to observe my teaching.	Having no right to choose my own observer makes it difficult to practise peer observation.	The word *I am not one who chooses teachers* may confusing respondent about the item.
4	15	I have specific time for feedback.	I do have sufficient time to give and analyse feedback from other observers.	Rewording a *specific time* as sufficient time and elaborating *feedback* as give and analyse will make it more clear what it should be.
5	17	Peer observation is evaluative.	Peer observation is within an accountability framework.	*Evaluative* may confusing teachers. Rewording the term to accountability framework is more relevant to the meaning.
6	24	Peer observation does not facilitate the challenges, which I face in implementing the new curricula.	Peer observation does not help me to face the challenges in implementing the new curricula.	The meaning of *facilitate* may be hard to understand than *help.*
7	28	Peer observation is not based on my professional needs.	My professional needs are met with peer observation.	Flip to positive statement to gain the more understanding statement.
8	35	I could just as well be working for a different school as long as the type of work was similar.	I could just as well be working for a different school as long as I am going the same job and task.	Rewording *the type of work* by *same job and task* make the statement clearer.
9	39	There is not too much to be gained by sticking with this school indefinitely.	I am not progressing/ promoting myself as well at this school.	The words of *gained by sticking are* rephrasing as progressing/ promoting to better understanding.
10	40	Often I find it difficult to agree with this school's policies on important matters relating to its employees.	I often question school's policies whether it support me as an employee.	Rephrasing the item *difficult to agree* as *question* may make more sense.

Appendix H: List of some codes identified from the transcriptions

	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Teacher 6	Teacher 7	Teacher 8	Teacher 9	Teacher 10	Teacher 11	Teacher 12	Teacher 13	Teacher 14	Teacher 15	Principal 1	Principal 2	Principal 3	Principal 4	Officer 1	Officer 2
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Male	Female	Male	Male	Female	Male	Female	Female	Male	Male	Female	Female	Male	Male	Male	Male	Female	Male	Female	male	male
1 ADMIN	administration organization				administration organizing; administration task			loaded with admin tasks				administration tasks; administrator take care	assigned position in school	administration task	administration						administration bureaucracy
2 ATTITUDE	attitude						attitude			individual attitude; own attitude	attitude; friend attitude					attitude change				attitude	
3 SHARING		love sharing; share technique; sharing	friends sharing; share information and technique; share together; shareable	material sharing	ideas sharing; sharing method and technique	shared models; sharing; collaboration sharing		material sharing; sharing	idea sharing	share	share; knowledge sharing	knowledge sharing; share; share	share anything; share student and class; sharing; sharing; sharing knowledge	sharing	share; sharing; sharing improvement	sharing	sharing		keep sharing effective; share experience; share ideas; sharing	sharing; sharing with teachers	
4 TIME	4 time yearly; limited time	shock at the first time; technically time	time consuming; time to time; not have time	specific time; time and resource; time constraint; out of school time; free time; less time; adequate time	spare time; time limited	available time; time constraint; time consumption	time consuming; time to learn; take time	waste time; amount of time	time; time allocated; time limited; time limited; time weather; time fixed; official time; extra time	time space; no time	time	lot of time; suitable time; time is compact	time; time; sharing activity; sharing planning	lot of time; time allocation; wasting time; suitable and free time	limited time	time-constraint			check timetable; few time; confident; limited time; senior teacher hard time; teacher' time	time	time; time constraint
5 PREPARATION	preparation	better preparation	preparation		being able to prepare; preparation	preparing material	preparation; prepare a lot; well preparation; well-prepared	more prepared; preparation	more prepared; not prepare	material preparation	preparation	preparation; prepare material			models preparation; preparation				preparation	prepare module	
6 DIFFERENCE			make a difference	differential	different committee		different; different; different way of thinking	influence differently					different								
7 DISCUSS	discuss		discuss	discussion	discussion	discuss	discussion		discuss; discussion beforehand	discussion	discussion; see and discuss	discuss	discussion; small discussion		discussion	discussion		credits discussion		discussion	discussion
8 KNOWLEDGE	gain knowledge; provide knowledge	gain knowledge; use third rules knowledge			unknowledgeable		gain knowledge				know flaws; knowledge share		gain new knowledge	deliver knowledge; know weakness		gain pedagogical measure knowledge	better knowledge	provide event of knowledge			
9 OLD							old method; old style; old ways														old way
10 MEETING	meeting		meeting	meeting	meeting		curriculum meeting		meeting					non-stop meeting	meeting		weekly meeting/gathering	weekly meeting/gathering		general meeting; meeting	

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Table (rotated). Row numbers 40–78 with thematic codes 11–22.

#	Code	Theme	Terms
40–42	11	IDEA	acquire new idea; content understanding; pop-up ideas; provide idea; gain idea; idea; exchange idea and info; ideas; germination of idea; provide ideas; exchange idea
43–45	12	UNDERSTAND	misunderstanding; understanding; understanding the concept; easy understanding; clear understanding; difficult to understand; student understanding; misunderstanding; load understanding; well understood; not understand; bonded understanding; misunderstanding
46–47	13	MOTIVATION	motivation; high motivation; more motivated; motivated; motivation; motivated being observed; motivated; enjoy motivated student
48	14	DIFFICULT	difficulties; difficulty; difficult
49–50	15	EXPERT	trained by experts; experienced teacher; experience; expert teacher; less experienced; experience; lack in experience; expert observation; experience; refresh experience; expert coaching; well experienced teacher; experienced
51–54	16	WORKLOAD	workload; heavy workload; love working; abundant work; work hard; workload; assigned workload; comfortable working; good network; workload; overcome workload; teamwork not exist; workload; workload not burden; workload reduction; no workload; teamwork; teamwork; workload
55–56	17	COOPERATION	cooperation; cooperation; cooperate; cooperative; good cooperation; cooperate; not cooperate; cooperation; refuse to cooperate; cooperate a lot; cooperation
57–65	18	TEACHER	young teacher; contract teacher; committee teacher; excellent teacher; teacher centered; principal/senior teacher; Excellent teacher; young teacher; teacher's passionate; teacher intelligence; teacher welfare; teachers burden; veteran teachers; lack of teacher; ratio for teachers and school; small number of teacher; teacher appearance; teachers institute; teacher's weakness; supportive teachers; teachers' envollment; teacher's flow; new teacher; teacher as challenge; teachers improvement; back to new teacher; refer teachers record book; all level of teachers; course for teachers; enhancing teachers perform; guidance for teacher; lead teacher; manage method; part of teacher's life; provide guidance to teacher training unit; teachers development; unity among teachers; enhance teacher capable; lack of teacher; new teacher; teachers background problem
66–69	19	HELP	dislike help; helpful; refuse to help; help; help a lot; helping each other; ensure and help; helpful; mean to help; help me a lot; help; help first; offer help; in charge of helping out; helps a lot; improvement; helpful; not help; environment helped; help; management help; helpful; friend's help; helpful; helping; great help; helps a lot
70–71	20	CULTURE	avoid negative culture; culturing; cultured; culture and publicized culture of observing
72–77	21	STUDENT	student attitude; student progress; student success; female students; selected students; student based learning; student shoes; embraced by students; student achievement; student effectiveness; student focused; student interest; student oriented; student passion; student problem; student success; student achievement; student enrollment; student's background; student achievement; student improvement; student centered learning; student success; student academic; student interest; student performance
78	22	INTERRUPT	interrupted; interrupted; no interrupt; interrupted; interruption; interrupted

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Rotated table (repertory grid). Row labels read bottom-to-top along the left edge:

#	Construct
23	COLLABORATE
24	BURDEN
25	TEAM
26	GUIDE
27	PRINCIPAL
28	DIRECT
29	FORMAL
30	INSET
31	COMFORT
32	MIND
33	WILL
34	TOGETHER
35	TEACH
36	INTERNET
37	SCHOOL
38	TRAIN
39	CHANGE
40	COMMITMENT
41	MODULE
42	EVALUATE

Code	Associated terms (across columns)
43 SELF	interest in each other; self-confidence emerge
44 LESSON	lesson plan; lesson plan; lesson study; lesson plan; new lesson; depends on subject and; lesson study; lesson plan; lesson study
45 CONFIDENCE	confident; not confidence; not confidence; confidence; high confidence; not confidence; boosting confidence
46 IMPROVE	improvement; improvement; improvement; improvement; provide improvement; confidence; improvement; learning improvement; improvement and measure; academic improvement; improve and measure; improvement; need to improve; character improve; improved subject improvement; weakness improved; improve quality; improvement; classroom improvement; improvement
47 INTEREST	interest in each other; less interested; less interested; not interested
48 SINCERE	sincerity; sincere; sincerity; sincere; concept of sincerity
49 BASHFUL	bashful; bashful; bashful; befriend; bashful; no bashful; bashful
50 FRIEND	friends moving; friend; friends; familiar friend; friendly; friend; befriend; friends
51 EMBARRASS	embarrassed; embarrassed; embarrassed; embarrassed; no embarrass; embarrassed
52 COMMENT	commenting sessions; comments; comments; comments; receiving comments; give comment
53 COMMITTEE	same committee; committee; inter committee; committee funds; majority of committee; subject committee; committee support; inter committee; inter committee
54 VALUE	value added; adds value; individually; additional values; value added
55 INDIVIDUAL	individually; individually; individual coaching; individualistic; individually
56 ENCOURAGE	encourage; encourage; encourage; encouragement; encouragement; not encouraged
57 INPUT	new input; new input; gain input; input implementation; latest input; officer input
58 FEEDBACK	feedback; feedback
59 ENVIRONMENT	environment; environment; create environment; limited TnL environment; environment
60 COMMUNICATE	communicating; communication; communicate
61 ACHIEVE	achieved; measure achievement; academic achievement; achievement; desire to achieve; academic achievement; great achievement; achieve the target; low achievement; subject achievement in
62 ACTIVE	active; less active; more active; active; active ways; actively taking part
63 FUN	less fun; peace of fun; fun
64 IMPLEMENT	implement
65 WORKSHOP	workshop; workshop; workshop
66 BUDGET	PTA budget

Appendix I: LJMU Research Ethical Approval

Dear Khairul

With reference to your application for Ethical approval.

