

Teaching and learning experiences in Malaysian higher
education: A case study of a teacher education programme

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A thesis submitted to

Auckland University of Technology

in fulfilment of the requirements for the degree of

Doctor of Philosophy (PhD)

2012

School of Education Te Kura Matauranga

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ATTESTATION OF AUTHORSHIP

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning”.

Tengku Sarina Aini Tengku Kasim: _____

Date: _____

ACKNOWLEDGEMENTS

Alhamdulillah (Praise be to God), the thesis is completed. I would like to take this opportunity to thank many wonderful people who have contributed to the successful completion of this study. First and foremost, I would like to express my gratitude and appreciation to my principal supervisor, Dr Dale Furbish, for his patience, guidance, advice and continuous support throughout the completion of this thesis. Thank you for keeping me focussed and on track throughout these years. I am also thankful to my secondary supervisor, Dr Philippa Gerbic for her constructive criticism, direction and help when they were most needed for the completion of this thesis. Deep appreciation is also expressed to Dr Andy Begg for his advice, encouragement and suggestions.

I want to acknowledge the contribution of the academic staff of AUT and, particularly, those at the School of Education with whom I have had many valuable discussions about teaching and learning in higher education. My respect and gratitude to Neil Haigh, Nesta Devine, and Stanley Frielick who sparked a number of the ideas reported in this thesis.

This research was not possible to be carried out without the ethics approval. I thank the Auckland University of Technology Ethics Committee (AUTEK), for approving this study at their meeting on 30 November 2009 (ethics application number 09/254).

This thesis would not have been completed without the tolerance, dedication and understanding of my beloved husband, Azizi. Thank you for your love and encouragement, you have served as an important source of strength for me. To my dear son and daughters, Syahir, Syasya and Syafia, thank you for the happiness you have brought into my life. You have been amazingly supportive in helping me to complete my work. I pray that you will be most successful in the future.

I dedicate this thesis to my dear parents, Tengku Kasim and Tengku Kamariah, who have always been there to support me in my journey in every way possible. Without their blessing and encouraging words, this thesis would not have been completed. My deepest thanks also to my mother-in-law, sisters and brothers for their ongoing encouragement.

I warmly thank my AUT friends, who have supported me throughout my journey, Asiah, Jiao, Aidah, Kazu, Hishamuddin, Rose, Stefan, Dirk and Zaini. I also wish to also thank my doctoral friends, John, Hanafiah, Nihra and Phillip. They have made me feel that I was not alone with my struggle in completing this thesis. My special gratitude also goes to the Malaysian teachers and students, whom I cannot name for reasons of anonymity, who graciously welcomed me to interview them. With their support, this work was made possible.

I further wish to acknowledge and sincerely thank Margaret Stiles, whose proofreading has helped improve the final quality of this thesis.

ABSTRACT

In line with its Vision 2020, the Malaysian education system is undergoing a significant pedagogical transition from a traditional teacher-centred to student-centred approach to teaching and learning. The Malaysian government expects these educational changes to occur in teaching and learning development in Malaysia's secondary schools and in its higher education system. However, Malaysian research indicates that there is an on-going ambiguity in regard to the teaching and learning approaches adopted in Malaysian schools and in tertiary institutions. This seems to suggest that the introduction of Western concepts such as student-centred learning models brought about tension and conflict among Malaysian teachers and students. Moreover, previous Malaysian studies revealed that different cultures have different norms and values, and these cultural differences have a strong influence on educational practices. Therefore, there is a need to examine and develop appropriate pedagogies for the specific educational traditions, rather than assuming that Western ideas are effective and desirable in every context.

Thus, the purposes of this study are to explore: (1) Malaysian teacher educators' understanding about teaching, (2) Malaysian education students' understanding about learning, and (3) the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices. This research was conducted in a Malaysian university teacher education programme. It employed a case study using a qualitative approach with the adoption of several research methods: Individual interviews; focus group interviews; classroom observations; stimulated recall interviews; and document analysis. Involved in this study, were a total of seven teacher educators from differing backgrounds of teaching experience, and 12 final year education students.

The major findings of the study are that: (1) The Malaysian teacher educator participants and the education student participants had adopted a combination of traditional teacher-centred and student-centred learning approaches because of the benefits that both approaches could offer to them, (2) The Malaysian teacher educator participants' understanding of teaching and the education student participants' understanding of learning were a reflection of their Islamic educational beliefs and philosophies, (3) The actual teaching/learning practices of the Malaysian teacher

educators and the education student participants have been considerably influenced by their Islamic beliefs, (4) Several Islamic education philosophies are compatible with student-centred learning (Western learning models). (5) The learning perspectives of Malaysian Muslim students are influenced by their Islamic religion beliefs, thus differentiating them from other Asian learners (who have been found to exhibit Confucian values in the educational research literature).

The findings of my research into Malaysian teachers and students result in understanding teaching/learning from a Malay Muslim viewpoint, distinguishing Malaysian teaching and learning for Malay Muslims from a Chinese Confucian standpoint. The research generates possible significant insight for other Muslim countries in the development of contemporary Islamic learning models. The findings of this study suggest that the Malaysian government and its policy makers should be more aware of the appropriateness or otherwise of the Western models for Malaysian education systems.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This section provides readers with the background information to the research. After providing the background of the study, I present my own study journey including my personal qualifications, professional experiences and assumptions. Following this, the research questions are described and the significance of the study is outlined. Finally the structure of the thesis is presented.

1.2 Background to this study

Over the past few decades, many universities, faculties, schools and departments of higher education in many parts of the world have been undergoing a significant pedagogical shift from a traditional teacher-centred approach to a student-centred approach to teaching and learning (Barr & Tagg, 1995; Jansen & Christie, 1999; Lea, Stephenson, & Troy, 2003; Lee, 2002). The traditional teacher-centred approach focuses on the teacher as the expert in transmitting knowledge to the student as the novice (Garfield, 1995; Harden & Crosby, 2000; Moore, 1997; Pratt, 1998; Zohar, 2004). In contrast, the student-centred approach places the student at the centre of the learning process (Cannon & Newble, 2000; Coombs & Wong, 2000; Estes, 2004; Hesson & Shad, 2007) and is generally intended to provide students with the autonomy to actively seek out and construct meaning from information and previous experience (Gibbs, 1992; Harden & Crosby, 2000; Huba & Freed, 2000; Weimer, 2002). This shift in teaching and learning from a teacher-centred approach to a student-centred approach is crucial; instead of concentrating on instruction (teacher-centred approach), the student-centred approach addresses the construction of learning by the student's own discovery and focuses on student learning outcomes.

This global trend can also be seen in the educational changes occurring in teaching and learning in Malaysia's secondary schools and in its higher education system. Malaysia intends to transform its educational system in line with its Vision 2020. Vision 2020 is a national development agenda with specific goals and objectives for long term development (Kassim, 1993; Rahman, 1993). In 1991, the Malaysian government unveiled Vision 2020, the targeted year by which Malaysia would achieve the status of

an industrialised and developed country in terms of its economy, national unity, social cohesion, social justice, political stability, system of government, quality of life, social and spiritual values, national pride and confidence (Mohamad, 1991). Towards achieving Vision 2020, the government has identified strategies to enable the following nine challenges to be met:

1. To establish a united Malaysian nation with a sense of common and shared destiny.
2. To create a psychologically liberated, secure, and developed Malaysian society.
3. To foster a democratic society.
4. To establish a full moral and ethical society.
5. To establish a mature, liberal and tolerant society.
6. To establish a scientific and progressive society.
7. To establish a fully caring society and a caring culture.
8. To ensure an economically just society.
9. To establish a prosperous society. (Mohamad, 1991, pp. 2-4)

The foundation for this educational reform and the fulfilling of Vision 2020 was the establishment of Technology Supported Smart Schools with student-centred learning (Ministry of Education, 1997b). The Malaysian Smart School is defined as "...a learning institution that has been systematically reinvented in terms of teaching-learning practices and school management in order to prepare children for the Information Age" (Smart School Project Team, 1997a, p. 10). The key aim of these Smart School projects is to help the country to achieve the aims of the National Philosophy of Education as well as to foster the development of a workforce that is prepared to meet the challenges of the 21st century. Aside from the goal of the project to equip students with IT competence, science and technology (Ministry of Education, 1997a), the project was also designed to bring about a systemic change in education; a change from an exam-oriented culture to a thinking, creative knowledge culture (Smart School Project Team, 1997a), coinciding with a shift to student-centred learning approaches.

This new culture which is to be embedded in the education system can be characterised as being one of active learning in the student's approach to learning rather than a passive one. The role of the student will shift from that of a passive receiver of information to becoming a student who "will learn to exercise courage in making decisions and assuming responsibility... will learn to process and manipulate

information...” (Smart School Project Team, 1997b, p. 130). Teachers are to be trained in instructional approaches that emphasize thinking. They will learn how to plan teaching strategies that involve problem solving, creative thinking, exploration and decision making (Ahmad, 1997). The teachers are also expected to accept that in the new environment, they will have to play the role of “a guide on the side” rather than their traditional role of “a sage on the stage” (Smart School Project Team, 1997b, p. 131). In other words, a teacher is no longer the sole knowledge provider in the classroom, but he or she has to also play the role of a facilitator and coach. Moreover, it is documented in the policy that one of the pedagogical implications of Smart Schools teaching and learning is that teachers must encourage students to be active learners by adopting elements of the student-centred learning approach in their teaching practices (Smart School Project Team, 1997a). This will be elaborated further in Chapter 4.

The Malaysian Government’s initiatives to reform the educational system from traditional teacher-centred to student-centred learning (i.e., passive to active learning) have been extended to Higher Learning Institutions through the implementation of soft skill elements in the curriculum (Ministry of Higher Education Malaysia, 2006). Soft skills are the abilities of people to interact with others, such as in communication skills, negotiation, change adeptness, flexibility, teamwork, relationship building and listening skills (Chaudhry, Khoo, Wu, & Chang, 2008). These competencies can be better developed through the adoption of a student-centred learning approach (e.g., Hasbullah & Sulaiman, 2002). This approach will ensure that students develop their interests and will also stimulate their quest for knowledge and skill (Lee, 1999). In addition, the growing concerns concerning the employability of university graduates formed the basis for the implementation of the soft skills that current graduates, to date, have not had the opportunity to learn (Ahmad, 1998; Ambigapathy & Aniswal, 2005; Idrus, Mohd Dahan, & Abdullah, 2009; Shakir, 2009; Song & Yuen, 2008). Greater elaborations of the soft skills implementation are presented in Chapter 4.

Despite constant educational reform such as the introduction of Smart Schools and soft skills, and the 23 years of implementation of the Integrated Secondary School Curriculum (Chapter 4), there are issues in Malaysian higher education which have not been directly addressed. (1) What do Malaysian teachers and students know of Western learning models? And (2) Do Malaysian teachers and students accept Western learning models? The on-going debate in Malaysian educational literature regarding teaching and learning approaches adopted in Malaysian schools and tertiary education seems to

suggest that the introduction of Western concepts such as student-centred learning models have brought about tension and conflict among Malaysian teachers and students. Findings from studies (e.g., Ahmad, Mohd Shah, & Abdul Aziz, 2005; Long, Musa, Ismail, Abdullah, & Mohamed, 1999; Mahamood, Lasan, Nik Yusoff, & Embi, 2009; Sidin, 1999) seem to indicate that Western pedagogical models may not be suitable for use in the Malaysian context. The studies suggest that expectations from Western theories might be inconsistent with Malaysian culture.

In addition, findings from several investigations have concluded that many of the learning models developed based on a Western perspective may not be appropriate to an Eastern culture (Dahlin & Watkins, 2000; Pillay, Purdie, & Boulton-Lewis, 2000; Purdie & Hattie, 2002; Tweed & Lehman, 2002; Volet, 1999; Zhang & Watkins, 2001); the reason for this is that the learning styles of Western and Eastern learners tend to differ (Biggs, 1996; Holmes, 2000; Kember & Gow, 1990; Liu, 1998; Richardson, 1994). Western learning models seemed to ignore Eastern learners learning cultural traits and their traditional value systems (Chan, 1999; Lim, 2001; Rao, Moely, & Sachc, 2000; Watkins, 1996, 2000; Yang, 1986).

My review of the comparative education literature in this thesis concerning Eastern or Asian learners has been about Chinese learners; the literature in regard to Malaysian learners is inadequate, especially with respect to the influence of Islamic and Malaysian cultural artefacts. Malaysian learners cannot be characterized as being merely 'Asian learners' as Malaysia is a multicultural, multi-ethnic country consisting of three main ethnic groups, namely; Malays, Chinese, and Indians. The Malays (more than 60 percent of the Malaysian populations) as the dominant ethnic group are Muslim (Malaysia Economic Planning Unit, 2011). Because it is an Islamic country, the Malaysian education system has been influenced by Islamic traditions and beliefs about education. Looking back through the history of the Malaysian education system, to around the fourteenth century, traditional Islamic education and religious instruction evolved gradually in Malaysia and dominated the education of the early Malay society. Before the period of British colonialism (1874-1957), the traditional Islamic education system emerged to meet the needs of the Muslim community.

Islam has been recognised as an important component in the moulding of the national education system (Hashim, 1994; Ismail & Hassan, 2009). This can be evidenced from the formulation of the Malaysian National Education Philosophy in 1988 (Ministry of

Education, 1988). The Malaysian National Education Philosophy holds educational principles and goals that are consistent with the Islamic philosophy for education (Hashim, 1994). With “belief and devotion to God” as its main principle, the document directs the goals and mission towards the accomplishment of an educational aim for the country (Ismail & Hassan, 2009; Langgulung, 1993). The National Education Philosophy that emphasizes the importance of a balanced and integrated growth for individuals supports the main purpose of education in Islam. Education in the context of Islam is regarded as a process that involves the complete person, including the rational, spiritual, and social dimension. As noted by Al-Attas (1979), the comprehensive and integrated approach to education in Islam is directed toward the “balanced growth of the total personality... through the training of Man’s spirit, intellect, rational self, feelings and bodily senses... such that faith is infused into the whole of his personality” (p. 158).