16/TPL/010 - Khairul Anuar Saad - PGR - Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Program **for Secondary School Teachers (Barbara Walsh/Andrea Mallaburn)**

Approval is given on the understanding that:

· any adverse reactions/events which take place during the course of the project are reported to the Committee immediately;
· any unforeseen ethical issues arising during the course of the project will be reported to the Committee immediately;
· the LJMU logo is used for all documentation relating to participant recruitment and participation e.g. poster, information sheets, consent forms, questionnaires. The LJMU logo can be accessed at http://www2.ljmu.ac.uk/corporatecommunications/60486.htm

Where any substantive amendments are proposed to the protocol or study procedures further ethical approval must be sought.

Applicants should note that where relevant appropriate gatekeeper / management permission must be obtained prior to the study commencing at the study site concerned.

For details on how to report adverse events or request ethical approval of major amendments please refer to the information provided at http://www2.ljmu.ac.uk/RGSO/93205.htm

Please note that ethical approval is given for a period of five years from the date granted and therefore the expiry date for this project will be September 2021. An application for extension of approval must be submitted if the project continues after this date.

(computer generated letter signature is not required)

Mandy Williams, Research Support Officer
(Research Ethics and Governance)
Research and Innovation Services
Kingsway House, Hatton Garden, Liverpool L3 2AJ
t: 01519046467 e: a.f.williams@ljmu.ac.uk

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Appendix J: Permission to conduct the research by EPRD, Ministry of Education, Malaysia

KEMENTERIAN PENDIDIKAN MALAYSIA
MINISTRY OF EDUCATION MALAYSIA
BAHAGIAN PERANCANGAN DAN PENYELIDIKAN DASAR PENDIDIKAN
EDUCATIONAL PLANNING AND RESEARCH DIVISION
ARAS 1-4, BLOK E8
KOMPLEKS KERAJAAN PARCEL E
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
62604 PUTRAJAYA

KEMENTERIAN PENDIDIKAN MALAYSIA

Telefon : 03-8884 6500
Faks : 03-8884 6439
Laman Web : www.moe.gov.my

Ruj. Kami : KPM.600-3/2/3 Jld.16 (2)
Tarikh : 25 Januari 2017

Ketua Pengarah
Seksyen Ekonomi Makro
Unit Perancangan Ekonomi
Jabatan Perdana Menteri
Blok B5 Aras 4
Kompleks Jabatan Perdana Menteri
Pusat Pentadbiran Kerajaan Persekutuan
62502 PUTRAJAYA
(u.p.: En. Azral Izwan bin Mazlan)

Tuan,

Permohonan Untuk Menjalankan Penyelidikan di Malaysia
Nama: Khairul Anuar bin Saad

Dengan hormatnya saya merujuk kepada perkara di atas.

2.   Adalah saya diarahkan memaklumkan bahawa permohonan tuan untuk menjalankan kajian bertajuk:

 "Peer Coaching in Malaysia: Exploring the Implementation of a Professional Learning Community Program for Secondary School Teachers" diluluskan.

3.   Bersama-sama ini disertakan ulasan Bahagian ini ke atas cadangan penyelidikan yang dikemukakan.

Sekian dimaklumkan, terima kasih.

" BERKHIDMAT UNTUK NEGARA"

Saya yang menurut perintah,
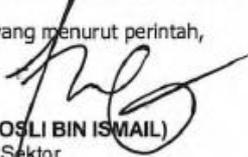
(DR ROSLI BIN ISMAIL)
Ketua Sektor
Sektor Penyelidikan Dan Penilaian
Bahagian Perancangan dan Penyelidikan Dasar Pendidikan
b.p. Ketua Setiausaha
Kementerian Pendidikan Malaysia

Salinan Diakui Asal Dan Sah

b/p Ketua Pengarah
Unit Perancang Ekonomi
Jabatan Perdana Menteri

AZRAL IZWAN BIN MAZLAN
Ketua Penolong Pengarah
Seksyen Ekonomi Makro
Unit Perancang Ekonomi
Jabatan Perdana Menteri

QUALITY SYSTEM   STANDARDS

BIRIM
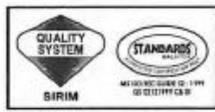
CERTIFIED TO ISO 9001:2008
CERT. NO: AR 3166

Appendix K: Permission to conduct the research by EPU, Prime Minister's Department

UNIT PERANCANG EKONOMI
Economic Planning Unit
Jabatan Perdana Menteri
Prime Minister's Department
Blok B5 & B6
Pusat Pentadbiran Kerajaan Persekutuan
62502 PUTRAJAYA
MALAYSIA

Telefon : 603-8000 8000

EPU

Ruj. Tuan:
Your Ref.:

Ruj. Kami: UPE 40/200/19/3400
Our Ref.:   (7)

Tarikh:
Date: 8 Mac 2017

Mr. Khairul Anuar bin Saad
13, Cecil Street
Wavertree, Liverpool
L15 1HP
Email : anuar_saad@yahoo.co.uk

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application, I am pleased to inform that your application to conduct research in Malaysia has been approved by the **Research Promotion and Co-ordination Committee, Economic Planning Unit, Prime Minister's Department.** The details of the approval are as follows:

Researcher's name	:	**KHAIRUL ANUAR BIN SAAD**
Passport No./ I.C No	:	**801029-09-5091**
Nationality	:	**MALAYSIAN**
Title of Research	:	**"PEER COACHING IN MALAYSIA: EXPLORING THE IMPLEMENTATION OF A PROFESSIONAL LEARNING COMMUNITY PROGRAM FOR SECONDARY SCHOOL TEACHERS"**
Period of Research Approved	:	**4 years (9.3.2017-8.3.2021)**

2.   Please take note that the study should avoid sensitive issues pertaining to local values and norms as well as political elements. At all time, please adhere to the conditions stated by the code of conduct for researchers as attached.

"Merancang Ke Arah Kecemerlangan"

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3.   The issuance of the research pass is also subject to your agreement on the following:

   a) to ensure submission of a brief summary of your research findings on completion of your research;

   b) to submit three (3) copies of your final dissertation/publication; and

   c) to renew your research pass annually.

4.   Thank you for your interest in conducting research in Malaysia and wish you all the best in your future research endeavor.

Yours sincerely,
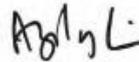
(AZRAL IZWAN BIN MAZLAN)
Macroeconomics Section
for Director General
Economic Planning Unit
Prime Minister's Department
Email: azral.mazlan@epu.gov.my
Tel : 03 88725277
Fax : 03 88883796

ATTENTION

This letter is only to inform you the status of your application and **cannot be used as a research pass.**

c.c

   Ketua Setiausaha
   Kementerian Pendidikan Malaysia
   Aras 1-4, Blok E8
   Kompleks Kerajaan Parcel E
   Pusat Pentadbiran Kerajaan Persekutuan
   62604 Putrajaya
   (u.p. YBhg. Dato' Sulaiman bin Wak
        Pengarah BPPDP
        Bahagian Perancangan dan Penyelidikan Dasar Pendidikan)

2

Appendix L: Researcher identification card
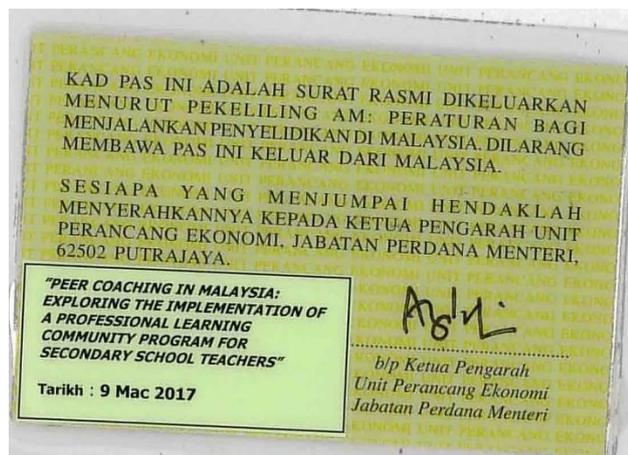
Appendix M: Permission to conduct research by State Education Department

JABATAN PENDIDIKAN NEGERI KEDAH
KOMPLEKS PENDIDIKAN, JALAN STADIUM
05604 ALOR SETAR
KEDAH DARUL AMAN

Telefon : 04-740 4000
Faks : 04-740 4342
Laman Web : www.jpn.moe.gov.my/jpnkedah

"MUAFAKAT KEDAH"

Ruj Kami : JPK. SPS.UPP 600-1/1/2 Jld.2(16)
Tarikh : 19 Mac 2017

Khairul Anuar bin Saad
13, Cecil Street
Wavertree, Liverpool L15 6BD
UNITED KINGDOM

Tuan,

Kebenaran Untuk Menjalankan Kajian/ Soal Selidik di Jabatan Pendidikan Negeri / Pejabat Pendidikan Daerah dan Sekolah – Sekolah di Negeri Kedah Darul Aman

Saya dengan hormatnya diarah merujuk kepada perkara tersebut di atas.