My observation that there has been inadequate study on Malaysian Islamic teaching and learning culture sparked the motivation to focus the study on a Malaysian teacher training programme. It is necessary to explore and investigate teaching and learning beliefs and approaches among Malaysian teacher educators and students in order to analyse teaching and learning from a Malaysian Muslims perspective. Such an exploration may uncover some new insights on their beliefs and philosophy of teaching and learning, rather than incorporating Malaysians with Asian learners in general: Asian learning has been influenced mainly by Chinese Confucian values. As a teacher educator in a Malaysian university teacher education programme, the Malaysian Government’s expectation that teachers and lecturers should employ student-centred models has prompted me to examine the teachers and students’ acceptance and understanding of the models.

1.3 Personal qualifications and professional experience

My personal qualifications and professional background have inevitably influenced my approach to this study. I obtained my bachelor and master’s degrees in education from a leading Malaysian university. Before starting my PhD, I was employed as a lecturer for ten years at two Malaysian universities. As a lecturer in education, the main focus was on teaching. I was also involved as a researcher in several university education research projects. In addition, I presented papers on teaching and learning in the Malaysian context at various conferences locally and internationally. This current study has developed from these professional activities.

As a lecturer in a teacher education programme, I dealt with prospective secondary school teachers. From this experience, I identified gaps between the teaching and learning approaches being expected by government policy and the responses to the approaches from students and teaching colleagues. I was expected to employ a student-centred learning approach that was aligned to national philosophy, however this pedagogy was a new approach for me as my own educational experience was based on a teacher-centred approach at primary, secondary, and university level.

As a teacher educator, I observed that the teacher-centred, rather than student-centred approach, was still the dominant model being implemented in the programme. My own teaching practices were initially influenced by my experiences as a student who had only experienced a teacher-centred environment. I was comfortable with the traditional teaching approaches. I preferred to give direct lectures to students using power point slides, asking students to take lectures notes, and assigning coursework. Little interaction occurred between the students and myself in the lecture hall because I assumed that time used for such interaction would detract from teaching and would be a waste of time. I felt obliged to complete the course syllabus on time. I provided students with adequate teaching materials in order to assist them in being successful in memorizing information and preparing for examination.

After reading literature pertaining to student-centred education and reflecting on it, I began to appreciate the benefits of a student-centred approach. I personally believe that learning is for understanding, not merely for memorizing; learning is an interesting process, not a stressful process. Moreover, my teaching practices had to meet the expectations of the Malaysian Government. As a result, I made more attempts to provide an active learning environment that involved students in class activities such as group discussion, class presentation and projects. The students did not respond well to my efforts. I found that most of the education students preferred the traditional approach to teaching and learning even though they understood that, in their future teaching, they would have to implement the student-centred approach. By conversing informally with them, I found that most of them perceived the role of a teacher educator as being that of a teacher giving information to them. They seemed to believe that their own role was to receive the information and produce assignments.

These experiences suggested that the students were uncomfortable in expressing ideas in front of the class, seemed to lack interpersonal skills, and were unwilling to argue

learning issues in a discussion group with their peers. This evidence proved their reluctance to change from their passive roles as learners. Even though I understood their situation, I realized that their unwillingness would bring conflict to them as they would be expected to implement a student-centred model of learning when they became secondary school teachers. Thus it was that, I began to explore the students' views of learning and teaching and their theoretical perspectives regarding the student-centred approach. From the informal conversations I realized that some of them did, indeed, embrace the new approaches of learning and tried hard to change their old learning strategies.

In order to appreciate other lecturers' perspectives, I joined several university education research projects as a group member. I devoted myself to two important tasks; that of a lecturer and also, a researcher. I soon realized that becoming involved in educational research was not a burden; it was emotionally and intellectually satisfying. I found that interviewing teacher educators about their perspectives on teaching approaches led me to better understand the reasons why some teachers preferred certain approaches rather than others. The collaborative meetings with the project leaders and other researchers stimulated my interest in understanding teaching and learning approaches in university teacher education programmes. This led to further involvement in several Ministry of Higher Education research projects, including some in which I was the principal researcher. With a large research grant from the Ministry, I led some university projects in exploring teaching and learning issues in higher education institutions, and have published several articles (e.g., Awang & Tengku Kasim, 2007; Che Husain & Tengku Kasim, 2006; Tengku Kasim & Che Husain, 2007; Tengku Kasim & Mansor, 2007). I now view my doctoral research journey as being an extension of my previous work as a teacher educator and a researcher.

With the expectations placed on teacher education programmes by the Malaysian government in preparing teachers to implement a student-centred approach, the educational experience of teacher education students during their university education poses some intriguing and significant questions: How do education students experience teaching and learning approaches? What learning approaches do they experience and decide to adopt for themselves? If they have been experiencing teacher-centred or student-centred approaches during their preparation programmes, they may be more likely to implement similar models when they become teachers. Education students' experiences, beliefs and attitudes will influence their behaviour and teaching practices

when they become teachers (Fang, 1996). Many educationalists believe that the learning preferences of education students have a significant relationship with their future teaching styles because “teachers teach the way they learned” (Dunn & Dunn, 1979, p. 241). This proposition is also supported by other researchers in their empirical studies (Cano & Garton, 1994; Witkin, Moore, Goodenough, & Cox, 1977).

1.4 Personal assumptions

My first assumption is that Malaysian university teacher educators are the key resource for bringing about the changes in educational reform in Malaysian university teacher education programme. I believe education reform will be very hard to achieve by merely restructuring programmes; rewriting curricula, and revising texts. I argue that by implementing new teaching and learning approaches in teacher education programmes, teacher educators are the most important agents of change for improving classroom climate. The classroom teacher is the most influential factor in a student’s education (Moore, 2000). Understanding the belief structures of teachers is essential to improving their professional and teaching practices (Pajares, 1992). Teachers’ resistance to change is a major variable that undermines reform theory becoming reform action (Beck, Czerniak, & Lumpe, 2000).

My second assumption is that teaching and learning should be interactive and reflective where teachers actively create and develop opportunities for students to be active in their own learning. Students, therefore, should be encouraged to actively construct and create their own understanding rather than receiving knowledge obediently from teachers who were regarded as experts.

I also assume that the student-centred teaching and learning approaches will contribute to the development of students’ interests and stimulate their quest for knowledge. The approaches will also develop students’ beliefs in student-centred learning and encourage modelling and incorporating into teaching. As students need to construct and acquire new information throughout life, the learning environment should be transformed from one that is predominantly memory based, to one that is active, informed, thinking, creative, and empathetic. This assumption is based on the belief that the prime advantage of effective learning approaches is that they engage students actively in knowledge building rather than in merely receiving, acquiring and repeating knowledge.

1.5 Research questions

Despite the government policy that expects Malaysian teachers in schools and in higher education institutions to adopt student-centred learning approaches, studies have revealed various degrees of acceptance to the approaches. While there have been some studies that reveal teacher acceptance of the student-centred learning approach, others showed teacher preference for the traditional teacher-centred approach. This suggests there is still ongoing debate in literature regarding the issue. This condition has stimulated this investigation of the teaching experiences of teacher educators and the learning experiences of education students in a Malaysian teacher education programme. Three research questions have been constructed.

1. How do Malaysian teacher educators understand teaching in a university teacher education programme?
2. How do Malaysian education students understand learning in a university teacher education programme?
3. What are the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices?

1.6 Significance of the study

There are several criteria that have been identified as being of significance for this study. Firstly, I expect this research to contribute to the development of educational theories relating to teaching and learning in Malaysian tertiary teaching research. There is a need to critically review those perspectives in the Muslim context in order to address the differences between Western and Muslim perspectives in regard to teaching and learning.

Secondly, my study will contribute to understanding the issues in instances where Western educational models are being introduced into Islamic educational environments. My study has the potential to promote insights for integrating Islamic and Western education theories in Muslim countries.

Thirdly, the research has the potential to describe teaching and learning approaches in Malaysia and to identify practical approaches that will enhance the effectiveness of teaching and learning. With the Malaysian Government's expectation for teacher education programmes to implement student-centred learning approaches, this research

can provide insight into the dynamics and issues of this process. In addition, I believe that, for the Malaysian teachers involved, this study will provide an increased understanding of learning experiences.

Finally, the focus of this study has the potential to provide an in-depth understanding of learning experiences among Muslim prospective teachers from their own perspectives as learners. This has significant implications for finding ways to improve the quality of their learning. The findings of this research may help reveal issues in the education training programme pertaining to approaches to learning that are encountered by Muslim students and which prevent them from successfully adopting an interactive approach. This study may also identify possible strategies and support structures that could be adopted more generally in order to promote more effective learning environments.

1.7 Structure of the thesis

This thesis is presented in 9 chapters. The first chapter introduces the background of the study; it presents the journey to study the topic and my personal assumptions; it describes the research questions, the significance of the study; and finally, provides an overview of the structure of the dissertation.

Chapter 2 provides a critical review of the literature related to teaching and learning. In this chapter, educational paradigms are compared, beliefs about teaching and learning are presented, and the cultural influences on teaching and learning are reviewed. This chapter also reviews the literature on the student-centred and teacher-centred learning approaches.

Chapter 3 reviews the literature related to the learning theories underpinning this study. Learning theories from two perspectives are discussed, including teaching and learning from a constructivist learning perspective and from an Islamic perspective. A critical review and analysis of each theory is included in an effort to build theoretical compatibility between the two theories of learning.

Chapter 4 presents a literature review that provides an overview and analysis of education in the Malaysian context. The chapter provides a brief review of the historical and cultural settings that impinge in different ways on the educational reform efforts in

Malaysia. The chapter also provides a brief account of recent policy developments related to the national system of education in Malaysia.

Chapter 5 presents the research design adopted in this study. It justifies the qualitative case study approach which involves document analysis, interviews, observations and stimulated interviews. It describes the data collection procedures, the data analysis processes, and discusses the quality of the criteria used.

Chapter 6 and 7 present the results of data analysis. Chapter 6 details the teaching experiences from voices of teacher educators. It also includes teaching approaches implemented in the programme. Chapter 7 recounts the learning experiences of the education student participants. It provides information relating to students' perception of learning approaches and strategies.

Chapter 8 presents the data interpretation and a discussion relating to the themes, and ties the findings to the existing literature.

In Chapter 9, the final chapter, conclusions are drawn about the research questions. Then, the significance and the limitations of this study are presented. Finally, the recommendations for further research are discussed.

CHAPTER 2

LITERATURE REVIEW: EDUCATION, TEACHING AND LEARNING

2.1 Introduction

The Malaysian education system is currently undergoing a transition in teaching and learning approaches at all levels of education. Malaysian Government policy is requiring teaching and learning to be shifted to paradigms, which will require teachers and students to adopt different responsibilities and roles. The traditional paradigms where teachers focus on transmitting information formats, such as lectures, have begun to be criticised in Malaysia. This debate has paved the way for a widespread growth of new paradigms of teaching and learning as an alternative approach.

Firstly, in this chapter, comparisons are made between educational paradigms, focusing on teacher-centred and student-centred approaches. Then teacher and student beliefs about teaching and learning are analysed because they are among the most significant contributing factors that will impact on the educational shifts. Next, Malaysian cultural influences on teaching and learning are reviewed, since cultural differences have a strong influence on educational practice. Following this, the definitions of the student-centred and teacher-centred approaches are explained; this is followed by a review of student-centred and teacher-centred approaches as presented in the professional education literature. Finally, prior to the analysis the gaps in the literature, empirical studies in regard to student-centred approaches to teacher education are analysed.

2.2 Comparison of educational paradigms

Some researchers view teaching and learning changes in educational models as shifts in paradigm (Barr & Tagg, 1995; Campbell & Smith, 1997; Fink, 2003). These have been described as moving from the “instruction paradigm” toward the “learning paradigm” (Barr & Tagg, 1995, p. 13). Barr and Tagg (1995) propose that the paradigm that has been taking hold in American higher education is a learning paradigm. Instead of concentrating on instruction, the learning paradigm addresses the production of learning by students’ own discovery and focuses on student learning outcomes. The consequence

of this is that the instructor constructs an experiential and active environment to empower learning.

Barr and Tagg (1995) suggested that the instruction paradigm and learning paradigm approach learning from opposite ends of a continuum. The instruction paradigm builds learning atomistically and that knowledge is created by experts and disseminated by instructors. Students are viewed as passive vessels, ingesting knowledge for recall in tests. The learning paradigm, on the other hand, constructs learning holistically and encourages student-involvement that promotes learner empowerment and experiential activities that are learner-centred or learner-controlled. Thus, students must be active discoverers and constructors of their own knowledge.

The new learning paradigm environments are challenging, and they support cooperative and collaborative learning, while, the instruction paradigm leads the classroom to become competitive and individualistic (Barr & Tagg, 1995; Fink, 2003). The learning paradigm requires students to jointly participate with faculty in the development of knowledge construction to become actively engaged in constructing, discovering and ultimately transforming the knowledge for their own independent purpose (Campbell & Smith, 1997).

More recently, Cheng and Mok (2008) added that the learning paradigm should have key factors such as positive learning attitudes, various applicable learning methods, effective learning strategies, multiple thinking in learning and a satisfaction with school life. The notion of the learning environment is non-traditional and there are active learning techniques to motivate students involved in the learning process. It is an unbounded, open, flexible, and locally and globally networked environment, providing unlimited opportunities for student learning (Mok & Cheng, 2001, 2006).

Fink (2003) asserts that higher education institutions start to shift the long believe in old paradigm (i.e., teacher-centred paradigm) and concentrate on providing students with a new learning paradigm (i.e., student-centred paradigm). Fink (2003) compares and contrasts the difference between the two paradigms by citing Campbell and Smith's (1997) research (Table 1).