2.   Dimaklumkan bahawa permohonan tuan untuk menjalankan kajian yang bertajuk " **Peer Coaching in Malaysia : Exploring the Implementation of a Professional Learning Community Program for Secondary School Teachers** " telah **diluluskan**.

3.   Kelulusan ini adalah berdasarkan kepada apa yang terkandung di dalam cadangan penyelidikan yang tuan kemukakan ke Kementerian Pendidikan Malaysia.Tuan dikehendaki mengemukakan senaskhah laporan akhir kajian setelah selesai kelak dan diingatkan supaya mendapat kebenaran terlebih dahulu daripada Jabatan ini sekiranya sebahagian atau sepenuhnya dapatan kajian tersebut hendak dibentangkan di mana-mana forum, seminar atau diumumkan kepada media.

4.   Kebenaran ini adalah tertakluk kepada persetujuan Pengetua / Guru Besar sekolah berkenaan dan adalah **sah sehingga 4 Mei 2017**. berkenaan .

Sekian, terima kasih.

" **BERKHIDMAT UNTUK NEGARA** "
" **MUAFAKAT KEDAH** "
" **PENDIDIKAN CEMERLANG KEDAH TERBILANG** "

Saya yang menurut perintah,
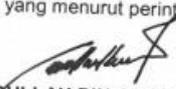
(ABDULLAH BIN ABDULL MANAF, BCK.)
Penolong Pengarah Kanan (Ketua Unit)
Unit Perhubungan dan Pendaftaran
Sektor Pengurusan Sekolah
b.p. Pengarah Pendidikan Negeri Kedah Darul Aman

"1 Malaysia: Rakyat Didahulukan, Pencapaian Diutamakan"
Sila catatkan rujukan Jabatan ini apabila berhubung

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Correlation Matrix[a]

Correlation	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22
P1	1.000	-.248	.442	-.147	-.021	.279	-.238	.382	.203	-.139	.207	-.319	-.279	.392	.396	-.426	.341	-.432	.425	-.425	.353	.287
P2	-.248	1.000	-.264	.307	.266	-.073	.234	-.140	.010	.304	-.010	.206	.379	-.096	-.088	.365	-.039	.379	-.100	.468	-.184	.001
P3	.442	-.264	1.000	.012	-.014	.458	-.127	.441	.292	-.069	.223	-.175	-.172	.531	.578	-.487	.486	-.413	.542	-.459	.482	.193
P4	-.147	.307	.012	1.000	.369	-.084	.237	-.077	.020	.506	-.111	.312	.295	-.121	-.047	.065	-.069	.084	-.095	-.009	-.071	-.116
P5	-.021	.266	-.014	.369	1.000	-.005	.242	-.098	.046	.358	-.011	.205	.250	-.072	-.014	.069	-.084	.118	-.073	.039	-.101	-.162
P6	.279	-.073	.458	-.084	-.005	1.000	.007	.382	.278	.051	.325	-.033	.032	.469	.483	-.221	.466	-.227	.482	-.166	.379	.351
P7	-.238	.234	-.127	.237	.242	.007	1.000	-.248	-.060	.304	-.106	.289	.402	-.229	-.107	.353	-.235	.354	-.156	.334	-.291	-.128
P8	.382	-.140	.441	-.077	-.098	.382	-.248	1.000	.430	-.095	.254	-.163	-.184	.575	.509	-.426	.599	-.322	.584	-.399	.589	.375
P9	.203	.010	.292	.020	.046	.278	-.060	.430	1.000	-.035	.271	-.084	.092	.370	.437	-.235	.409	Double-click to activate	Double-click to activate	-.182	.318	.279
P10	-.139	.304	-.069	.506	.358	.051	.304	-.095	-.035	1.000	.029	.307	.335	-.051	-.020	.145	.036	-.095	.263	.118	-.069	-.004
P11	.207	-.010	.223	-.111	-.011	.325	-.106	.254	.271	.029	1.000	-.187	.063	.367	.352	-.125	.467	.264	-.204	-.009	.342	.254
P12	-.319	.206	-.175	.312	.205	-.033	.289	-.163	-.084	.307	-.187	1.000	.335	-.230	-.193	.309	-.234	.341	-.152	.308	-.198	-.110
P13	-.279	.379	-.172	.295	.250	.032	.402	-.184	.092	.335	.063	.335	1.000	-.237	-.176	.357	-.144	-.417	.621	.340	-.220	-.113
P14	.392	-.096	.531	-.121	-.072	.469	-.229	.575	.370	-.051	.367	-.230	-.237	1.000	.726	-.428	.754	-.362	.557	-.410	.592	.394
P15	.396	-.088	.578	-.047	-.014	.483	-.107	.509	.437	-.020	.352	-.193	-.176	.726	1.000	-.492	.671	.537	-.304	-.431	.567	.393
P16	-.426	.365	-.487	.065	.069	-.221	.353	-.426	-.235	.145	-.125	.309	.357	-.428	-.492	1.000	-.377	-.377	-.304	.701	-.379	-.119
P17	.341	-.039	.486	-.069	-.084	.466	-.235	.599	.409	.036	.467	-.234	-.144	.754	.671	-.377	1.000	-.361	.677	-.324	.682	.417
P18	-.432	.379	-.413	.084	.118	-.227	.354	-.322	Double-click to activate	-.095	.264	.341	-.417	-.362	.537	-.377	-.361	1.000	-.428	.627	-.396	-.146
P19	.425	-.100	.542	-.095	-.073	.482	-.156	.584	Double-click to activate	.263	-.204	-.152	.621	.557	-.304	-.304	.677	-.428	1.000	-.353	.686	.414
P20	-.425	.468	-.459	-.009	.039	-.166	.334	-.399	-.182	.118	-.009	.308	.340	-.410	-.431	.701	-.324	.627	-.353	1.000	-.320	-.094
P21	.353	-.184	.482	-.071	-.101	.379	-.291	.589	.318	-.069	.342	-.198	-.220	.592	.567	-.379	.682	-.396	.686	-.320	1.000	.406
P22	.287	.001	.193	-.116	-.162	.351	-.128	.375	.279	-.004	.254	-.110	-.113	.394	.393	-.119	.417	-.146	.414	-.094	.406	1.000

a. Determinant = 2.59E-005

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of Sphericity	Approx. Chi-Square	1698.889
	df	231
	Sig.	.000

Appendix O: Table of data coding categorised into seven themes

THEME		SUB THEMES		CODES
THEME 1	The positive/benefit of Peer Observation/ PLCs	Sub theme 1.1	Peer observation as a helpful tool to upgrade and improve teaching performance	helping skill development
				observe and monitoring teacher's performance
				trial and improvement
				guidance/assist
				new teacher development career
		Sub theme 1.2	The influence idea of shareable in peer observation	sharing idea/new knowledge
				sharing experience
				sharing input and techniques
				exchange expertise/idea
				examples/ role model / imitating
				sharing material/ teaching aids
		Sub theme 1.3	The ideal of giving feedback	discussion
				reflection / instrument standard
				suggestion
				learn
				communicate
				comment/critics
				planning / preparation / brainstorming
		Sub theme 1.4	peer observation usable in recognition teaching weakness and strength	spot and fix the flaws/ strength
				find mistake
				modification
				overcome issue
				amendment
		Sub theme 1.5	Peer observation cultivates the culture of cooperation	group/team teaching / teamwork
				collaboration
				togetherness
				relationship / social
				common and simple
				cooperation
THEME 2	The implementation/ practice of peer observation/PLCs in schools	Sub theme 2.1	The school events/ programmes to support peer observation/PLCs	INSET
				talk/ course /training
				meeting
				exposure/ briefing
				principal observation
		sub theme 2.2	The practice of sharing	teaching aids
				question developing
				module
				lesson plan
				sharing classroom