Table 1: Teaching paradigms

	Old paradigm	New paradigm
Knowledge	Transferred from faculty to students	Jointly constructed by students and faculty
Student	Passive vessel to be filled by faculty's knowledge	Active constructor, discoverer, transformer of knowledge
Mode of learning	Memorizing	Relating
Faculty purpose	Classify and sort students	Develop students' competencies and talents
Student growth, goals	Students strive to complete requirements, achieve certification within a discipline	Students strive to focus on continual lifelong learning within a broader system
Relationship	Interpersonal relationship among students and between faculty and students	Personal relationship among students and between faculty and students
Context	Competitive, individualistic	Cooperative learning in classroom and cooperative teams among faculty
Climate	Conformity, cultural uniformity	Diversity and personal esteem, cultural diversity and commonality
Power	Faculty holds and exercises power, authority, and control	Students are empowered, power is shared among students and between students and faculty
Assessment	Norm-references (that is, grading on the curve); typically use multiple-choice items, student rating of instruction at the end of course	Criterion-referenced (that is, grading to predefined standards); typically uses performances and portfolios, continual assessment of instruction
Ways of knowing	Logical-scientific	Narrative
Epistemology	Reductionist; facts and memorization	Constructivist, inquiry and invention
Technology use	Drill and practice, textbook substitute, chalk-and-talk substitute	Problem solving, communication, collaboration, information access-expression
Teaching assumption	Any expert can teach	Teaching is complex and requires considerable training

Source: Fink (2003), p. 19

2.3 Beliefs about teaching and learning

One major contributing factor which impacts on educational paradigm shifts is the belief structure of teachers and students. Thus, in this section, the beliefs about teaching and learning, as they are relevant to this study, are analysed.

In implementing goals for an educational change, such as is happening in Malaysia, teachers are central agents and play a key role in changing schools and classrooms. Educational change can be referred to change in knowledge, belief, attitudes, understanding, self-awareness, and also teaching practices (Bailey, 1992; Darling-Hammond, 1990; Jackson, 1992; O'Banion, 1997; Richardson, 1990). A review of the literature pertaining to educational change reveals that educational theorists relate educational shifts to change in teachers' beliefs, knowledge, attitudes, and perceptions (e.g., Borg, 2009; Doyler & Ponder, 1977; Fullan, 1982; Guskey, 1986, 1988; Harris, 1980; Richardson, 1990; Tobin, 1987). Moreover, it has been widely acknowledged in the field of teacher education that changes in practice by teachers in the classroom are an expression of their beliefs and educational philosophies, and that beliefs play an important role in their conceptualization of instructional tasks and activities (Clark & Peterson, 1986; Dobson & Dobson, 1983; Fenstermacher, 1979; Nespor, 1987; Pajares, 1992).

In the context of this research conducted in Malaysia on the educational reforms to implement student-centred pedagogy, it is important to explore the existing understanding and beliefs prevailing among Malaysian student teachers and teacher educators. This investigation of Malaysian teacher educators' teaching experiences and Malaysian education students' learning experiences is expected to contribute to the understanding of how Malaysian teacher educators and education students may, or may not, alter their educational beliefs. As teacher educators and future teachers, their beliefs are crucial to the implementation of Ministry endeavours to adopt student-centred learning approaches. Although educational change can happen on a variety of levels, such as at the level of the individual teacher, the school, local community, state and nation (Fullan, 2001; Richardson, 1990), student teachers and teachers are considered to be significant actors of change and play a key role in changing schools (Beck, Czerniak, & Lumpe, 2000). Therefore, understanding the belief structure of teachers is essential to improving their teaching practice, as well as in enhancing the professional teaching preparation of student teachers (Fenstermacher, 1979; Nespor, 1987). As Pratt (1998)

suggested, “Beliefs and values are not minor, they are fundamental, these beliefs and values provide the submerged ‘bulk of the iceberg’ upon which any particular teaching technique rests” (p. 16). Dobson and Dobson (1983) argued that we create and invent our own belief system and that the belief system acts as a beacon in guiding our daily lives.

Eisenhart, Cuthbert, Shrum and Harding (1988) conducted a study to explore the effects of policy changes on teachers’ work. Their findings revealed that educational policies that are implemented without attention to teachers’ beliefs are seldom implemented the way the policy makers intended. Fenstermacher (1979) argued convincingly that if policy makers want teachers to change their practice, it is necessary that teachers’ existing beliefs be examined and perhaps changed. Furthermore, Prawat (1992) mentioned that most of the problems associated with implementing new approaches related to teachers existing beliefs. Beliefs are among the most important indicators of the decisions people make throughout their lives (Bandura, 1986).

In a more recent discussion on student-centred learning, Pillay (2002) has argued that students’ individual beliefs and values can strongly influence how they understood the concept of student-centredness. He argued that the student perception of what is useful learning is very much influenced by both formal and informal conceptions of the nature of knowledge and the learning process. Therefore, if students come from backgrounds where their epistemological beliefs are not compatible with a student-centred approach, they may not be successful in their studies in a student-centred environment. As Schommer (1990) argues, personal epistemological beliefs include an individual’s deeply held convictions about the certainty of knowledge, about how knowledge is organized, and about the ability of individuals to control their learning. This means that if students perceive learning as a knowledge acquisition, they are more likely to acknowledge learning as a teacher-centred approach, compared to those who view learning as knowledge construction, and who most probably tend to prefer a student-centred learning approach.

Thus, this research attempts to examine beliefs among Malaysian students and teachers as I would argue that there is a need to first understand how students and teachers from different cultural backgrounds perceive learning, before assuming that student-centred learning will be suitable for all students. The following section will analyse cultural influences in teaching and learning.

2.4 Cultural influences in teaching and learning

This section will examine teaching and learning differences among different cultures, both Eastern and Western, and how their ideas, beliefs, and values, directly or indirectly influence teaching and learning approaches in the Malaysian context. Different cultures have different norms and values, and these cultural differences have a strong influence on educational practice. I assume that studies involving learners from a non-Western culture can be challenged as most learning models are developed from a Western perspective.

My reviews of literature show that there has been inadequate literature written on the Malaysian learning culture compared to other Eastern or Asian cultures, and that much of the literature on Eastern or Asian learners has been about Chinese learners. Therefore, in the following sections, the similarities and differences between Eastern and Western learning will first be reviewed and analysed. This will be followed by an analysis of Malay-Islamic influences on Malaysian teaching and learning, and finally Confucian influences on Malaysian teaching and learning will be discussed.

2.4.1 Eastern and Western context

Students in higher education exhibit different approaches to learning, and there is evidence that these vary systematically from one culture to another (Biggs, 1996; Holmes, 2000; Kember & Gow, 1990; Liu, 1998; Richardson, 1994). Studies applying Western models of learning to students from a non-Western culture could be very suspect as most learning models, such as Jarvis Learning Model (Jarvis, 2006), Kolb's Theory of Learning (Kolb, 1976), Biggs 3P Model (Biggs, 1987) and Novak's Meaningful Learning Model (Novak, 1998) have been developed from the Western perspective, and are designed for a Western culture or context. Western learning models seemed to ignore Eastern students' cultural learning traits and traditional value systems, and may not be appropriate when incorporated directly into Eastern contexts (Chan, 1999; Lim, 2001; Rao et al., 2000; Watkins, 1996, 2000; Yang, 1986).

For example, despite the importance of Biggs' (1987) work in a number of studies over the years (Walberg & Haertel, 1992), one of the widely acknowledged criticisms of his Study Process Questionnaire (SPQ) (Biggs, 1987) is the exclusion of cultural values in his theory for measuring learners' approaches to learning (Kember, Wong, & Leung, 1999; Tan, Pillay, & Fiona, 2004). Biggs's instrument is designed based on his theories

on a 'motive/strategy' model, which form 'Approaches to Learning'. If learners' approaches to learning are a combination of motives and strategy, then motives are represented by the learners' choice of strategy, which influences the outcomes. Biggs (1987) argues that motives for learning can be influenced by context and environment. Learners can be intrinsically or extrinsically motivated. If learners are intrinsically motivated, they are able to relate new knowledge to their existing knowledge. In contrast, if the learners are extrinsically motivated, they tend to reproduce the information quantitatively rather than focus on understanding the subject. Nevertheless, the SPQ seems to merely reflect on surface and deep approach to learning, or on achieving motives to learn, and does not reflect and deal directly with the way in which these motives are related to cultural values. In fact, cultural values are recognized to be a significant variable in the studies of learning (Merriam, Cafarella, & Baumgartner, 2007) and, in particular, adult learners from different cultural groups (Merriam & Mohamad, 2000). It is widely accepted that cultural factors such as traditional values have a significant effect on learning behaviour and processes (Biggs, 1996; Salili, 1995; Watkins, 2000).

Research further demonstrates that there are significant differences in the nature of Eastern and Western thought in relation to teaching and learning approaches (Bodycott & Walker, 2000; Cortazzi & Jin, 1996; Gu & Schweisfurth, 2006; Li, 2003; Li, 2004; Liberman, 1994; Liu, 1998; McCargar, 1993). The believed differences in teaching and learning between Western and Eastern cultures have generated many misperceptions and misunderstandings about each of the approaches. The role of different cultural values has been debated. Often Eastern learners are characterized by Western observers as rote learners, unable to participate in classroom discussion, and overly respectful of the teacher (e.g., Ballard & Clanchy, 1991; Biggs, 1996; Burns, 1991; Hammond & Gao, 2002; Pratt, 1992; Samuelowicz, 1987). Studies carried out in Australia by Samuelowicz (1987), Ballard and Clanchy (1984, 1997) and Burns (1991) reiterate these misperceptions. Ballard and Clanchy (1984, 1997), who have written widely on the adjustment of Eastern students, suggested these students need to discard or transform their approaches to study.

However, a body of literature aims to challenge misconceptions about Eastern learners as passive rote learners, and the teaching methods used as authoritarian and expository (Biggs, 1998; Dahlin & Watkins, 2000; Ho & Crookal, 1995; Littlewood, 2000; Watkins & Biggs, 1996, 2001; Watkins & Ismail, 1994; Watkins, Reghi, & Astilla,

1991; Zhang, Sillitoe, & Webb, 2003). Educational researchers, such as Biggs and Watkins have written extensively on the Chinese learner and his/her approach to learning (Biggs, 1998; Watkins & Biggs, 1996, 2001; Watkins & Ismail, 1994; Watkins et al., 1991).

Another common misperception of Eastern students is that they place an emphasis on memorization without attempting to obtain understanding; this is known as surface approach learning (e.g., Ballard & Clanchy, 1991; Biggs, 1987; Burns, 1991; Samuelowicz, 1987). Eastern students are commonly perceived by Western teachers as adopting a surface approach to learning because they are seen to copy down overhead teaching notes word for word, to request model answers, and hardly ever question or challenge the teacher in classroom (Ho, Holmes, & Cooper, 2004).

In order to address the misconception, quantitative studies were conducted amongst students studying in Malaysia (Watkins & Ismail, 1994), Hong Kong (Kember & Gow, 1990, 1991), Nepal and the Philippines (Watkins et al., 1991). One significant finding from these studies is that both the deep and surface approaches to learning are incorporated in the learning approaches of all students at reasonably consistent levels. Moreover, several researchers have found that among Eastern students and, in particular, with learners from a Confucian background, memorization is incorporated into their learning strategy to gain understanding (Biggs, 1994; Dahlin & Watkins, 2000; Kember & Gow, 1990, 1991; Lee, 1996; Marton, Dall'Alba, & Kun, 1996; Pratt, Kelly, & Wong, 1999). The repetition and memorization that are usually associated with rote learning are very much part of meaningful learning (Lee, 1996; Marton et al., 1996).

In conclusion, this analysis of the above literature shows that most of the literature written about those non-Western learners, who are from the East, is about Chinese learners. The key points this literature highlights are that Eastern students who have been accustomed to Confucian concepts in teaching and learning use rote learning and memorization as learning methods. They also regard teachers as experts. Chinese Confucian ideas which have existed since two thousand five hundred years ago emphasized the importance of education for an individual's success in life, and the belief in effort and malleability as essential and necessary factors for learning (Lee, 1996; Tweed & Lehman, 2002). The ultimate aim for Confucian learning was for a very practical reason, 'pragmatic learning' (Salili, 1995). Chinese Confucian ideas may have

significant influence in the Malaysian education system as Chinese are the second largest ethnic group in Malaysia. However, on investigating teaching and learning in Malaysia, the dominant cultural influences, or sets of values, are Islamic. Thus, in the next section, the influences of Malay Islamic values in the Malaysian education system will first be analysed, followed by an analysis of the Chinese Confucian influences.

2.4.2 The influence of Malay-Islamic values

Malaysian learners have typically been generalized as Eastern learners (Tan, 2006). However, studies carried out in the West tend to ignore the fact that Malaysia is a multi-cultural country, examining these learners as being simply Malaysian learners and not differentiating them into Malay, Chinese, Indian, and other mixed races (e.g., Watkins & Ismail, 1994). Therefore, Western scholars studying culture have tended to use Confucianism values as a philosophical and religious blanket to explain the cultural roots of psychology in Asia (e.g., Biggs, 1998; Dahlin & Watkins, 2000; Ho & Crookal, 1995; Littlewood, 2000; Liu, 1998; Watkins & Biggs, 1996). However, in the Malaysian context, it is not appropriate for Confucianism values to be deferred to, or to represent all Malaysians. Although Malaysia is a country which practices religious freedom (such as Islam, Buddhism, Hinduism and Christianity), Islam is the official religion. Islamic values have a deep influence among its dominant people, i.e., Malays (Mastor, Jin, & Cooper, 2000). Therefore, in this sub-section, the influence of Malay-Islamic values in the Malaysian education context will first be reviewed before the influence of Chinese Confucian values (section 2.4.3) is described.

In Malaysia, Islam permeates every facet of life for the Malays, especially in the realms of values and behaviour that rely heavily on religious sources, the Qur'an and the sayings of the prophet. Among Malays, Islam constitutes a central element in ethnic identity and has a significant impact on the development of Malay culture (Mastor et al., 2000). The arguments on the influence of Islamic values among Malays before independence can be found in Chapter 4, section 4.3.1.

After independence, the position of Islamic education in Malaysia was arguably safeguarded by Article 3(1) of Federal Constitution that states "Islam is the religion of the Federation, but other religions may be practiced in peace and harmony in any part of the Federation" (Federal Constitution with index, 1998, p. 1). The Rahman Talib Report of 1960 and the consequent Education Act of 1961 reflect the integration of Islamic

education with the national education system. Thereafter, Islamic religion lessons were made a core part of the syllabi for Muslim learners in both primary and secondary schools (Mat Diah, 1989).