		Sub theme 2.3	Teachers' gathering as a fundamental approach	weekly gathering
				usrah
				informal
		Sub theme 2.4	The influence of demographic background (position/location)	responsibility
				value added/ role model in position
				motivation
				facility
				personal tendency
		Sub theme 2.5	Peer observation as an assessment to evaluate teachers' performance	assessment task/ marking / evaluating
				improvement
THEME 3	The obstacles/cha llenges to practise peer observation/P LCs	Sub theme 3.1	Individualistic and personal attitude	fixed mindset (attitude)
				embarrassment
				bashful/shyness
				unconfident/ pretense / hypocrite
				misunderstanding
				unprepared
				being forced
				pressure
		Sub theme 3.2	The influence from the environment	school size
				student background/ achievement
				lack of the teachers / veteran teachers
				new syllabus/ beginning approach
				school culture (old type)
				interruption/disruption
		Sub theme 3.3	Time constraints	schedule/ postpone
				preparation/ unprepared
				pack (limit/ no time)
		Sub theme 3.4	Teachers' burden by workloads	extra work
				administration tasks
				job scope (overload)
				report task/ documentation
				online data/ evidence recording
		Sub theme 3.5	Lack of training	lack of publicity / technique
				workshop
				talk
THEME 4	peer observation/P LCs from the knowledge of research	Sub theme 4.1	Micro-teaching	
		Sub theme 4.2	Lesson study/plan	
		Sub theme 4.3	Clinical supervision	
		Sub theme 4.4	Expert coaching/observati on	School Improvement Special Coach Plus
		Sub theme 4.5	Self-evaluation	

		Sub theme 5.1	Superior/outsider observation	low achievement school
THEME 5	The role of principals and state officers in implementing peer observation/PLCs	Sub theme 5.2	Managing/ organizing talks/ workshops	exposure to the Principal
				workshop
		Sub theme 5.3	Provide guidance	book/ info reading
				module
		Sub theme 5.4	Supporting/ encouraging	talk (officer/expert)
				workshop
		Sub theme 5.5	Allocating the budget	financial (PTA/INSET)
THEME 6	The secrets/ strategies on the positive commitment and self-efficacy to practise peer observation/PLCs	Sub theme 6.1	Will power	intensity
				sincerity/ honesty
				own initiative (survey/research)
				confidence
				passionate / desirable
		Sub theme 6.2	Growth mind set	joyful/ fun
				spirit/ motivation
				voluntarily
				positive thinking
				teamwork
				open/broad minded
		Sub theme 6.3	Alma mater	old school bonding
		Sub theme 6.4	Technology support	ICT expert/ technology
		Sub theme 6.5	Spiritual practice/ atmosphere	religious blessing
				time flexibility
		Sub theme 6.6	Student based learning	Teaching in 21th Century
				teachers as facilitators
				student centered/ focused
THEME 7	Suggestion for improvement the practice of peer observation/PLCs	Sub theme 7.1	Individual teachers	understanding
				team / relationship
		Sub theme 7.2	School' s administration/ leadership	observation
				liberalisation (flexible time and peers)
				school based program (award/ competition)
				informal accustomed
				school support/value added
		Sub theme 7.3	Education Ministry/ Department	teacher's workload
				report task
				training
				publicity and campaign

Appendix P: Sample of interview transcription (School teacher)

Audio length: 16 minutes 45 seconds

Interviewer	:	In the name of Allah. First of all, would you please tell briefly about your service background as a teacher?
Interviewee	:	(I) began serving since the year 1999; it has been almost 17 years. I started to serve (as a teacher) in Sarawak for three years and a half, after that I moved to SMKAP on the year 2003, have been here at this school for 14 years. My current position is as Arabic Language Excellent Teacher (since 2008). Apart from that I also act as secretary general of PA21 (21st Century Education). Under this committee of PA21 we have PLC, HOTS (High-Order Thinking Skills) and so forth. Then I am also in charge as the secretary of Arabic Language Excellence at school. Mentioning this so-called Arabic Language Excellence, it involves curricular excellence; (we) ought to organize many programs to ensure that the Grade-Point Averages (GPA) of Arabic Language would gradually increase.
Interviewer	:	So talking about PLC or peer coaching, what do you understand about the context (of the term)?
Interviewee	:	Peer coaching, it could be formal or informal. In a formal way, we observe them teaching and then we would provide comments or guidance. Or it could be the other way around in which the person who is a mentor becomes the coach, meaning that someone else comes in to observe them teaching. That way is also possible. But usually teachers are more into observing, meaning that the coach observes the teacher. Okay, second, it can be done informally like what usually happens in (our) Arabic Language Committee, the teachers will come to see me if they would like to be observed by the principal next week, for instance. Or they want to teach a new lesson or something, so they would come to ask for opinions. Our Arabic Language teachers could be said as quite good as they diligently come by like A, N, Ustazah A, these three people often come to ask for opinions. But still there are some who have never come at all. All is well.
Interviewer	:	Alright. So based on your experience in PLC, be it formal or informal one, what kind of experience did you have like observing (teachers) for instance?
Interviewee	:	Yes, I do. Observing other people and there are times they also do the same to me, observing me teaching.
Interviewer	:	So if that's so, how does it happen? Like when we observe people teaching or vice versa, is there some sort of discussion beforehand?
Interviewee	:	Yes. Like what they usually do, discussing on Form Five subjects with Ustazah N and Ustazah H, how do we teach about *istiab* to students so they could become more active. Just like PDPC which implies latest teaching method differs from old methods, (in which) we used to instruct *Qiraah* students to recite altogether and all, and then they would answer written questions. But the active method is different. Yes, it is different. (Through that method), they come in to observe (someone else) teaching. Ustazah N used to come in and observe, and then Ustazah A also did the same. So they could gain ideas (from that). When we teach *Istiab* we divide (students) into groups and there would be presentations done by every student, then all students have the chance to share their answers instead of just sitting down at their seats and writing. Yes, it is student-based learning.
Interviewer	:	So talking about observing people, did you ever follow any training for PLC before?
Interviewee	:	There are courses (I followed). Like (what happened) last year. So I was listed to be amongst the committee members who are assumed as SiSC+ by the Director (of JPN), and then the Secretary of PLC at this school, as it becomes one of the four pioneer schools in Perlis which are the pioneers of PA21 in Perlis. So inevitably we ought to submit PLC reports once in three months to the Department. Last year, the Director invited twelve of us to Penang to see how PPD of Northeast of Pulau Pinang executed (it) at a Chinese girls school. It was an elementary school but they invited a consultant-like team (which is) called as Teach for Malaysia, they were all Chinese. Yes, they are outsider consultant. They were originally teachers. But as they pioneered the sophisticated PA21, their ideas were all creative and advanced, so they quitted (their profession) as teachers, they were recruited by Yayasan Amir; this Yayasan Amir pays them to train Malaysian teachers. So PPD of Northeast is the one in charge to provide the salary. So (we from) Perlis joined (the session) and listened about it. But it was fun; they organized it in a way as if we get into a floating class together. After coming back, the Director instructed to execute it in Perlis. So in Perlis, last year was quite exhausting. It was done four times; at SMKAP, Sanglang, IPG and then SM Arau.
Interviewer	:	So when we mention about peer coaching, in your opinion, is it a form of instrument to evaluate a teacher's performance?

Interviewee	:	Not really. Not necessarily. If it (involves) performance evaluation, usually our leader would be the one to do it. The principal. Our Senior Teacher. Committee Leader. So for peer coaching amongst teachers, even our subordinates can come to observe us teaching. It is like… The higher-ups look at the subordinates, and the subordinates look at the higher-ups. It is all to gain ideas for teaching and learning improvement.
Interviewer	:	So in your point of view, does this kind of program affect a teacher or not?
Interviewee	:	Yes it does. If we look at this school, since the PDPC workshop organized last year, as we do so, the learning process becomes more active. It's no longer like the old ways like in curriculum meetings, sleeping students become an arising issue. This time we don't have that. None this year.
Interviewer	:	Just now you mentioned about the positive (impacts), are there any negative ones?
Interviewee	:	Negative, not everyone could be open about it. People are different. Meaning that (it's about) attitude, a person could be like this, when people observe them they feel like they have to keep a pretence. As if they feel that way. Feel like a hypocrite. But in fact no big deal. Open-minded people would rather think it is time to learn. Others may observe them, make comments, they would want to learn.
Interviewer	:	So when we mention about PLC, it covers various forms of activities. From what you see, which form of activity has great impacts on teachers?
Interviewee	:	The most impactful is (the way) teachers could experience themselves what it feels like to be in students' shoes. They do the activities that students are supposed to do themselves. Meaning that it's like in-service training organized by a committee. Like Malay Language Committee, The Language Committee once invited me to provide it to them early this year. They became students; I turned out to teach as a teacher. So, definitely they experienced it themselves and it's been observed that their ways of teaching get better afterwards. Whenever they want to enter a class, they'd look for mah-jong papers, pens, instead of bringing nothing along. And The Language Committee indeed use the committee's fund to purchase abundant of mah-jong papers as well as manila cards, (and then) committee teachers will come to take (what they need). We definitely could see the active ways.
Interviewer	:	That means, does the teachers' commitment increase or not?
Interviewee	:	In class, it does seem so.
Interviewer	:	So from your own point of view, either you are observed or you observe someone else, does your (commitment) with this school get stronger and more motivated or the other way around ….
Interviewee	:	Sort of, quite okay. It gets stronger. And one of the advantages here at this school is its female students who are easy to shape in the sense of discipline, so if outsiders come to observe, our students do not really cause much problems. So we could see it that way.
Interviewer	:	So just now you mentioned that your friends come to refer to you, and then discuss, that means personally do you think there is a value of teamwork or understanding (exist within Arabic Language Committee)?
Interviewee	:	Of course. Yes… Yes… At times even Arabic Language Committee help those in Malay Language Committee. (Even) English Language Committee, even we ourselves see the way they do it, we could take their idea and implement it, like at this school there was a teacher who started to instruct students to do public speaking in class five minutes right before teaching and learning session. She intended to train the students to broaden their vocabulary. She just provided a topic for example to talk about transport, so the respective student would look it up himself; he spoke about it for five minutes. The next day it would be another student's turn. So when that happened we see it and wow, why can't we do it for Arabic Language as well? So we end up doing it for Arabic Language. This year we do it for Form 3 students. So it turns out to be sort of like *kalimatussobah*.
Interviewer	:	So, the teachers, in your opinion, when they are involved in PLC, involved in observing and all, can it build up their self-efficacy, their self-confidence in teaching?
Interviewee	:	Can. They can. But one thing, the person who acts as an observer has to be honest. If they want to tell something, they have to tell it. They want to criticize, they just do it. But actually not everyone could accept that. They would feel like their mistakes are picked on.
Interviewer	:	In your opinion, when we talk about PLC, everything is fine, but there are some challenges that come with it. What do you think is the main challenge which may inhibit our effort to do PLC?