In the late 1970s and early 1980s, in light of Islamic revivalism (*al-tajdid al Islami*) in Malaysia, some critiques on national education system emerged. There had been no explicit theological dimension in a statement or national philosophy (Said, 1987). There was also a spiritual vacuum and discord between the material and spiritual development in the educational system (Sidin, 1987). The critiques led to the need to review the educational system and to infuse the principles and values of Islamic teaching into the curriculum, as well as into the teaching and learning environment.

Subsequently, the Ministry of Education started to develop a National Education Philosophy through careful educational planning (Langgulung, 1993). As a result, in 1987 a statement of National Education Philosophy was formulated as follows:

Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on a firm belief in and a devotion to God. (Ministry of Education, 1990a, p. 5)

From the statement of the National Education Philosophy, it is clear that, in the present educational system, religious and moral values have been consciously considered. As a Muslim majority-country, the philosophy has clearly included some of the important Islamic principle beliefs such as “belief and devotion to God” (Ministry of Education, 1990a, p. 5). Ismail et al. (2009) argue that with the “belief and devotion to God” as its principal belief, the document incorporates Islamic principles when defining the goals and mission of the educational aims of the country.

Although Islam plays a significant role in moulding the National Education Philosophy, the document was criticized because it utilized the term ‘God’ in a generic sense to include all religions. Wan Daud (1989) argues that the philosophy was a “blurred basis” (p. 15) for Muslims as they should have understanding that “God” is only Allah. He claims that the Islamic concept of *Tawhid* (belief in the Oneness of Allah) has been compromised for the sake of the diverse Malaysian community. In fact, the statement in the National Education Philosophy had presented the belief of the multi-religious and

multi-cultural citizens of Malaysia and was not solely formulated for Muslims. Hashim (1994) argues that the phrase 'belief in Allah' is not meaningful to non-Muslims and Islam does not compel others to itself.

In conclusion, this analysis of Malaysian education system and National Education Philosophy shows the centrality of Islamic values on Malaysian educational philosophy. There is a lack of literature on the Malay-Islamic cultural values in learning. However, there is substantial research and discussion about the influence of Confucian values in learning for learners with a Confucian background. Therefore, in the next section, the dominant Confucian values and practices which may have impact on Malaysian students' learning will be analysed. As Chinese is the second largest population in Malaysia, the Confucian values are inevitably emerged in Malaysian education practice. Although Islam has a very important influence in Malaysia, it is not the only religion originated influence, as Malaysia is a multi-cultural and multi-religious country.

2.4.3 The influence of Chinese Confucian values

In this section the influence of Chinese Confucian values will be presented. The Chinese are the second largest population group in Malaysia (Malaysia Economic Planning Unit, 2011). Their Chinese traditions may influence the teaching and learning approaches among Malaysians. Moreover, Westerners often refer to Chinese when discussing Eastern learners (as mentioned previously in section 2.4.1).

Like many other Chinese in every part of the world, the Chinese in Malaysia seem to have retained some of their dominant cultural values. They have preserved cultural values by practicing their customs and beliefs. Such practices have helped to maintain their cultural identity (Chan, 1999; Tan, 2006). The Chinese members of the Malaysian population have also been allowed to maintain the Chinese language throughout the Chinese schools including, the Chinese National-Type Schools and Chinese Independent High Schools. It was British colonial policy (1786-1957) that allowed vernacular language schools to exist and develop.

A study by Hussin (1997) which adopted in-depth interviews with 10 Malay and 10 Chinese entrepreneurs in Malaysia confirmed that some of the values elicited from Malay and Chinese entrepreneurs in Malaysia were significantly similar to some of the values reflected in the Chinese Confucian culture. Therefore, in this section, some of the literature concerning the Chinese Confucian culture will be analysed, as I would argue

that, although Islam has an influence on Malaysian educational policies and practices, Confucianism may also have an influence due to the number of Malaysians who come from this tradition.

In Confucian culture, the basic education curriculum, whether formal or informal, implied the use of the classics of Chinese literature. The teaching involved the passing of knowledge from teacher to learner, whereby a teacher played the role of a possessor of wisdom and an interpreter of knowledge. Liu (1998) argues that in Chinese education, a teacher is seen not as a facilitator but as a “fount of knowledge to be delivered” (p. 5). The instructor of teaching should aim at transmitting the truth, delivering the skills, and answering the questions (Gu, 2005; Li, 2002; Luk, 1995). These practices well support a teacher-centred approach.

This perception of traditional Chinese education has been well-known for a thousand years and these one-way teaching approaches apply in the education process (Zhang & Collis, 1995). Moreover, in Confucian thought, education is an internalized quest to fulfil one’s potential and thus enabling the individual to become a *Jun Zi*, a superior person (Hammond & Gao, 2002). However, the individual is expected to develop into a superior person. The basis of the value of education is found in the quest to perfect the self and the belief that all individuals can succeed intellectually through their own perseverance and hard work (Lee, 1996). Confucian teachings were further infused in relation to hierarchy and authority, because “to honour those higher than ourselves is the highest expression of the sense of justice” (Tweed & Lehman, 2002, p. 92).

Another aspect in Confucianism is the concept of “face” (*mien-tzu*). In a classroom situation, the questioning of a teacher by a student is disrespectful and may cause the loss of face (Kennedy, 2002). In other words, Chinese have been taught since childhood to be concerned with “face” or shame orientation. Hwang (1987) argues that disrespecting teachers may cause them to lose face. Students, therefore, are not encouraged to speak out, to question, or to criticize for fear of being wrong and thus losing face (Tsui, 1996). This was supported by Tseng, Chang and Nishizono (2005), who stated that:

An extension of the concern for others in interpersonal relationships is the emphasis on the harmonious resolution of problems. People are encourage

to bend, to endure, to tolerate, to comply, and not to stand out, rather than to fight, to challenge, or to defy. (p. 5)

In an ethnographic study by Holmes (2002), Chinese Confucian beliefs appear to be related to ethnic Chinese students' feelings of discomfort when native New Zealand students ask questions of their teachers in class. One Chinese student reflected the importance of being passive in class by commenting:

It's very impolite to ask teachers questions... [You should] not challenge the teachers in class. If you have problems you can ask [the] teacher after class, not in class because that makes [the] teacher feel embarrassed.

In conclusion, the above analysis of Chinese Confucian suggests the need to develop appropriate pedagogies for the specific educational traditions, rather than assuming that Western ideas must be right for every context. This is relevant to my study. My study explores teacher and student beliefs about Western learning models (i.e., student-centred learning), and the suitability of the models with Malaysian beliefs and traditions.

2.5 Student-centred and teacher-centred approaches

In section 2.2, the educational paradigms of Barr and Tagg (1995) who label the paradigms as 'instruction paradigm' and 'learning paradigm', are discussed. They argue that in the instruction paradigm, learners are viewed as passive recipients of knowledge, and that the teachers place greater emphasis on knowledge delivery. In contrast, in the learning paradigm, students are considered as active constructors of knowledge. For the sake of this study, educational paradigms are divided into two types of approach, first, the teacher-centred approach (instruction paradigm), and second, the student-centred approach (learning paradigm). Thus, in this section, the definitions of both the student-centred, and the teacher-centred approach, will be reviewed, following which, the literature pertaining to the application of the student-centred and teacher-centred approaches will be analysed.

2.5.1 The student-centred approach

In recent years, there has been a growing interest in student-centred learning paradigms. Student-centred paradigms are rooted in constructivist epistemology, where "knowledge and context are inextricably connected, meaning is uniquely determined by individuals

and is experiential in nature, and the solving of authentic problems provides evidence of understanding” (Hannafin, Hill, & Land, 1997, p. 94). Constructivist learning theories emphasize human learning as active and that learners build new knowledge upon the foundation of previous learning (Brooks & Brooks, 1999; Duffy & Jonassen, 1992; von Glasersfeld, 1995). Student-centred learning was categorized as a learning paradigm by Barr and Tagg (1995), who argue that learning paradigm environments are challenging, cooperative and collaborative.

The review of the literature shows that some researchers have identified the central characteristics of student-centred learning (e.g., Brandes & Ginnis, 1986; Gibbs, 1995; Lea et al., 2003; Lee et al., 2007). The following Table 2 depicts commonly identified student-centred characteristics.

Table 2: Student-centred learning characteristics

Source	Student-centred learning characteristics
Lea et al. (2003)	<ol style="list-style-type: none"> 1. Reliance on active rather than passive learning 2. Emphasis on deep learning and understanding 3. Increase responsibility and accountability on the student 4. Increase sense of autonomy on the learner 5. Interdependence between teacher and learner 6. Mutual respect within learner teacher relationship 7. Reflective approach to the teaching and learning process for both teacher and learner.
Gibbs (1995)	<ol style="list-style-type: none"> 1. Emphasis on learner activity rather than passivity 2. Student experience on the course outside the institution and prior to the course 3. Process and competence rather than content 4. Key decisions about learning are made by the student through negotiation with the teacher.
Brandes and Ginnis (1986)	<ol style="list-style-type: none"> 1. The learner has full responsibility for her/his learning 2. Involvement and participation are necessary for learning 3. The relationship between learners is equal, promoting growth and development 4. The teacher becomes a facilitator and resource person 5. The learner experiences confluence in his education (affective and cognitive domains flow together) 6. The learner sees him/herself differently as a result of the learning experience.
Lee et al. (2007)	<ol style="list-style-type: none"> 1. Self-monitoring of own learning process 2. Meaningful collaboration 3. Technology to support deep thinking 4. Instructor as active facilitator 5. Active knowledge construction process 6. Engaging in authentic task 7. Multiple forms of scaffolding.

From consideration of the characteristics used to define student-centred learning, roles for students and roles for teachers emerge. This suggests that student-centred learning is transactional between teachers and students. As Elen et al. (2007) argue, student-centred learning entails a continuous renegotiation of teachers and students in learning process. They may execute the same tasks and assume similar responsibilities in learning process. Although learning is an active and constructive process, both teachers and students are responsible for the success of learning. In other words, teachers continuously facilitate and guide student learning by developing the student's gradual growth of responsibilities.

The first perspective emphasizes the role of the student as being that of an active, autonomous, and responsible learner in learning process. Some researchers have defined student-centred learning as offering the student role of actively seeking out and construct meaning from information and previous experience (Gibbs, 1992; Harden & Crosby, 2000; Huba & Freed, 2000; Lea et al., 2003; Yuen & Hau, 2006). Gibbs (1992) proposed a definition that student-centred learning "gives students greater autonomy and control over choice of subject matter, learning methods and pace of study" (p. 23). Gibbs defined this in more detail in regard to the main decision: "what is to be learnt, how and when it is to be learnt, with what outcome, what criteria and standards are to be used, how the judgements are made and by whom these judgements are made" (p. 1).

The concept of learner autonomy, was originally defined by Holec (1981) as "the ability to take charge of one's own learning" (p. 3). However, there were implications from Holec's (1981) definition of learner autonomy. For example, Little (1990, 1991) argues that developing ability to take charge of our own learning means we accept full responsibility for the learning process, acknowledging that success in learning depends crucially on ourselves rather than on other people. However, learners exercise their independence within a specific socio-cultural context. Benson (2001) argues that independence and interdependence through socialization and the nature of student interaction with peers and teachers will impact on the levels of control they exercise and develop. This suggests that development of learner autonomy can be seen not only as the development of 'individual' autonomy but also as the development of a social construct.

This first perspective also stresses student freedom and the responsibility of the individual learner to construct his/her own learning experience. Rogers (1969) strongly

believed in personal responsibility and freedom to choose. In student-centred learning, students are no longer passive recipients of knowledge, but have more responsibility towards their own learning (Gibbs, 1992; Harden & Crosby, 2000; Huba & Freed, 2000; Lea et al., 2003; Yuen & Hau, 2006). Student-centred learning allows students to take on more responsibility for thinking what and how to learn so that they can play an active role in their learning (Yuen & Hau, 2006). The approaches focus on students' learning and what the students do to achieve, rather than what the teacher does (Harden & Crosby, 2000).

Glasgow (1997) added that in student-centred learning, students are expected to gradually take more responsibility for their own learning. According to Glasgow, with the necessary experience and guided practice, the students will gain full independence, with the teacher becoming more of a co-worker. The focus is on active student acquisition of information and skills, suitable to their ability, level of experience, and educational needs. As Lambert and Mc Combs (1998) described, student-centred learning recognizes individual student differences and their unique learning styles. Many researchers support this definition by describing that this approach as involving the reversal of traditionally teacher-centred learning, placing the student at the centre of the learning process (Brandes & Ginnis, 1986; Cannon & Newble, 2000; Coombs & Wong, 2000; Estes, 2004; Griffiths, Oates, & Lockyer, 2007; Hesson & Shad, 2007; Hirumi, 2002).

However, some educationists recognise the mutual roles of student responsibility and teacher support. Garrison (2003) argues that although control and choice strengthen motivation, which in turn builds a sense of responsibility among learners, without appropriate support and guidance, learners may not achieve the expected learning outcomes. The issue of balance between student responsibility and control were raised by some researchers. For example, Garrison (1993) argues that teachers should be responsible for establishing a balance of control that will ensure worthwhile outcomes and continuing efforts to learn.

The second perspective moves from the role of the student to the role of the teacher. This perspective defines the student-centred approach as a shift from didactic teaching to facilitative approach. Rogers and Frieberg (1994) describe student-centred learning as a shift in power from the expert teacher to the student learner, a process driven by the need for a change in the traditional environment. According to this viewpoint, student

learning should be facilitated to meet student needs and their personal characteristics. It is expected that the teacher will perform more as a facilitator of learning rather than a presenter of information (Kember, 1997) to clarify, stimulate and enhance the students' insights and ideas (Rogers & Frieberg, 1994).

The facilitator's role assumes several empowering attributes such as those of active listening, strong awareness of group dynamics, and maximisation of peer learning; it encourages risk taking, draws on creative resources, works with issues in the here-and-now and fosters intuition (Rogers & Frieberg, 1994). The assumed outcome of effective facilitation is to influence positively the learning ethos and encourage student empowerment (Gilmartin, 2001).

While this dimension has been agreed upon by many Western researchers (Barraket, 2005; Brandes & Ginnis, 1986; Carter & Long, 1991; Cornelius-White, 2007; Gibbs, 1995; Kember, 1997; Rogers & Frieberg, 1994; Scott, 2008), my review of Malaysian educational literature suggests that not all Malaysian teachers have accepted their new roles as facilitators, but instead remained with their traditional roles as experts in knowledge. However, some of them chose to combine both roles in their teaching practice. The Malaysian literature relating to teaching practice will be reviewed and analysed in the following section.

In summary, from the literature reviewed above, I recognize that there is no universally agreed definition of student-centred learning. However, a commonly occurring element in the various writings on student-centred learning is the concept of student choice in learning. Some see it as being about the student doing more than the lecturer (active versus passive learning); while others have a much broader definition which includes both of these concepts and that also describes the shift in power relationship between student and teacher. Both of these perspectives emphasise the importance of acknowledging individual differences by adopting diverse learning techniques.

My understanding of student-centred learning has been developed as a result of reading this literature. For the purpose of this research, Cannon and Newble (2000) provide a good starting point. They define student-centred learning as:

Ways of thinking and learning that emphasize student responsibility and activity in learning rather than what the teachers are doing. Essentially SCL has student responsibility and activity at its heart, in contrast to a strong

emphasis on teacher control and coverage of academic content in much conventional, didactic teaching. (p. 16)

This section has reviewed and analysed several aspects of student-centred learning, the philosophical underpinning of student-centred learning, its characteristics and definitions. Several criticisms on elements of student-centred approaches such as learner autonomy and students' responsibility have been provided. This is important in order to analyse the suitability of student-centred approaches within the Malaysian education culture. As discussed earlier in section 2.4, Islamic values have a strong influence on Malay education culture. This is reflected in the traditional history of the Malaysian education system, as well as in the National Education Philosophy that is based on the principal beliefs of Islam. As analysed previously, different cultures have different norms and values, and these cultural differences have a strong influence on educational practice. Therefore, in regard to the student-centred learning approaches, I would argue here that there is a critical need to investigate the suitability of combining Western approaches with Asian approaches, particularly of the Malay Islamic culture.

2.5.2 The teacher-centred approach

The underlying principle of the teacher-centred approach to education is rooted in the psychology of behaviourism (Conti, 2007; Elliot & Busse, 1991; Garfield, 1995; Moore, 1997; Skinner, 1953). Behaviourism is based on the idea that learning is change in behaviour and that changes in behaviour occur as a response to a stimulus. Learning according to behaviourists can be defined as “a relatively enduring change in observable behaviour that occurs as a result of experience” (Eggen & Kauchak, 2001, p. 214). Behaviourism regards learning as a system of behavioural responses to physical stimuli, driven by reinforcement, practice and external motivation (Skinner, 1953).

According to behaviourism, teachers devote their time and resources to deconstructing subject matter into its constituent parts and to developing a sequenced, well-structured curriculum. The dominant role of the teacher means that learners are viewed as relatively passive, and their behaviour needs to be shaped by external reinforcement controlled by teachers (Skinner, 1953). Skinner (1953) argues that behaviour is based around the central notion of a reaction being made to a particular stimulus (stimulus-response relationship) and that desired behaviour is shaped by reinforcement, either positive reinforcement (rewards) or negative reinforcement (punishment). Behaviourists

believe that if teachers provide positive reinforcement (rewards), whenever students perform a desired behaviour, they will learn to perform the behaviour on their own. The same concept applies to punishment (Mayer, 2003). Educational research suggests that reinforcing appropriate classroom behaviour, such as paying attention and treating others well, decreases misbehaviour and leads to conducive learning atmosphere (Elliot & Busse, 1991).

However, there have been critiques on the application of behaviourist approaches. Pritchard (2009) commented that rewarding students for all learning is likely to cause them to lose intrinsic motivation in learning. Studies have indicated that the provision of rewards for motivated students may result in a loss of interest in the subject. Moreover, cognitive theorists believe student behaviour (punished and rewarded behaviour) will only change if students understand the cause-and-effect of the punishment and reward to the behaviour (Mayer, 2003). Bandura (1986) critiques that behaviourist philosophy is too simplistic. He argues that behaviour is not a mere reaction to environmental stimuli, but can also be learned from watching a model perform a behaviour. In other words, learning should involve a cognitive process.

In a teacher-centred classroom, the teacher employs a traditional approach to teaching, employing methods such as formal lectures, seminars and examinations, the designing of assignments, tests, and grading (Felder & Brent, 1996). In such a classroom, the main decisions about teaching aims and objectives, contents and methodology are finalised even before there is any encounter between teacher and learner (Nunan, 1989). The approach focuses on the teacher, as the expert, transmitting knowledge to the student as the novice (Harden & Crosby, 2000) or empty vessels to be filled with knowledge (Garfield, 1995; Moore, 1997). As described by Zohar (2004), the teacher-centred approach “consists of transmitting knowledge, that is, rules and algorithms that are required for solving problems” (p. 306). The teacher is entirely responsible for selecting what information and skills the students are expected to learn, how and in what sequence they are to be learned, and at what pace they are to be delivered (Glasgow, 1997). Knowledge is defined as an entity that can be given or transmitted and absorbed by students. Moore (2001) argues that although the teacher-centred approach such as in a lecture is a passive form of learning with very low level of student involvement; the lecture can focus student activities through its excellent way of presenting background information when introducing a unit.

Some researchers offer teacher-centred definitions from the teaching and learning perspective. As an example, Pratt (1998) considered teacher-centred approach to be just one perspective of his five perspectives for teaching and learning in adult and higher education. The five perspectives are as follows:

1. A transmission perspective: Delivering content
2. An apprenticeship perspective: Modelling ways of being
3. A developmental perspective: Cultivating ways of thinking
4. A nurturing perspective: Facilitating personal agency
5. A social reform perspective: Seeking a better society

According to Pratt (1998), from all the above perspectives, the first perspective, i.e., the transmission perspective, is considered as a teacher-centred approach which is the most “traditional” and long-standing perspective for teaching. This perspective is based on the belief that knowledge can be effectively transmitted to students, instead of actively constructed by students (Pratt, 1998). The key goal is effective knowledge delivery to students. Pratt (1998) suggests that the main responsibility of a teacher, according to this perspective, is to transmit or deliver content to the students regardless of time constraint. Thus, this perspective claims teachers are expected to be an “expert” and experienced in their subject disciplines. Pratt noted that the teacher-centred approach concentrates on:

1. What the teacher does in the process of teaching.
2. How the content has been planned, organized, represented, and transmitted.

Pratt (1998) disagrees with the teacher-centred approach entirely. Pratt believes that the transmission perspective of teacher-centred approach leads to superficial learning. He agrees with the work of Gow and Kember (Gow & Kember, 1993; Kember & Gow, 1994) that this perspective results in a surface approach to learning (students are aiming to reproduce material in test or exams) rather than a deep approach to learning (learning for understanding). However, my analysis of literature found evidence that understanding is also being gained through repetition and memorization (e.g., Gertsman & Rex, 2001; Gordon et al., 1998; Kember & Gow, 1990, 1991; Lee, 1996; Marton et al., 1996; Ramburuth, 2001; Volet, 1999; Watkins & Ismail, 1994; Watkins et al.,

1991). This suggests that teacher-centred approaches can contribute to both memorization (surface approach) and understanding (deep approach).

2.5.3 Analysis of the definitions of student-centred and teacher-centred approaches

From the literature, it can be noted that not all theorists agree with the dichotomy between the teacher-centred and the student-centred approach as student-centred and teacher-centred pedagogy share many common attributes with a variety of other approaches, such as; flexible learning, experiential learning and self-directed learning.

As one of the examples, that of Oyler (1996) does not refer to student-centred and teacher-centred learning approaches, but instead classifies various “Vocabulary of Binary Distinctions in Teaching” the traditional and progressive teaching approaches (Table 3).

Table 3: Vocabulary of Binary Distinctions in Teaching

Traditional	Progressive	Author
Banking	Liberatory	Freire (1970)
Didactic	Dialectic	Edwards (1980)
Didactic	Dialogic	Hunter (1980)
Cold Science	Hot Science	Delamont (1983)
Teacher as instructor	Teacher as facilitator	Doake (1985)
Transmission	Transaction	Wells (1986)
Transmission	Interpretive	Barnes (1990)
Power over	Power with	Kreisberg (1992)
Method classroom	Discourse classroom	R. Young (1992)

Oyler (1996) explains that:

These binary distinctions are not meant to be rigid; rather they are included to sharpen the distinction between transmissions versus more collaborative styles of teaching. Additionally, such categories help connect the various terms that have been used to describe a more progressive style of teaching in which power and control are shared in important ways with students. (p. 20)

From this characterization of the vocabulary of binary distinction in teaching, Oyler (1996) describes that good teachers would want to be progressive, collaborative and engage in an approach of teaching where power and control are shared in important ways with students. Oyler (1996) seems to suggest that good teachers should adopt progressive teaching approaches (i.e., student-centred) and think of teaching as a form of facilitation.

However, there have been critiques about these judgements. Ehrlich and Frey (1996) claim that there is no single model that exists for effective teaching, and that no single model defines all great teachers. Similarly, Wise and Darling-Hammond (1995) refer to good teaching thus: “it is not simplistic nor mechanical; it is a complex mixture of artistry and mystery” (p. 43).

For the purposes of this research, only the terms “student-centred” and “teacher-centred” are utilized rather than other terms, as the student-centred and teacher-centred terms are more widely used in the teaching and learning literature. These two terms are used in conjunction with approach, process, learning, or teaching. It would be interesting to consider which of the beliefs of the Malaysian teacher educators and education students underlay each of the terms.

From my review and analysis of several definitions of student-centred and teacher-centred learning approaches, there are two perspectives for the application of the student-centred and teacher-centred approaches. Firstly, some educational researchers have made an explicit contrast between student-centred and teacher-centred approaches in regard to the teaching methodology selection. For example, Moore (2001) claimed that the foundation of teaching approaches could be divided into two, i.e., teacher-centred and student-centred. Moore’s comparisons of these two approaches are presented in Table 4.

Table 4: Comparison of teacher-centred and student-centred methodologies

Teacher-centred instructional approaches		
Method	Amount of Teacher Control	Intent and Unique Features
Exposition teaching	High	Telling techniques. Authority presents information with little or no student interaction.
Lecture	High	Telling techniques. Teacher presents information without student interaction.
Lecture-recitation	High to moderate	Telling techniques. Teacher presents information and follows up with question-and-answer sessions.
Socratic	Moderate	Interaction technique. Teacher uses question-driven dialogues to draw out information from students.
Demonstration	High to moderate	Showing technique. Individual stands before class, shows something, and talks about it.
Modelling	High	Showing technique. Teacher or other model behaves in way desired of students. Students learn by copying actions of model.
Student-centred instructional model		
Method	Amount of Teacher Control	Intent and Unique Features
Discussion	Low to moderate	Interaction technique. Whole class or small group interact on topic.
Panel	Low	Telling technique. Group of students present and/or discuss information.
Debate	Low	Telling technique. Competitive discussion of topic between teams of students.
Role playing	Low	Doing technique. Acting out of roles or situations.
Cooperative learning	Low	Doing technique. Students work together on one or more tasks in mixed-ability group.
Discovery	Low to moderate	Doing technique. Students follow established procedure in an attempt to solve problems through direct experiences.
Inquiry	Low	Doing technique. Students establish their own procedure for solving a problem through direct experiences.
Simulations, games	Low	Doing technique. Involvement in an artificial, but representative, situation or event.
Individualized instruction	Low to moderate	Telling and doing technique. Student engage in learning designed to fit their needs and abilities.
Independent study	Low	Telling and doing technique. Learning is carried out with little guidance.

Source: Moore (2001), pp. 131-132.

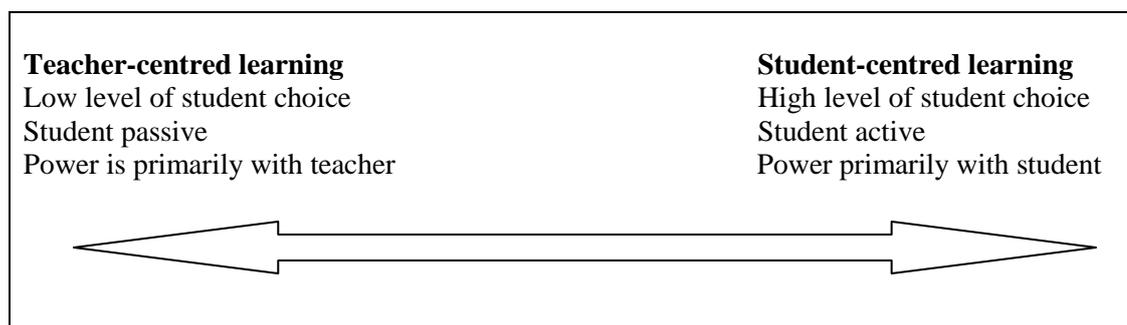
Moore (2001) suggests that the teacher-centred instructional approaches are “traditional” and didactic, in which students acquire knowledge by listening to teachers. The student-centred approach, on the other hand, guides students to actively engage and

construct their own learning. According to Moore (2001), either of the two instructional approaches can be used effectively to bring about learning. He related the selection of appropriate instructional approaches (either teacher-centred or student-centred) to (1) teaching factors such as teaching goals, objectives, and content; (2) teachers' personal experiences, background knowledge, teaching skills and personality traits that make them comfortable and effective with certain methodologies; and (3) students' maturity level and experiences.

The contrast between the teacher-centred and the student-centred approach is also supported by Strickland and Strickland (2002). They also delineate the differences between the teacher-centred approach and the student-centred approach. However, instead of using these two terms, they prefer to use "transmission" and "transactional". They refer to "traditional" classrooms with the terms "transmission" and "behaviourist". Whereas, in contrast, for "student-centred", the terms "constructivist", "transactional", "progressive" and "authentic" are suggested.

Secondly, while some educational researchers position the terms in severe contrast, others represent them as a continuum (e.g., O'Neill & McMahon, 2005; Reinsmith, 1994). For instance, the term student-centred can be seen as the end of a continuum, using three concepts regularly used to describe student-centred learning (O'Neill & McMahon, 2005). They describe the continuum of student-centred and teacher-centred, defined in Figure 1.