Interviewee	:	First is teacher's preparation. It is time-consuming. When we want to come in and observe them, guide them, they would feel they have a lot to prepare. And with the presence of other workloads right. So… but… how should we put it… hmm… we ought to change from the old styles, it is supposed to be so. All teachers should think that way. We can no longer enter the class bringing nothing and just open the text book. It can't be like that anymore, we definitely must prepare a lot. Because students nowadays have got different way of thinking (this first point is more to teachers themselves individually, if they refuse to change then it will be hard: P). Students would ask all sorts of weird questions in class. Even now, especially when teaching in front of the class. Even regarding *nahu* they would ask (they are smarter than us: P). They are smart… but teachers have to be prepared.
Interviewer	:	So if you were given a chance to suggest for the betterment of PLC, what would your suggestion be?
Interviewee	:	Hmmm… (PLC) has to be cultured. It is like collaboration between the committee members and made into a culture and it's just that spreading positive thinking to everyone would take time. Because people are concerned about constraints. We think a lot about problems.
Interviewer	:	So here is the last question. If you were given an opportunity, this is common, just a common question. Are you more comfortable to teach (during) teaching and learning session in class individually all the time or do you tend to do it collaboratively with friends in class like some sorts of sharing?
Interviewee	:	To say being comfortable, it depends on the topic. Depends on location as well. It is up to the topic that we want to teach. If we feel more comfortable, how to put it, if people don't look at us, we would definitely feel more comfortable right, but if they observe us on the purpose of first, they aim to learn something from us, and second, they want to guide us like that, then no problem. It's fine. But like the culture here in this school, the principal would tell us two or three days before entering the class to observe, instead of coming in abruptly in the morning.
Interviewer	:	So would you agree if I say that you prefer to share with other people?
Interviewee	:	Sure. Okay. No problem. It's usually like for Excellent Teachers, if the department officers come to observe, it would be us. Our record books will be taken. So it's like we must be prepared. We must be aware, no matter what we would be targeted.
Interviewer	:	Okay. Thank you. That's all to ask you. Before that, I would need you to sign on this form…

Appendix Q: Sample of interview transcription (Principal)

Audio Length: 18 minutes 21 seconds

Interviewer	:	In the name of *Allah*. First of all, could you please tell about your background as a teacher?
Interviewee	:	I started to be a teacher in the year 1988 in Perak for 6 years, and then moved to Perlis for 4 years. After that (I) served in Kedah until now (and) in total I have been in service for 30 years. I've been here for only a year as a principal.
Interviewer	:	We go back to the questions, alright. So, when we mention about PLCs or peer coaching, what do you understand (about) it?
Interviewee	:	Previously, in the practice at this school, there is a method called observing. Observing means that a teacher would come in and teach and observed by another teacher and followed by post-discussions for improvement and whatnots. The concept of PLC could be a rebranded conception of teachers' collaboration in fact.
Interviewer	:	Can you tell about the information and experience in the PLC process ay this school until now?
Interviewee	:	At this school, sometimes this matter does not happen in a too formal manner. Discussions amongst teachers could happen anywhere, even at the canteen, teachers always discuss toward the betterment for their respective teaching. From my part personally, I often go around to supervise my teachers in class. Then I would call for them (to see me) in person and provide some advice and feedbacks of my observation towards their teaching for the sake of improvement.
Interviewer	:	When we talk about peer coaching, is it a form of measuring instrument for a teacher's performance based on the observing or just an improvement process?
Interviewee	:	To me both of them (*are possible*). Peer coaching, apart from for improvement, also covers the measure on teachers' performance. In terms of measurement, this coaching could help the school in evaluating a teacher's performance. Even though does not fully rely on that evaluation for teachers' performance, but to me it does assist us to see the extent of our teachers' mastery in pedagogy in teaching and learning. Because a part of students' academic achievement also depend on in-class learning activities handled by teachers, besides external activities such as tuition, courses and the like. In-class learning is what matters the most actually.
Interviewer	:	Could you tell briefly about the strategies done by the school management team in developing a teacher's job at this school?
Interviewee	:	First, on Wednesdays every week, I organize an event for knowledge improvement where all staff and teachers are all gathered (2.30-3.30 pm). During that particular event which runs between half an hour to 45 minutes, every single occurrence with regard to current educational issues especially of those leading to teachers' professional development are discussed. I also request for help and cooperation from PPD through SISC+ to provide inputs for teachers of this school. For instance recently, I invited SIC+ related to English Language to help English teachers at this school. On the other hand, I often call for other teachers whose role is as *think-tank* to discuss on their teaching and learning.
Interviewer	:	In your opinion, does this PLCs program affect and help teachers to improve the understanding and development in their profession?
Interviewee	:	Yes, for sure. Because when this erudite discussion happens, new information and latest input can be applied by teachers for improvement. Even I myself often emphasize on academic achievement, thus what I see throughout the time I've been here there is an achievement recorded. Beginning from PT3, STAM and SPM, all shows great progress and betterment.
Interviewer	:	What about negative aspects?
Interviewee	:	I observe in an overall manner and frankly speaking I do not know how teachers' acceptance is behind my back. But I could spot their acceptance and there is an academic improvement, teachers' voluntary involvement in development programs at school without any instruction to do so, I think all these are more to positive side.
Interviewer	:	In your point of view, considering all forms of teachers' career development done, which one has the most impacts on a teacher at this school?
Interviewee	:	I think the most impactful on teachers is coaching and mentoring by SISC+. Our teachers regard SISC+ as special ones and experts. So when their expertise is shared with

teachers, thus the teachers could put (the input) into practice in their teaching and learning. Besides, for the empowerment of PLCs itself, I invite officers from PPD to come and provide the information on PLCs. In fact, PLCs can be something common and simple if teachers know its concept and objectives. Sometimes it's already done before. It's just that it's not named as PLCs.

Interviewer	:	In your opinion, is there any teamwork or understanding happening amongst committee teachers at this school?
Interviewee	:	I'm thankful to *Allah*, what I could see is the teamwork amongst teachers of this school is very good. I could also say here that their cooperation and collaboration are the best not only in the implementation of PLCs, in all aspects and fields, in terms of academic and co-curriculum, their teamwork deserves applause.
Interviewer	:	In your opinion, does teachers' involvement in PLCs add up to their commitment towards this school?
Interviewee	:	In my opinion, at this school, when we can see an improvement in academic means parts of PLCs programs are helpful. When teachers discuss between one another about the flaws and empowerment of their teaching and learning, actually this matter could become a betterment and transformation to the teachers themselves. To me, this kind of good things is surely helpful to teachers in giving their commitment to the school.
Interviewer	:	How does the school overcome the problem of time constraint in the implementation of PLCs?
Interviewee	:	I see PLCs and 21st Century PDPC as always interrelated. Today, if I could show school teachers' WhatsApp line, many teachers have applied the modules of 21st Century PDPC. At this moment of time, the so-called student centred learning has happened in class. A lot of students take part actively during in-class activities, teachers observing their friends teaching and so forth.
Interviewer	:	In terms of workload challenge amongst teachers, do you think that workload amongst teachers limits them from doing this PLCs program?
Interviewee	:	In fact, here we do not really do PLCs in a too formal way that teachers have to prepare reports and plans in precise details. We give them an understanding that PLCs is actually too simple. When teachers meet up with each other and discuss about their teaching and learning, just jot down a little bit and that's what PLCs is all about actually. Referring back to the question, whether teachers are burdened, it actually depends on how the school management team handles the program. Don't let it become a burden to teachers. In fact, for the observing, for the check on students' class and their exercise books, we already have the form actually. Here we don't emphasize too much on form filling which at times could burden teachers, in fact. Our approach here is by providing events of knowledge improvement, talks related to PLCs and providing examples related to PLCs like clip videos and such. We also encourage teachers to do lesson plans amongst the committees. When all these could be done voluntarily by teachers without obvious pressure, I assume that teachers are not burdened with those tasks. Even though not all teachers are active in PLCs, but most teachers here have successfully applied it.
Interviewer	:	In your opinion, would the implementation of PLCs amongst teachers affect their confidence towards their capability and self-efficacy in class?
Interviewee	:	Yes. That surely will happen. Because after being here for almost a year, I could see the teaching and learning methods by teachers become more interesting. Perhaps one of the reasons is they are exposed to PLCs activities and apply the concept in their teaching and learning. Not only teachers could enjoy it, but I see that students are also more motivated.
Interviewer	:	What is the main challenge, which inhibits the implementation of PLCs in your opinion?
Interviewee	:	First, (it becomes a challenge) when teachers do not receive a real exposure about it. Second, they are not encouraged and the management must supervise after providing the exposure to know what is going on after the exposure given. Whether it happens according to plan or so on. We actually do not hope for this PLCs to happen in a large scale, it would be sufficient if it happens in a minor and moderate context but give impacts on teachers.
Interviewer	:	What is your suggestion for the improvement of PLCs activities in future?
Interviewee	:	There's only one thing that I spot which is I would request for teachers to provide brief reports on their meetings with regard to how much they have practise PLCs in their teaching. I also would ask them to provide some proofs and evidences to be shared with other friends. Hopefully it does not become a burden to them.