Figure 1: Teacher-centred and student-centred learning continuum



Source: O'Neill and McMahon (2005), p. 29.

In conclusion, it appears from the literature that there are two points of view regarding the application of teacher-centred and student-centred approaches. The first opinion divides the teaching approaches into two camps. This binary distinction would have teachers decide on their educational paradigm, i.e., either teacher-centred or student-

centred. Meanwhile, the second viewpoint draws a continuum between the teacher-centred and student-centred approaches in which teachers would be able to analyse their teaching methods and position themselves along the path between the two approaches.

This suggests that there is no agreed application of the student-centred and teacher-centred learning approaches in the literature.

Analysis of the application of student-centred and teacher-centred approaches assists me in better understanding the way in which Malaysian teachers and students understand and perceive the two learning approaches, and how they apply them in their practice (either as a binary distinction or a continuum). In the next section, the empirical studies on student-centred and teacher-centred approaches will be analysed. First, Malaysian literature will be considered, followed by Islamic country literature and finally, Western literature.

2.6 Empirical studies of student-centred and teacher-centred approaches

2.6.1 Malaysian literature

Numerous Malaysian studies have been carried out in Malaysian higher education institutions in an attempt to investigate the teaching approach of teachers and the learning approach of students, that is, whether they are, student-centred or teacher-centred (e.g., Long et al., 1999; Luan, Bakar, & Hong, 2006; Mahamood et al., 2009; Sidin, 1999; Zubir, 1988).

Several of these studies indicate that Malaysian lecturers use traditional teacher-centred approaches or a mixture of teacher-centred and student-centred as their teaching practice. For example, a quantitative study conducted by Mahamood et al. (2009) to investigate the perceptions of 218 students at private higher learning institutions (PIHL) in Sarawak revealed that the students reported that their lecturers adopted both traditional teacher-centred and student-centred approaches. This finding was similar to the research findings of Sidin (1999) and Long et al. (1999) who found that lecturers at higher institutions employed various teaching methodologies, involving teacher-centred and students-centred methods such as direct lectures, discussions and tutorials in their teaching. All the findings from the above studies suggest that the participants viewed

teacher-centred and students-centred approach as a continuum, and not as a binary distinction.

However, there are studies which are contradictory (Luan et al., 2006; Neo & Neo, 2002, 2003, 2009; Zubir, 1988). Zubir (1988) conducted a quantitative study among 225 teacher trainees to explore the impact of two teaching methods, i.e., the teacher-centred teaching lecture and student-centred individualised learning methods. The study focused on several facets of learning from the lecture to individualised learning. The findings of the reported study revealed that over half the students expressed a preference for individualised learning; this is contrary to the accepted view that Malaysian students cannot learn independently (Mustapha, 1998).

This is aligned with another qualitative study conducted by Neo and Neo (2009) among education students. The study created a constructivist learning environment using integrated multimedia courses, where the students were exposed to student-centred notions requiring them to construct their own knowledge, determine their own learning outcomes, and work in a collaborative and cooperative way. It was found that student-centred learning helped students in several ways, including in their ability to be creative and critical thinkers, the motivation to learn, in finding learning to be more challenging, and also in the ability to learn more from each other when working as a team. Students were found to be willing to seek and digest information on their own.

Similarly, Luan et al. (2006) conducted a qualitative study examining the effect of the student-centred learning approach to teach a discrete information technology course for Malaysian pre-service teachers. The study revealed that infusing student-centred learning into a discrete IT course can help promote and enhance positive attitudes toward IT, create opportunities for students to work and collaborate, and enable students to be active participants in their own learning process. From this study, the student feedback also indicated that they became more independent, more creative, and developed collaborative learning skills as they did not fully rely on the course instructor to solve problems they faced.

In this research, the analysis of the literature mentioned above suggests that there is still ongoing debate regarding teaching and learning approaches in Malaysian tertiary education. Although, after over than 20 years, the Malaysian government introduced the student-centred learning approach in its philosophy (Ministry of Education, 1989),

Malaysian university teachers seemed not to fully adopt the student-centred approach. Their partial adoption of student-centred learning may have been due to the pressure of government demand, rather than as being representative of their own belief that the student-centred approaches can contribute to learning effectiveness among students. This led the university teachers to integrate teacher-centred strategies together with a student-centred approach.

2.6.2 Literature of Islamic countries

The reviewing of the relevant literature from Islamic countries indicates to me that constructivist learning theories and student-centred principles have been accepted by many Muslim teachers and students (Ann Brosseau, 2000; Lubis et al., 2011; Salimi & Ghonoodi, 2011; Zarei & Esfandiari, 2008). Studies have been conducted to examine Muslim teacher perceptions of student-centred approaches (e.g., Lubis et al., 2011; Salimi & Ghonoodi, 2011). Lubis et al. (2011) conducted a quantitative study to 83 African teachers to study their perception of effectiveness strategy and technique in teaching and learning in Islamic Education. The findings show that the teachers agreed with the principles of student-centred learning, such as student engagement in classroom discussion and student responsibility for their learning. The teachers also agreed with their suggested roles to advise and motivate students in their learning.

Similarly, another study by Salimi and Ghonoodi (2011) in Iran also found that Muslim teachers agreed with constructivist student-centred approaches. The study was conducted with the purpose of integrating curriculum along with ICT and emphasized constructivist notions of learning in Smart Schools and its advantages in comparison with traditional schools. The findings showed that using ICT in smart schools has resulted in advantages such as the increase in the importance and reliability of curriculum contents, making the curriculum content more flexible, promoting learner interest, and enhancing curriculum usefulness, with the possibility of exploiting a combined curriculum.

However, the above findings are in contrast with other studies. Iqbal, Azam and Rana (2009) conducted a quantitative study in Pakistan to explore the views of 200 secondary schools science teachers concerning the Nature of Science (NOS), whether traditional or contemporary, and their approach to teaching science. The overall results of this study indicate that the teachers hold traditional views about the Nature of Science (NOS) and

prefer teacher-centred didactic teaching approaches. Similarly, a quantitative study conducted by Mustafa and Cullingford (2008) in Jordan among 98 Islamic Education teachers also showed that Muslim teachers were using only one teaching method, which was lecturing. Findings from these two studies suggest their preference for a teacher-centred approach instead of student-centred one.

There were also studies that focused on students' learning perceptions and outcomes (Ann Brosseau, 2000; Zarei & Esfandiari, 2008). Zarei and Esfandiari (2008) conducted a study in Iran to investigate university students' learning outcomes in a general English course. They were randomly assigned to two classes; one constructivist and the other conventional. Results showed that student learning best occurs within the constructivist student-centred learning environment.

In another study, Ann Brosseau (2000) conducted an exploratory research to study seven Moroccan university students to examine their preferences of teachers and teaching styles. They were interviewed and asked to describe their best and worst teacher according to questions designed to identify teaching styles. The "best" and the "worst" teachers teaching styles were evaluated according to their perceptions. The study found that the best teachers chosen by the students tend towards a student-centred teaching styles, while worst teachers more towards teacher-centred teaching styles.

Conversely, a study by Sajjad (n.d.) in Pakistan found that undergraduate students rated the teacher-centred method as in a lecture as the best teaching method. Reasons included; teachers provide all the knowledge relating to the topic, the method is time saving; students listen to lectures attentively and take notes. This supports other literature which revealed that the concepts of student-centred and active learning have not been well accepted in some Islamic countries, asserting instead that Muslim teachers and students prefer teacher-centred approaches (e.g., Ahmad, 1990; Azhar, 2006; Hashim & Langgulung, 2007; Sikand, 2005; Talbani, 1996; Zakaria, 2008; Zia, 2006). The literature suggests that the dominant pedagogical mode in many Islamic institutions today is listening, memorization, and regurgitation within a teacher-centred learning environment. The review of the literature also shows that, historically, in the Arabic world, all subjects were taught by means of book-centred methods in the majority of schools (Al-Saif, 1996; Jallad, 1997; Mustafa & Cullingford, 2008). Muslim Arabic teachers were found to be fully dependent on textbooks and the teachers to rely on "chalk and talk" in preference to methods that use student-centred learning (Al-Saif,

1996). Jallad (1997) concludes that teaching approaches that emphasize student-centred learning such as group discussion, projects, and acting were very rarely used in teaching practice.

Findings from the above studies exemplified the teachers' philosophy of teaching as a knowledge transmission, and students' understanding of learning as being an acquisition of knowledge. In my view, this may be due to their Islamic teaching and learning beliefs, which emphasize the importance of knowledge delivery from knowledgeable teachers, particularly when it refers to knowledge (*'Ilm*) from God or known as revealed knowledge (Nasr, 1987). As Pajares (1992) and Richardson (1994) claim, educational beliefs have a great influence on teacher and student behaviour and practices in classroom.

However, upon further consideration, some writers argue the tenets of student-centred learning and Islamic educational principles may not be that disparate at a theoretical or principles level. Islamic educational traditions may be interpreted to suggest that student-centred learning principles are consistent with those propagated by Muslim scholars and have been practiced in the Islamic context since the medieval times (Abdullah, 1994; Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978). The student-centred, consistent learning, methods of teaching found in the Islamic education tradition, namely; observation and experimentation, reason and reflection, problem solving, dialogue, discussion, application, independent learning, and project based learning have been used by several Islamic scholars such as Al Biruni, Imam Abu Hanifah, Imam Malik, Abu Hasan al-Basri, and Wasil Ibn 'Ata' as teaching tools for their students (Abdullah, 1994; Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978).

2.6.3 Western literature

Western literature has shown that the student-centred approaches promote learning in various ways. For example, some researchers found that teaching guided by the student-centred approaches can enhance student motivation (e.g., Brindley, 1996; Deci & Ryan, 1991; Gill & Holton, 2006; Lea et al., 2003; McCombs, 1993; Sally, Gauci, Dantas, Williams, & Kemm, 2009). Several attempts have been made to show the success of the student-centred teaching approach on student learning performance, particularly the positive effect of such approaches on students' cognitive and affective outcomes (e.g.,

Barraket, 2005; Bozin-Mickovic, 1997; Darling-Hammond, 1994; Deboer, 2002; Griffiths et al., 2007; Lord, 1997; Slavin, 1996; Stewart, 1997; Wenglinsky, 2004). Other than the study of the effective impact on student learning motivation and performance, there have also been several studies which have portrayed student-centred learning environments as being more effective than teacher-centred learning environments (Deboer, 2002; Entwistle, 2003; Gow & Kember, 1993; Kember, 1997; Cheng & Mok, 2008). A teacher-centred learning environment, or traditional instruction methods, are said to have discouraged students from adopting a deep approach to learning (Entwistle, 2003; Gow & Kember, 1993).

There have been several studies conducted in teacher education programmes focused on teaching approaches (e.g., Bansberg, 2003; Brindley, 1996; Quaintance, 2006). Brindley (1996) conducted a qualitative study to examine to what degree pre-service teachers acquired a constructivist student-centred perspective in their teacher education coursework, which aspects of constructivism were manifest in their classroom practice, and which factors influenced their decision to utilize constructivism. Research findings indicated that the pre-service teachers in this study were able to build an understanding of constructivism. The participants were able to use constructivism in their classroom practice.

The findings are congruent with a study conducted by Quaintance (2006). Quaintance's (2006) study also revealed that pre-service teachers valued the characteristics of constructivism. The findings revealed that the students developed an appreciation for constructivist practice, realized the importance of student-centred environments, came to value collaborative learning and social interaction, and moved away from the view that learning is acquiring facts towards the view that learning is constructing knowledge. The students indicated that the course content was interesting and relevant. Similarly, Bansberg (2003) also discussed the success of the implementation of Learner-Centred Principles (LCP) to pre-service teachers. Bansberg's (2003) study revealed that LCPs supported active student learning, connecting new learning to prior learning, stimulating interest, providing student choice and control, and adaptation to individual developmental differences.

However, despite successful student-centred approaches, the Western literature also revealed some debate in regard to this issue. Some educational researchers did have criticisms of the student-centred approach to teaching. A number of studies have found

that teacher-centred instructional methods are more efficient because the teacher-centred approaches may not lead to confusion or misconceptions in regard to material, in comparison to the student-centred approach (Chall, 2000; Moreno, 2004; Schauble, 1990; Singley & Anderson, 1989). Other researchers present a case for a teacher-centred approach and against student-centred instruction. For example, previous research findings present the case of student-centred education that may bring about early misconceptions in regard to information (Cronbach & Snow, 1977; Klahr & Nigam, 2004; Mayer, 2004; Shulman & Keisler, 1966). These misconceptions may prompt students to become frustrated and confused (Schauble, 1990).

The other criticism is that the student-centred approach provides minimally guided instruction which hinder students from getting effective learning (Cronbach & Snow, 1977; Klahr & Nigam, 2004). There are some researchers who suggest that learners are more successful with direct instruction related to the concepts and procedures required for various subject matter domains (e.g., Klahr & Nigam, 2004; Mayer, 2004; Shulman & Keisler, 1966). Direct instructional guidance is described as the provision of explicit information that fully explains the concepts and procedures that students are required to learn (Kirschner, Sweller, & Clark, 2006). Several studies have revealed that student-centred instructional methods (i.e., inquiry learning or discovery learning) are less efficient than direct, teacher-centred instruction (Chall, 2000; Moreno, 2004; Schauble, 1990; Singley & Anderson, 1989). For example, a recent study carried out by Klahr & Nigam (2004) found that science students learn better when their teacher had employed teacher-centred direct instruction instead of minimally guided instruction. Consistent with this finding, Cronbach & Snow (1977) assert that direct instruction is superior to minimally guided instruction. More specifically, they found that highly organized learning environments that include lecture and explicit provision of information produce a higher level student achievement than do minimally guided classrooms (Cronbach & Snow, 1977). Clark (1989) went one step further and proved that minimally guided instruction not only results in less positive student outcomes, but also causes measurable loss of learning.