Appendix R: Sample of interview transcription (State Officer)

Audio Length: 25 minutes 11 seconds

Interviewer	:	In the name of *Allah*. First of all, would you please tell about your background as a teacher briefly?
Interviewee	:	Up until this moment of time, I have been serving for 11 years in educational field. (I used to be) at school as a teacher for 7 years and (have been) at the office as an Arabic Language Officer at JPN here for 4 years.
Interviewer	:	Could you tell about your job scope as Arabic Language Officer in Islamic Education Sector in the sense of (your) role and movement?
Interviewee	:	I am responsible of managing the curriculum of Arabic Language for elementary school level and also in charge of managing the curriculum of Arabic Language for the secondary level. At the secondary level we have two types of Arabic Language curriculum. One is *Kurikulum Bersepadu Dini (KBD)* and another one is *Kurikulum Standard Sekolah Menengah (KSSM)/Kurikulum Bersepadu Sekolah Menengah (KBSM)*.
Interviewer	:	Could you elaborate on the roles of an Arabic Language Officer in providing guidance and managing teachers at school?
Interviewee	:	For teacher development, the main issue amongst Arabic Language teachers is that almost 70% of Arabic Language teachers' backgrounds are not in Arabic Language education at the bachelor's degree level. Some of them are graduates of *Syariah, Usuluddin* and so forth. It's just that they are obliged to teach Arabic Language, thus they are assigned so. It's just that I am given the responsibility of related courses. Some of them include what we have done (like) the course for the empowerment of Arabic Language teaching and learning, how the teaching and learning session of Arabic Language is supposed to run in class. We also recently contacted ISESCO, an association with regard to Arabic Language at The United Nations, in Malaysia they point out KUIS as the representative here. We have sent our teachers who are involved in Arabic Language to a program organized by ISESCO. Next, for teachers individually, we are responsible in enhancing their capabilities in the pedagogy of Arabic Language. Either from the aspects of methods, techniques and approaches, so how it is supposed to occur in class. In the sense of content (curriculum) I think our teachers have mastered it majorly. It's just in the aspects of approaches, methods and teaching techniques that we ought to be creative about and inculcate the creativity amongst teachers. Therefore these kinds of things are what we want to emphasise to teachers so that the curriculum of Arabic Language would not just become a conventional form. In the previous (one) we should not blame our teachers. Perhaps at that time that particular method was suited to the old ways. But now we have to diversify it to attract children's interest.
Interviewer	:	We go back to the questions, alright sir. So, when we mention regarding PLCs or peer coaching, what do you understand (about it)?
Interviewee	:	As far as what I am informed and understand about PLCs is how we could help our colleagues, be it at the school or district level. At school, teachers are responsible of discussing together regarding how to develop or improve (their) teaching or the teaching and learning process of Arabic Language. Not just that, (it's also concerning) what sorts of programs can be done for the improvement of Arabic Language subject performance. Peer coaching is supposed to happen in three stages which are pre-teaching, during teaching and post-teaching. What often happens now, peer coaching is only done when the teaching session takes place. Before that, no discussion happens. Supposedly, before the teaching session, we should have discussed amongst teachers how to capture our students' interest, what activities would be suitable during the teaching and learning session, and what we need to plan out in order to make it interesting. Then, after teaching, reflection is crucial as well. Peer feedbacks from other teachers could be discussed together to improve the teacher's flaws. If only all these three concepts could happen at the school level, teaching and learning would be better and the quality would be much improved. It's just that right now the emerging issue is concerning how teachers are pointing out each other (to stand out), and get embarrassed when they are to be observed. It is supposed to happen. (We should not) expect only the principal or administrator to be in charge of observing. It ought to happen amongst teachers as well.
Interviewer	:	Could you please tell how do you assist in the progress of peer coaching and PLCs in schools?
Interviewee	:	We, in fact, have made it uniform. Either in SPI or the Sector of Academic Management, we have long tried to observe or provide guidance to administrators using SKPM; I think all are using SKPM. Right now, we are already using SKPMG2 which is the second wave. So we use SKPM forms just like what is used by MOE inspectors. We know that not all

administrators and officers are capable in Arabic Language, but we can look through the aspects of methods, approaches, strategies used by a particular teacher. Like when we do an observing session for an English Language teacher, whereas we are not that good in English. That would not matter because we are only looking at the aspects of methods and approaches used. Supposedly, principals are the one in charge of implementing PLCs program or observing at their respective schools. But since some principals are incapable thus SPI takes the responsibility to help teachers in a more focused manner.

Interviewer	:	Is there any financial budget or planning from SPI for teachers' development related to peer coaching and PLCs?
Interviewee	:	Actually there is no financial source allocated to SPI specifically for the activities of teachers' development. It's just that in the past years we had a little budget for *Instituti Pendidikan Agama* (IPA) for NRSS and GARS for MOE. Even so, we try to appeal for aid from outsiders (NGO) like *Persatuan Guru-guru Agama Malaysia Barat, Yayasan Taqwa* and such in order to implement additional courses for teachers involved. Praises to Allah, in this year we have done a course of teaching and learning empowerment for Arabic Language teachers through collaboration with *Kolej Universiti Insaniah* (KUIN). At the school level in fact there is a budget of *Geran perkapita* (PCG) based on students and Arabic Language subject, but until this moment of time, SPI Kedah, we have never applied to use it to implement programs at SPI and JPN level. For your information, the procedure to use the budget of PCG for Arabic Language at this school is quite strict, where it requires the approval from the Director of Education at the state level. So far, we have yet to use that particular budget and it is up to the school itself to manage and use the budget appropriately. At SPI, in fact, to implement any training program or teachers' courses, we could only use the budget gained from the Sector of Secondary School Management of JPN Kedah. Any planned programs which involve secondary school teachers, we would ask from them. For SPI itself, no budget is provided at all.
Interviewer	:	In your opinion, is peer coaching one of the forms of measuring instrument for a teacher's performance through the observing done?
Interviewee	:	There are a few matters need to be considered with regard to this problem. If a teacher is assigned to evaluate other friends, the marking and evaluation probably would be unfair. We used to observe a few teachers who evaluated their other friends; we noticed that the marks they give did not fit in as compared to the marks given by SPI. The marks given by teachers were too high. The same thing happens at the administration level. At times, the marks could even reach until more than 90%. I think if the marks are truly that high, there would be no such cases as failed students in that particular subject. Indeed there are some good and precise marking, but not many. So in my point of view, peer coaching amongst teachers cannot be solely regarded as a form of evaluation on teachers.
Interviewer	:	Could you please explain briefly about SPI strategies in the development of a teacher's job at school?
Interviewee	:	For specific programs at school, SPI is not involved much actually. But we have the program of *tahbib lughah* (Loving Languages) which is in fact under the instruction of KPM to be implemented at the school level. SPI only reshow the instruction on the implementation of that particular activity as guidance and to be noted by teachers at school. Meanwhile in other programs, most teachers and schools plan out and execute at their own level without any instruction or supervision from SPI.
Interviewer	:	In your opinion, do the programs done on teacher's career development give any impact on a teacher at school?
Interviewee	:	PLCs and these teachers' development programs, if done well, would give great impacts. We have delivered a talk on the implementation of PLCs and related courses at the district and state level. It becomes a problem when it is not executed properly at the school level. Those program would become a success if teachers are positive minded and desire for their self-development.
Interviewer	:	What about negative aspects?
Interviewee	:	I could see the negative aspects when PLCs only happens in one day and involves many teachers in all subjects, not only Arabic Language. That is why many Arabic Language teachers refuse (to do it) as they would prefer programs which specifically focus on Arabic Language. But when it only involves Arabic Language teachers, thus their number is too small and sometimes it just becomes a chit-chatting and discussion session. At the same time, they see PLCs as an exclusive matter, requires a period of time, ought to involve a slot to gather, takes one specific day, sometimes it is to the extent of allocating weekends for courses, that's what becomes a burden and teachers feel heavy to handle. It is supposed to be done on weekdays, that'll be enough. Take one slot of time, a teacher could go and observe another teacher teaching and give comments regarding the teaching, then it's all done.