2.7 Identification of areas for further research

From the critical reviews and analyses presented in this research, it can be noted that findings from previous Malaysian studies suggest that there is still significant diversity in the teaching approaches being used by Malaysian teachers. One group of studies

suggests that teachers are still implementing teacher-centred approaches in their classroom teaching, even though the Ministry of Education has outlined the implementation of student-centred approaches in teaching and learning. The other group acknowledges that the student-centred approaches are being implemented in school and higher institutions. The findings from both camps have generated ongoing debates with regard to teaching and learning approaches in the Malaysian education system. I would argue that, in the Malaysian context, based on the empirical data, existing literature on the education system in Malaysia, the teaching approaches at all levels of education are still mainly teacher-centred approaches or a mixture of approaches that are mainly teacher-centred with some being student-centred.

Moreover, although there have been some studies carried out on teaching and learning methods (e.g., Ahmad et al., 2005; Ismail & Alexander, 2005; Konting, 1998; Tamuri, Che Noh, Abdul Razak, Abdul Ghani, & Ismail 2010), they focused on secondary school teachers and secondary school students. However, even though there have been some studies focused on Malaysian teacher education programmes, none of those studies have looked into the experiences of teaching and learning from the perspectives of both teacher educators and students. All the studies (Kamaruddin & Hazni, 2011; Luan et al., 2006; Mahamood et al., 2009; Neo & Neo, 2009; Zubir, 1988) were carried out among education students only, thus excluding teacher educators. Furthermore, all the studies conducted on the teacher education programme employed either a quantitative method or a mix method. None of the studies employed a qualitative study focussing on the perspectives of both the teacher educators and the education students.

Moreover, analyses of several previous studies from Islamic countries have revealed an on-going debate among Muslim teachers and students on the acceptance of student-centred learning. However, all of the studies mentioned earlier focused on either student perspectives (e.g., Ann Brosseau, 2000; Sajjad, n.d.; Zarei & Esfandiari, 2008), or teacher perspectives (e.g., Iqbal et al., 2009; Lubis et al., 2011; Mustafa & Cullingford, 2008; Salimi & Ghonoodi, 2011). Moreover, most of the studies focused on schools (e.g., Iqbal et al., 2009; Lubis et al., 2011; Mustafa & Cullingford, 2008; Salimi & Ghonoodi, 2011) and generally used a quantitative research method.

In addition, while Western literature has identified various perspectives and issues on student-centred and teacher-centred approaches, most of the studies have focused on schools (e.g., Deboer, 2002; Scott, 2008; Singer & Moscovici, 2008), and higher

education in general (e.g., Entwistle, 2003; Estes, 2004; Gow & Kember, 1993; Griffiths et al., 2007; Hesson & Shad, 2007; Lea et al., 2003; Lord, 1997) rather than on teacher education programmes. Although some studies (e.g., Bozin-Mirkovic, 1997; Brindley, 1996; Dunn, 2008; Stewart, 1997; Quaintance, 2006) have attempted to focus on teacher education programmes, they have not incorporated the perspectives of both teacher educators and education students regarding teaching and learning approaches.

My study is an attempt to fill the research gaps identified above. It aims to present a contemporary Islamic Malaysian perspective on teaching and learning since further research that does not focussed on solely values that are Confucian is needed in order to investigate these issues in Asian/Islamic contexts. My study employs a qualitative approach to explore the teaching and learning experiences of both the teacher educators and the education students in a Malaysian teacher education programme. Thus, the study intends to examine which teaching approaches Malaysian teacher educators employ in their teacher preparation programme, and which learning approaches education students experience and adopt for themselves.

2.8 Chapter Summary

Education research over the last few decades has focused on the debate over which teaching approaches bring about effective student learning, the teacher-centred or the student-centred or a mixture of both teacher-centred and student-centred. I would argue that there is a need to examine this issue in a Malaysian Islamic and cultural context as different religions and cultures have different values that have a strong influence on educational practice. It is crucial to examine Malaysian teachers and student beliefs since they are the key elements for Malaysian educational change, and to ensure the effectiveness of ministry endeavours to adopt a student-centred learning approach.

As discussed previously in this chapter, the amount of literature in regard to Malaysian Islamic learning culture is inadequate compared to that of Eastern or Asian cultures, and the largest body of literature on Eastern or Asian learners concerns Chinese learners. Although Chinese Confucian values may influence the Malaysian educational context, Malay Muslim people are the dominant group in Malaysia and Islamic values have a big influence on all aspects in their lives, including education. This is reflected in the National Education Philosophy that emphasizes religious principles and values. Moreover, student-centred learning models that encourage active student involvement

and greater responsibility in learning may be appropriate for adoption in a Malaysian context. The models that are based on constructivist learning theories may have theoretical compatibility with Islamic teaching philosophy. These two learning theories, i.e., the constructivist and Islamic learning theories will be reviewed and analysed further in the next chapter (Chapter 3): Theoretical Framework for Teaching and Learning.

CHAPTER 3

THEORETICAL FRAMEWORK FOR TEACHING AND LEARNING

3.1 Introduction

In the literature, learning is defined both as a process and a product. It is a process of acquiring knowledge or information, storing information, acquiring skills that can be retained and applied as necessary, making sense or abstracting meaning by relating parts of the subject matter to each other and comprehending the world by reinterpreting knowledge (Ramsden, 2003). This learning process results in an outcome or, the formation of product. The product changes in behaviour or understanding. The focus of learning leads us to the realm of learning theories (Merriam et al., 2007). Even though theories on education, teaching and learning are prevalent, there is no single learning theory that can define all aspects of learning (Quinn, 1995).

In the context of this research, learning is viewed from the perspectives of two learning theories, namely, Constructivist Learning Theory and Islamic Learning Theory. This chapter will review, analyse and critique these two learning theories which underpin the research.

3.2 Teaching and learning from a constructivist perspective

This research study is based on a constructivist view point about the creation of knowledge. This is a philosophy that promotes human learning an active process and that the learner builds new knowledge upon the foundation of previous learning. In other words, learning is a contextualized process of constructing knowledge rather than acquiring it. Learning involves “constructing, creating, inventing and developing our own knowledge” (Marlowe & Page, 1998, p. 10); individuals do not passively acquire or absorb new knowledge (Brooks & Brooks, 1999; Duffy & Jonassen, 1992; Hein, 1991; Kember, 1997; Krause, Bochner, & Duchesne, 2003). Instead, new information is actively constructed by each individual (Brooks & Brooks, 1999; von Glasersfeld, 1996). Duffy and Jonassen (1992) further explain that these theories stand in contrast to objectivism, which suggests that knowledge is constructed and modified by individuals through their interactions with the world around them, rather than existing in the world

as independent objects of truth. These perspectives of constructivist learning guide my study as in my view; teacher and student perceptions are constructed by relevant individuals. My study seeks to describe teacher and student perceptions of teaching and learning approaches by examining how the phenomenon is experienced and interpreted by the participants in the study.

Everyone has had different experiences in the world and, as a result, understandings and interpretations; a person's schemata of any concept cannot be exactly the same as anyone else's (Marlowe & Page, 1998). Each new construction of understanding will depend on, and be defined by, one's prior experience, knowledge and learning as well as the ability one has to accommodate and interpret discrepant data into existing understandings (Brooks & Brooks, 1999). According to Marlowe and Page (1998), constructivism is about: "thinking and analysing, not accumulating and memorizing" (p. 8), "understanding and applying, not repeating back" (p. 9) and "being active, not passive" (p. 9).

Thus, in constructivist learning, students play a larger role (Wilson, 1996) as "mentally active agents struggling to make sense of their world" (Pines & West, 1986, p. 584). They are expected to actively construct, or build, new knowledge based upon past and current knowledge, and do not "passively acquire or absorb a new knowledge or copy the understandings of others" (Simon & Shifter, 1991, p. 310). In order to support students in being active learners, the constructivist learning environment requires teachers to take on a new role in encouraging students to explore their world and knowledge (Moore, 2000). In other words, the teacher's role changes from that of being the main agent in the classroom to being its facilitator.

3.2.1 Constructivist learning environment

Wilson (1996) defined the constructivist classroom as a "place where learners may work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem solving activities" (p. 5). He stresses that students have more control in this environment and that the teacher takes on the role of a "coach and facilitator" (Wilson, 1996, p. 6). As Prawat (1992) stated, in the constructivist classroom, teachers and students actively engage in the in-depth exploration of important ideas from different subject-matter domains in dealing with knowledge and previous experiences.

The constructivist classroom well supports student-centred learning. Gibbs (1992) argues that in the student-centred learning environment, students are provided with greater autonomy and control over choice of subject matter, learning methods and pace of study. In other words, in student-centred learning, students are encouraged to actively expand and develop their knowledge and experience by connecting them with new learning and experience. In this sense, students are exposed meaningful learning through active activities that enable them to construct their own understandings and develop skills relevant to problem solving.

The review of the literature (Brooks & Brooks, 1999) reveals that there are general features of constructivist philosophy that reflect the student-centred approach, and make it different from the conventional teacher-centred approach. An analysis of the features suggests that the differences between these two methods can be understood with respect to their epistemological assumptions and approaches to teaching and these are presented in Table 5.

Table 5: The differences between traditional classrooms and constructivist classrooms

Traditional classrooms	Constructivist classrooms
<ul style="list-style-type: none"> • Curriculum is presented part to whole, which emphasis on basic skills • Strict adherence to fixed curriculum is highly valued • Curricular activities rely heavily on text books and workbooks • Students are viewed as ‘blank slates’ onto which information is etched by the teacher • Teachers generally behave in a didactic manner, disseminating information to students • Teachers seek the correct answer to validate students learning • Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing • Students primarily work alone 	<ul style="list-style-type: none"> • Curriculum is presented whole to part with emphasis on big concepts • Pursuit of student questions is highly valued • Curricular activities rely heavily on primary sources of data and manipulative materials • Students are viewed as thinkers with emerging theories about the world • Teachers generally behave in an interactive manner, mediating the environment for students • Teachers seek the student’s point of view in order to understand the student’s current conceptions for use in subsequent lessons • Assessment of student learning is interwoven with teaching and occurs through teachers observation of students at work and through student exhibitions and portfolios • Students primarily work in groups

Source: Brooks and Brooks (1999), p. 17

3.2.2 Some critiques of constructivist learning theories

Despite constructivist learning theories being accepted by many educationists, several criticisms have recently appeared in the literature challenging the theories (e.g., Fox, 2001; Phillips, 1995). Phillips (1995), for example, uses the words ‘the good, the bad and the ugly’ to critique constructivism. Phillips (1995) praises the good side of constructivism for its emphasis on learners’ active participation in learning. However, Phillips (1995) states that the bad side of constructivism lies in its tendency towards epistemological relativism, where no statements are “objectively” true or false. It is doubtful that individual and social constructivism in the construction of learning leads to the view that truth is relative to a person or a culture. Lastly, the ugly face of constructivism is identified, i.e., the ‘quasi-religious ideological aspect’ (Phillips, 1995). He argues that from the divergence of constructivist views has emerged a dualist position.

Phillips (1995) characterized constructivism as a ‘powerful folktale’ and a ‘secular and sectarian religion’ and criticized the tendency towards relativism and the abandonment of rational and substantial justification.

Across the broad field of educational theory and research, constructivism has become something akin to a secular religion... constructivism, which is, whatever else it may be, a “powerful folktale” about the origins of human knowledge. As in all living religions, constructivism has many sects—each of which harbours some distrust of its rivals. This descent into sectarianism, and the accompanying growth in distrust of nonbelievers, is probably the fate of all large-scale movements inspired by interesting ideas; and it is the ideological or ugly side of the present scene, which is reflected in my article’s title. (Phillips, 1995, p. 5)

However, Phillips (1995) further commented “Constructivism also deserves praise for bringing epistemological issues to the fore in the discussion of learning and the curriculum” (p. 11). This suggests that the quasi-religious or ideological aspect of constructivism is closely related to human epistemology and the desire for prescribing it. It is probably because of the initiative of constructivism to prescribe the ‘truth’ about human epistemology and about the universe as the object of knowing, that it has become an exclusive church of thinking.

Another critique came from Fox (2001). Fox (2001) argued that many of the principles of constructivism were “implied by common sense, broadly empiricist accounts of learning” (p. 23). Theoretically, Fox (2001) does not accept the mere emphasis on learners’ active participation too easily dismissing the roles of passive perception, memorization, and all the mechanical learning methods in traditional didactic lecturing.

3.2.3 Socio-constructivist learning theories

The social context of my study is Malaysia, which has a multi-cultural society. The main ethnic groups are the native Malays, followed by the Chinese and the Indians. These ethnicities retain their religions, customs and lifestyles. Although all ethnicities have differences in tradition, they socialize with each other in harmony. My research is based on the belief that individual perceptions are a reflection of both personal characteristics and larger societal forces. Teacher and student perceptions are socially constructed and therefore reflect the broader socio-cultural context in which the individual is located. The main notion of socio-constructivist theories that teaching and learning perceptions are actively constructed and constantly evolving as a result of social interaction in a particular environment of culture (Vygotsky, 1962; Woolfolk, 2001) has guided my study. The socio-constructivist theories place the social environment at the very centre of learning, and without which “the development of the mind is impossible” (Cole & Wertsch, n.d., p. 4).

Socio-constructivist learning theories are based on Lev Vygotsky’s theory. The theory proposed that learning is not just an individual matter, but that it develops within a social environment (Vygotsky, 1978). The theory emphasizes the importance of student learning through interaction with other learners (Jadallah, 2000; Low, 2003; Maypole & Davies, 2001; Woolfolk, 2001). According to the theories, learning does not take place on its own but begins when people come together to contribute concepts, ideas, facts, skills, and attitudes (Crain, 2004; McCown et al., 1999; O’Neill & McMahon, 2005; Wells, 2001).

Vygotsky’s (1978) theory requires social interaction and dialogue in that “the understandings and capabilities that emerge from social interaction with a group are greater than those that are possible at an intrapersonal level” (Light, 2008, p. 25). The most significant socio-constructivist tool is language. The theory, therefore, acknowledges the role of language in mediating learning, in particular the processes of

human dialogue, interaction, negotiation, and collaboration (Duffy & Cunningham, 1996; Karpov, 2003; Rogoff, 1990). As Prawat and Floden (1994) argue that through the use of language and other artefacts, society shapes the individual's view of reality. In other words, through language, members of a community learn to adapt the world in similar ways.