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Interviewer	:	How do SPI help schools in overcoming time constraint and teachers' workload in the process of implementing PLCs?
Interviewee	:	We have provide a briefing to principals with regard to observing and SKPM in which principals have to execute it at the school level. The moment there is enforcement from the principals themselves, it becomes more effective. One more thing is concerning teachers' attitude of only concentrating on teachers who are in charge of teaching examination classes (SPM) exclusively without involving the role of other forms teachers. When we look at other subjects like Science, English Language and History, they involve all teachers more thoroughly. Teamwork they build is very strong that the academic performance improves. If we observe schools like SMKAK where Arabic Language academic performance gets better, stemming from teamwork amongst teachers. All teachers are involved based on students' level of capability. Students are categorized into several groups for improvement.
Interviewer	:	In your opinion, is there any teamwork or understanding amongst Arabic Language teachers of this state?
Interviewee	:	If we were to dig into the aspect of the achievement of schools with good results, we would find that they have great teamwork at their schools. It is not only teamwork, if there is a situation where Arabic Language teachers are lacking in number at that particular school; it would absolutely affect students' achievement. Sometimes there are cases in which new teachers teach Arabic Language and also cases where teachers are forced to teach Arabic Language. So in schools with lowering achievement become so due to weak teamwork. For instance form five teachers, thus it would only be those teachers who are playing the role and responsibility. We understand everyone faces workload and time constraint, but this is in fact due to misunderstanding with regard to the exclusive implementation of PLCs itself as mentioned earlier.
Interviewer	:	What is the main challenge, which inhibits the implementation of PLCs according to your point of view?
Interviewee	:	I notice one thing which is our Arabic Language teachers' limited capability to provide feedbacks on methods, techniques and approaches of Arabic Language teaching which make us uncomfortable to point it out. If we look at (what happened) recently during courses, all sorts of matters were pointed out concerning teaching methods and techniques; that only covers one form of listening method, not yet the other issues. The explanation on those methods is still in a general form with too much detail on other more complex sub-methods or subjects or curriculum.
Interviewer	:	What is your suggestion for the improvement of PLCs activities in the future?
Interviewee	:	The important part is the execution of teaching and learning in class. So SPI approaches other than courses approach and teaching methods, we also go to schools for observing sessions especially schools with lowering Arabic language academic performance. More focus will be given more seriously on schools under good level especially with respect to the execution of teaching and learning in class, students' academic management, headcounts and teachers' empowerment at the school itself.
Interviewer	:	Please provide your comment about the necessity of SISC+ (*School Improvement Special Coaching Plus*) for Arabic Language subject at district and state level.
Interviewee	:	Once there is a suggestion to implement the concept of Arabic Language native speaker. Meaning that native Arabic teachers from Arab itself are sent to GARS to teach Arabic Language subject. So far even the Arabic Language officer at the district level still could not execute it therefore this SISC+ BA is still unclear to be implemented, I think.

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Appendix S: Some of the Statistic Data Output from SPSS

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.890
Bartlett's Test of Sphericity	Approx. Chi-Square	1694.171
	df	231
	Sig.	.000

Communalities

	Initial	Extraction
P1	1.000	.404
P2	1.000	.581
P3	1.000	.628
P4	1.000	.652
P5	1.000	.479
P6	1.000	.593
P7	1.000	.603
P8	1.000	.548
P9	1.000	.337
P10	1.000	.595
P11	1.000	.365
P12	1.000	.406
P13	1.000	.545
P14	1.000	.704
P15	1.000	.678
P16	1.000	.697
P17	1.000	.767
P18	1.000	.611
P19	1.000	.660
P20	1.000	.764
P21	1.000	.610
P22	1.000	.441

Extraction Method: Principal

Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.159	32.541	32.541	7.159	32.541	32.541	5.314	24.154	24.154
2	2.756	12.526	45.067	2.756	12.526	45.067	3.503	15.921	40.075
3	1.747	7.939	53.006	1.747	7.939	53.006	2.132	9.691	49.766
4	1.006	4.575	57.581	1.006	4.575	57.581	1.719	7.814	57.581
5	.966	4.389	61.970						
6	.953	4.330	66.301						
7	.777	3.533	69.834						
8	.714	3.246	73.080						
9	.674	3.063	76.143						
10	.635	2.886	79.028						
11	.630	2.865	81.893						
12	.551	2.504	84.398						
13	.508	2.308	86.706						
14	.497	2.258	88.964						
15	.444	2.017	90.982						
16	.403	1.832	92.814						
17	.342	1.555	94.369						
18	.333	1.514	95.883						
19	.271	1.230	97.114						
20	.235	1.068	98.182						
21	.208	.946	99.128						
22	.192	.872	100.000						

Extraction Method: Principal Component Analysis.

Scree Plot

Component Matrix^a

	Component			
	1	2	3	4
P14	.808			
P17	.784			
P15	.779			
P19	.769			
P21	.732			
P8	.726			
P3	.699			
P16	-.670		.424	
P20	-.635		.516	
P18	-.627			
P1	.612			
P6	.529			
P9	.481			
P22	.429			
P11				
P10		.584		
P2		.577		
P13		.553		
P12	-.404	.413		
P4		.508	-.553	
P5		.416	-.504	
P7	-.412	.448		.481

Extraction Method: Principal Component Analysis.
a. 4 components extracted.

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Rotated Component Matrix^a

	Component			
	1	2	3	4
P17	.846			
P14	.764			
P19	.753			
P21	.725			
P15	.719			
P8	.637			
P6	.630			
P22	.607			
P11	.571			
P9	.549			
P20		.835		
P16		.755		
P18		.713		
P2		.587	.474	
P3	.517	-.577		
P1		-.453		
P4			.792	
P10			.746	
P5			.675	
P7				.716
P13				.637
P12				.469

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.^a
a. Rotation converged in 6 iterations.

Component Transformation Matrix

Component	1	2	3	4
1	.780	-.560	-.163	-.227
2	.523	.359	.610	.475
3	.337	.681	-.647	-.054
4	-.063	-.307	-.426	.849

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Mean	Male	71	2.0833	.36210	.04297
POS	Female	102	2.0668	.34663	.03432

T-Test

Group Statistics

	School	N	Mean	Std. Deviation	Std. Error Mean
Mean	GARS	140	2.0799	.34643	.02928
POS	NRSS	34	2.0495	.37422	.06418

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Mean POS	Equal variances assumed	.426	.515	.453	172	.651	.03045	.06729	-.10236	.16327
	Equal variances not assumed			.432	47.676	.668	.03045	.07054	-.11141	.17231

T-Test

Group Statistics

	Location	N	Mean	Std. Deviation	Std. Error Mean
Mean	Suburban	107	2.1237	.35557	.03437
POS	Urban	67	1.9905	.32394	.03958

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Mean POS	Equal variances assumed	.518	.473	2.488	172	.014	.13325	.05356	.02753	.23896
	Equal variances not assumed			2.542	149.991	.012	.13325	.05242	.02967	.23682

Oneway

Descriptives

Mean POS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
1 to 3 years	33	2.0326	.32463	.05651	1.9175	2.1477	1.27	2.55
4 to 6 years	18	2.1284	.41580	.09801	1.9216	2.3352	1.41	2.85
7 to 9 years	37	2.0438	.30466	.05009	1.9422	2.1454	1.41	2.64
10 years and above	88	2.0971	.36573	.03899	2.0196	2.1746	1.14	3.32
Total	176	2.0770	.35034	.02641	2.0249	2.1291	1.14	3.32

ANOVA

Mean POS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.189	3	.063	.509	.677
Within Groups	21.290	172	.124		
Total	21.479	175			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Mean POS

Tukey HSD

(I) Teaching	(J) Teaching	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 to 3 years	4 to 6 years	-.09581	.10309	.789	-.3633	.1716
	7 to 9 years	-.01125	.08424	.999	-.2298	.2073
	10 years and above	-.06454	.07182	.806	-.2509	.1218
4 to 6 years	1 to 3 years	.09581	.10309	.789	-.1716	.3633
	7 to 9 years	.08456	.10110	.837	-.1777	.3469
	10 years and above	.03127	.09101	.986	-.2048	.2674
7 to 9 years	1 to 3 years	.01125	.08424	.999	-.2073	.2298
	4 to 6 years	-.08456	.10110	.837	-.3469	.1777
	10 years and above	-.05329	.06893	.867	-.2321	.1255
10 years and above	1 to 3 years	.06454	.07182	.806	-.1218	.2509
	4 to 6 years	-.03127	.09101	.986	-.2674	.2048
	7 to 9 years	.05329	.06893	.867	-.1255	.2321

Homogeneous Subsets

Mean POS

Tukey HSD[a,b]

Teaching	N	Subset for alpha = 0.05 — 1
1 to 3 years	33	2.0326
7 to 9 years	37	2.0438
10 years and above	88	2.0971
4 to 6 years	18	2.1284
Sig.		.695

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.193.

b. The group sizes are unequal. The harmonic mean of the

group sizes is used. Type I error levels are not guaranteed.

Oneway

Descriptives

Mean POS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
1 to 3 years	79	2.0657	.37846	.04258	1.9809	2.1504	1.14	3.32
4 to 6 years	39	2.1189	.32627	.05225	2.0132	2.2247	1.41	2.68
7 to 9 years	20	2.0182	.35803	.08006	1.8506	2.1857	1.23	2.73
10 years and above	37	2.0860	.31904	.05245	1.9796	2.1924	1.50	2.82
Total	175	2.0764	.35125	.02655	2.0240	2.1288	1.14	3.32

ANOVA

Mean POS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.151	3	.050	.403	.751
Within Groups	21.317	171	.125		
Total	21.468	174			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Mean POS

Tukey HSD

(I) Observing	(J) Observing	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1 to 3 years	4 to 6 years	-.05328	.06910	.867	-.2325	.1260
	7 to 9 years	.04747	.08838	.950	-.1818	.2768
	10 years and above	-.02034	.07034	.992	-.2028	.1621
4 to 6 years	1 to 3 years	.05328	.06910	.867	-.1260	.2325
	7 to 9 years	.10075	.09711	.728	-.1512	.3527
	10 years and above	.03294	.08103	.977	-.1773	.2432
7 to 9 years	1 to 3 years	-.04747	.08838	.950	-.2768	.1818
	4 to 6 years	-.10075	.09711	.728	-.3527	.1512
	10 years and above	-.06781	.09799	.900	-.3220	.1864
10 years and above	1 to 3 years	.02034	.07034	.992	-.1621	.2028
	4 to 6 years	-.03294	.08103	.977	-.2432	.1773
	7 to 9 years	.06781	.09799	.900	-.1864	.3220

Homogeneous Subsets

Mean POS

Tukey HSD[a,b]

Observing	N	Subset for alpha = 0.05 1
7 to 9 years	20	2.0182
1 to 3 years	79	2.0657
10 years and above	37	2.0860
4 to 6 years	39	2.1189
Sig.		.635

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 34.684.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway

Descriptive

Mean POS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
Diploma	16	2.0710	.34775	.08694	1.8857	2.2563	1.14	2.59
Bachelor	150	2.0894	.35357	.02887	2.0324	2.1465	1.23	3.32
Master	13	1.9755	.29784	.08261	1.7955	2.1555	1.50	2.59
Total	179	2.0795	.34884	.02607	2.0281	2.1310	1.14	3.32

ANOVA

Mean POS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.157	2	.078	.640	.528
Within Groups	21.505	176	.122		
Total	21.661	178			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Mean POS

Tukey HSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Diploma	Bachelor	-.01842	.09193	.978	-.2357	.1989
	Master	.09550	.13052	.745	-.2130	.4040
Bachelor	Diploma	.01842	.09193	.978	-.1989	.2357
	Master	.11391	.10106	.499	-.1250	.3528
Master	Diploma	-.09550	.13052	.745	-.4040	.2130
	Bachelor	-.11391	.10106	.499	-.3528	.1250

Homogeneous Subsets

Mean POS

Tukey HSD[a,b]

Education	N	Subset for alpha = 0.05
		1
Master	13	1.9755
Diploma	16	2.0710
Bachelor	150	2.0894
Sig.		.550

Means for groups in homogeneous subsets are
displayed.

a. Uses Harmonic Mean Sample Size = 20.535.

b. The group sizes are unequal. The harmonic
mean of the group sizes is used. Type I error levels
are not guaranteed.

Oneway

Descriptives

Mean POS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Head of Panel/Excellent Teacher	46	2.1917	.29720	.04382	2.1034	2.2800	1.23	2.73
Assisstant Teacher	89	1.9881	.36436	.03862	1.9113	2.0648	1.14	3.32
In-training Teacher	40	2.1385	.30258	.04784	2.0417	2.2353	1.45	2.64
Total	175	2.0760	.34482	.02607	2.0245	2.1274	1.14	3.32

ANOVA

Mean POS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.460	2	.730	6.530	.002
Within Groups	19.228	172	.112		
Total	20.688	174			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Mean POS

Tukey HSD

(I) Position	(J) Position	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Head of Panel/Excellent Teacher	Assisstant Teacher	.20362*	.06072	.003	.0601	.3472
	In-training Teacher	.05320	.07228	.742	-.1177	.2241
Assisstant Teacher	Head of Panel/Excellent Teacher	-.20362*	.06072	.003	-.3472	-.0601
	In-training Teacher	-.15042	.06365	.050	-.3009	.0001
In-training Teacher	Head of Panel/Excellent Teacher	-.05320	.07228	.742	-.2241	.1177
	Assisstant Teacher	.15042	.06365	.050	-.0001	.3009

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

Homogeneous Subsets

Mean POS

Tukey HSD[a,b]

Position	N	Subset for alpha = 0.05 1	Subset for alpha = 0.05 2
Assisstant Teacher	89	1.9881	
In-training Teacher	40	2.1385	2.1385
Head of Panel/Excellent Teacher	46		2.1917
Sig.		.060	.698

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 51.746.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.

Oneway

Descriptives

MeanPOSapril

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
below 35	74	2.0978	.34544	.04016	2.0178	2.1778	1.27	2.91
35 to 44	69	2.0981	.36383	.04380	2.0107	2.1855	1.23	3.32
45 and above	36	2.0063	.32546	.05424	1.8962	2.1164	1.14	2.82
Total	179	2.0795	.34884	.02607	2.0281	2.1310	1.14	3.32

ANOVA

Mean POS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.242	2	.121	.992	.373
Within Groups	21.420	176	.122		
Total	21.661	178			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Mean POS

Tukey HSD

(I) Age2	(J) Age2	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
below 35	35 to 44	-.00032	.05838	1.000	-.1383	.1377
	45 and above	.09148	.07089	.402	-.0761	.2590
35 to 44	below 35	.00032	.05838	1.000	-.1377	.1383
	45 and above	.09180	.07172	.408	-.0777	.2613
45 and above	below 35	-.09148	.07089	.402	-.2590	.0761
	35 to 44	-.09180	.07172	.408	-.2613	.0777

Homogeneous Subsets

Mean POS

Tukey HSD[a,b]

| Age2 | N | Subset for alpha = 0.05 |
		1
45 and above	36	2.0063
below 35	74	2.0978
35 to 44	69	2.0981
Sig.		.362

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 53.779.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
Mean BENEFIT	1.8988	.40778	179
Mean CONSTRAINT	2.2955	.42335	179
Mean OCQAFFECTIVE	1.8336	.51279	179
Mean OCQCALCUALTIVE	1.8336	.51279	179
Mean TSES	1.8414	.43777	179

Correlations

		1	2	3	4	5
Mean BENEFIT	Pearson Correlation	1	.411**	.549**	.549**	.580**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	179	179	179	179	179
Mean CONSTRAINT	Pearson Correlation	.411**	1	.202**	.202**	.194**
	Sig. (2-tailed)	.000		.007	.007	.009
	N	179	179	179	179	179
Mean OCQAFFECTIVE	Pearson Correlation	.549**	.202**	1	1.000**	.707**
	Sig. (2-tailed)	.000	.007		.000	.000
	N	179	179	179	179	179
Mean OCQCALCUALTIVE	Pearson Correlation	.549**	.202**	1.000**	1	.707**
	Sig. (2-tailed)	.000	.007	.000		.000
	N	179	179	179	179	179
Mean TSES	Pearson Correlation	.580**	.194**	.707**	.707**	1
	Sig. (2-tailed)	.000	.009	.000	.000	
	N	179	179	179	179	179

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			1	2	3	4	5
Spearman's rho	Mean BENEFIT	Correlation Coefficient	1.000	.431**	.501**	.501**	.500**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	179	179	179	179	179
	Mean CONSTRAINT	Correlation Coefficient	.431**	1.000	.248**	.248**	.261**
		Sig. (2-tailed)	.000	.	.001	.001	.000
		N	179	179	179	179	179
	Mean OCQAFFECTIVE	Correlation Coefficient	.501**	.248**	1.000	1.000**	.641**
		Sig. (2-tailed)	.000	.001	.	.	.000
		N	179	179	179	179	179
	Mean OCQCALCUALTIVE	Correlation Coefficient	.501**	.248**	1.000**	1.000	.641**
		Sig. (2-tailed)	.000	.001	.	.	.000
		N	179	179	179	179	179
	Mean TSES	Correlation Coefficient	.500**	.261**	.641**	.641**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	179	179	179	179	179

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	175	97.8
	Excluded[a]	4	2.2
	Total	179	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.898	9

Item Statistics

	Mean	Std. Deviation	N
OCQ1	1.5371	.62288	175
OCQ2	1.7714	.72261	175
OCQ4	2.1257	.73981	175
OCQ5	2.1200	.68849	175
OCQ6	1.8343	.70382	175
OCQ8	1.8800	.68009	175
OCQ10	1.8457	.71452	175
OCQ13	1.6800	.62551	175
OCQ14	1.7829	.71014	175

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OCQ1	15.0400	17.809	.595	.892
OCQ2	14.8057	16.479	.737	.881
OCQ4	14.4514	17.203	.583	.894
OCQ5	14.4571	17.388	.603	.892
OCQ6	14.7429	16.399	.777	.878
OCQ8	14.6971	17.017	.686	.885
OCQ10	14.7314	16.761	.693	.885
OCQ13	14.8971	17.564	.643	.889
OCQ14	14.7943	16.957	.661	.887