For Vygotsky (1962), the development of language, articulation of ideas and culture are central to learning and development (Woolfolk, 2001). Humans are the only species to have created culture and every child develops in the context of a culture. Therefore, a person's learning development is affected to either a small or large extent by culture and family environment. Vygotsky focuses on the notion that humans use tools and sign systems in order to transfer themselves to reshape cultural forms of society (Woolfolk, 2001).

Vygotsky's perspectives informed the research study that was conducted in the Malaysian context. Vygotsky's (1962, 1978) theory addressed four new areas of reductionism in psychology that bring together a unified notion of how students learn and develop, that is, of reduction to the rational, individual, internal and innate (del Rio & Alvarez, 1995). In regard to the rational, Vygotsky argued that emotion is a crucial part of understanding consciousness. He emphasized "the development and cultural construction not only of meaning, but of emotion and directivity" (del Rio & Alvarez, 1995, p. 386).

My analysis of the literature (del Rio & Alvarez, 1995) provides support for the point that Vygotsky's theories are viable in the Malaysian context. The Malaysian education system emphasizes holistic and integrated learning through its National Education Philosophy. The integrated approach consists of a combination of the intellectual, spiritual, emotional and physical aspects. This combination allows the development of individuals without ignoring the cultural, social, and historical backgrounds of the students. Moreover, the Malaysian education system expects every student to grow into a socially responsible individual in order to form a moral and civilised society,

... to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards and who are responsible and capable of achieving a high level of personal well-being, as well as being able to

contribute to the betterment of society and the nation at large. (Ministry of Education, 1990a, p. 5)

Therefore, I would argue here that Vygotsky's theories emphasizing the importance of language and action, as tools of mediation for learning within a cultural context, are appropriate and useful in the Malaysian context. Vygotsky (1978) recognised language as both a psychological function and a cultural tool with which students can communicate thoughts as well as emotions to themselves and others. This is in agreement with the National Education Philosophy. The principles of integration that are embedded in the National Education Philosophy will be accomplished through Vygotsky's theories that acknowledge the role of integrated psychological development, while recognising the cultural, social and historical perspectives.

As a learning theory that emphasizes the strongly socially-rooted role of instruction and its broad pedagogical implications, Vygotsky (1962, 1978) presents an additional concept that is of particular relevance to the classroom practitioner. This concept is his notion of the 'Zone of Proximal Development' (ZPD). Vygotsky describes the 'Zone of Proximal Development' as "the distance between the actual development levels as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). The concept claims that students are able to construct and develop new concepts and ideas regarding new aspects that they cannot understand on their own, with specific assistance and guidance from others such as teachers and adults (Woolfolk, 2001). In other words, the concept describes the kind of environment that enables students to develop cognitively. When encountering a new environment, students need new, or more mature, psychological tools and mental structures to help them achieve success in the learning activity (Chaiklin, 2003; Karpov, 2003).

3.2.4 Some critiques of Vygotsky's theories

While Vygotsky's theories are accepted by many educationists to be the origin of social constructivism, other scholars claim that he cannot be said to be 'social' enough. Lave and Wenger (1991), for example, in postulating their situated learning theory, criticize Vygotsky's concepts of learning internalisation, generalisation, and scientific concepts,

for they contain only “a small ‘aura’ of socialness that provides input for the process of internalisation, viewed as individualistic acquisition for the cultural given” (p. 47).

Similarly, Matusov and Hayes (2000) also criticized Vygotsky’s theories from a current sociocultural perspective. They argue that Vygotsky’s approaches to human development tend to be “universalist (i.e., claiming that there is only one advanced direction for development), decontextual (i.e., claiming there are general developmental mechanisms/skills that are independent of the context of their use), ethnocentric (i.e., claiming deficits in values and practices of the other, not own, communities), and adultocentric (i.e., claiming deficits in values and practices of children when they are not comprehensible by adults)” (Matusov & Hayes, 2000, p. 216). In fact, sociocultural perspectives highlight the issues of “multiplicity of developmental directionality and its socially constructive, relational, negotiable, and emergent character” (Matusov & Hayes, 2000, p. 216).

Matusov and Hayes (2000) further critiqued Vygotsky’s concept of internalisation, how the “social plane” becomes the “individual plane”. They describe the way in which, from a sociocultural perspective, “the social is neither just an individual’s environment nor a plane of actions, but the aspect of any human activity together with other aspects such as the individual, cultural and historical” (Matusov & Hayes, 2000, p. 217). Matusov and Hayes (2000) argue that Vygotsky’s perspective that saw human development as a decreasing gap between function of individual’s actions and cultural mediation established an unbridgeable dualism between the individual and the social.

Comments have also been made by Cobb (1996), Fox (2001) and Resnick (1996) concerning Vygotsky’s concept of the role of social collectivity in individual learning and development. The critiques are, that: (1) it emphasises the role of the social and the collective, but ignores the role of the individual (Resnick, 1996); (2) it fails to address how the external world is bridged across to the internal mind (Cobb, 1996; Fox, 2001) and (3) it implies a “blinkered social consensualism” when it emphasizes relativism and rejects empiricism or common sense realism (Fox, 2001, p. 27).

Despite critiques of Vygotsky’s constructivist learning theories, I recognise an opportunity to use his theories in the research context of Malaysia. Malaysia is a multicultural and multiethnic country. The varieties of religion, language and culture are shared by people who share the same activities and who are engaged in similar

social practice. Thus, the central concept of the constructivist learning theories, that learning is a cultural practice or practical activity which is mediated by language (Rogoff, 1990), has helped in the designing of my research. My study aims to explore Malaysian teaching and learning experiences which are mediated by Malaysian social context and cultural beliefs, i.e., Islam. This is the main rationale for the choice of socio-constructivist learning for the thesis. Moreover, I hope to use these theories which will be coupled with Islamic learning theories for better understanding of the research participants' perspectives on teaching/learning. This usage could assist in further interpreting the data from the study. Beside the constructivist learning theories, my research is also based on Islamic perspectives of teaching and learning. The following sections will be dedicated to the philosophical and conceptual frameworks of Islamic learning theories.

3.3 Teaching and learning from Islamic perspective

In this section, the Islamic philosophy of education will be presented by analysing the concept of knowledge, the definition of education from an Islamic perspective, the aims of education, and its methods of instruction. It is believed that this framework will assist me in the bringing into focus of the significant parts of Islamic philosophy. In the first section, the concept of knowledge in Islam is first presented.

3.3.1 The concept of knowledge

Seeking knowledge has been an integral part of the Islamic tradition. The requirement for Muslims to seek knowledge is explicitly stated in a verse from Prophet, "seeking knowledge is obligatory for every Muslim" (in Al Ghazali, 1997a, p. 8). Al-Ghazali (1997b) perceived that the pursuit of knowledge should be one's highest priority, as "knowledge will not give you of itself unless you give it yourself utterly" (Al-Ghazali, 1997a, p. 62). This provides the tenet that a good education is acquired by a motivated pursuit of knowledge.

Knowledge (*Ilm*) is a sacred concept deriving from God, its Ultimate Giver (Al-Attas, 1990). Epistemologically, knowledge has been defined as "arrival in/of the soul of/at the meaning of a thing or an object" (Al-Attas, 1990, p. 17). Meaning (*Ma'na*) here refers to its authentic or correct versa as determined by the Islamic vision of reality and truth as projected by the Qur'anic conceptual system (Al-Attas, 1990). Thus, according to Islamic world view, the goal for acquisition of knowledge must necessarily be "the

recognition of the proper place of God in the order of being and existence” (Al-Attas, 1990, p. 19).

From early on, Islam emphasized two types of knowledge, revealed and earthly (Nasr, 1981). Revealed knowledge comes straight from God and earthly knowledge is to be discovered by human beings themselves. Islam considers both to be of vital importance and directs its followers, both men and women, to go and seek knowledge. The Qur’an is considered as the core of knowledge and is the major “power” or force to legitimize, produce, and operationalize truth in society (Nasr, 1981). The Qur’an, therefore, is believed to be divine; it is the primary source of knowledge. While Muslims believe that the Qur’an is the perfect word of God, sacred and cannot be changed, Muslims also are encouraged to seek for earthly knowledge, as it is very important to compliment the knowledge revealed by God in the Qur’an and help Muslims to live productive and good lives in this world.

There have been several classifications of knowledge by Muslim scholars, i.e., (1) *fard ‘ain* and *fard kifayah* by Al-Ghazali (d.1111), (2) *ulum naqliyyah* (revealed science) and *ulum aqliyyah* (rational science) by Ibn Khaldun (d. 1406), and (3) perennial knowledge and acquired knowledge by Hasan Langgulung (d. 2008). While *fard ‘ain* refers to doctrinal and ritual obligations which must be testified to, and practiced by, every adult Muslim male and female in order to legitimize his/her Islamic faith, *fard kifayah* refers to collective obligations that must be practiced by at least one unit of a group of believers. *Ulm aqliyyah* and acquired knowledge include rational, intellectual, and philosophical science. Nevertheless, there is broad consensus among Muslim scholars that in any educational system which is declared to be Islamic, it is knowledge of the *fard ‘ain* and *‘ulum naqliyyah* that should be prioritized as forming the core of the curriculum (Al-Attas, 1979, 1990; Ishak, 1995) as it is obligatory for every Muslim.

In summary, knowledge (*‘Ilm*), either from God (revealed knowledge) or discovered by human beings themselves (earthly knowledge) plays a central role in the Muslim attitude toward life. In fact, Husain and Ashraf (1979) argue that: “... because God is the source of knowledge, by knowing more they [Muslims] felt have drawing near to God” (p. 11).

In the following sections, the definition and aims of education in Islam will be reviewed and analysed. It is important to know the concept of education from Islamic perspective in order to understand the Islamic teaching and learning philosophy.

3.3.2 Definition of education

Three Arabic words for education provide a useful starting point for the analyses of the Islamic concept of education. Among them are *tarbiyah*, *ta'lim*, and *ta'dib* (Al-Attas, 1979). In contemporary Arabic usage, the word *tarbiyah* is extensively used to denote education, but encompasses more than just sitting in a classroom and gaining knowledge from books. *Tarbiyah* (to grow, increase) refers to the development of individual potential and to the process of nurturing and guiding the child to the maturity (Al-Attas, 1979; Halstead, 2004). Its meaning also includes social studies and educational discipline. Meanwhile, Ibnu Manzur (as cited in Roald, 1994) offers several terms as synonyms for *tarbiyah*, including; increase, formation, nourishment, saving, guarding, and growing/let grow. Roald (1994) explains that *tarbiyah* in the Islamist sense relates to a lifelong process. The definitions explicitly suggest that students' learning should include several characteristics including enhancing individual development, guiding, nurturing, and growing.

Meanwhile, *ta'lim* (to know, be informed, perceive) relates to the kind of instruction, telling and informing that involves mental activity, and results in cognition or knowledge which the learner does not internally possess (Al-Attas, 1979; Halstead, 2004). Al-Attas (1979, p. 1) refers to *ta'dib*, as “encompassing the spiritual and material life [of a person] that instils the quality of goodness that is sought after”. *Ta'dib* is further described as a term that means to discipline and train the mind and soul (Halstead, 2004). It is a process where the good qualities and attributes of the mind and soul are required, a process for performing the correct in opposition to an erroneous action, of the right or the proper against that which is wrong. This is supported by Husain (2001) who stressed that the teacher does not “merely fill the pupil's head with knowledge, but also needs to train and discipline [the pupil's] mind...to prepare him for practical life and to raise his intellectual level” (p. 702).

Nasr (1987) argues that from an Islamic education perspective, a teacher has an ethical duty as a *murabbi* (an educator) and not only as a *mu'allim* (an instructor or a transmitter of knowledge). A teacher is also a *muaddib* (a trainer of soul and

personality). A teacher should not be only concerned with transmission of skills and knowledge but also the inculcation of *adab* which is the discipline of mind, body and soul (Nasr, 1987). This suggests that a teacher is, at the same time *murabbi* (an educator), *mu'allim* (an instructor or a transmitter of knowledge) and *muaddib* (a trainer of soul and personality).

The concept of education will not be complete without knowing the aims of education. Hence, in the following section, aims of education in Islam are analysed.

3.3.3 Aims of education

The fundamental objective of education from an Islamic perspective is the balanced and integrated growth of individuals. Education in Islam represents an approach that aims to achieve a perfect and balanced human being. The training of a person as a whole being should necessarily be aimed at his spiritual, intellectual, rational and physical aspects, as being human is made up of a dual nature of spirit and body (Hashim, 1999). The spiritual faculty is known as the *ruh* (soul), *'aql* (mind or intellect), *qalb* (emotion), or *nafs* (self) according to the function that is ascribed to it (Hashim, 1999). *'Aql* (mind or intellect), unique to human beings, elevates them above the rest of creation (The Qur'an, 95:4). The soul could be elevated to the noblest of positions but it could also be debased to the lowest of the low (The Qur'an, 89: 25; 95:5).

Ashraf (1985) argues that the purpose of education in Islam is to develop the whole person in a way that all knowledge acquired by him will become organic to his total personality. Thus, the main purpose of education in Islam is to provide guidance to individuals in order to assist them to grow into good people. Halstead (2004) suggests that the key aim of education is to guide, as people are not able to gain their ability and potential automatically. This has been supported by Yaakub (2009) who argues that through education, individuals achieve self-confidence and self-dependence, and also become strong physically and mentally.

The Islamic educational goal was summarized by Muslim scholars at the First World Conference on Islamic Education in Mecca, Saudi Arabia, in 1977:

Education should aim at the balanced growth of the total personality of Man through the training of Man's spirit, intellect, rational self, feelings and bodily senses. Training imparted to a Muslim must be such that faith

is infused into the whole of his personality and creates in an emotional attachment to Islam and enables him to follow the Quran and the *Sunnah* and be governed by the Islamic system of values willingly and joyfully so that he may proceed to realization of his status as *Khalifat* Allah to whom Allah has promised the authority of the universe; ... Education should promote in man the creative impulse to rule himself and the universe as a true servant of not by opposing and coming into conflict with Nature but by understanding its laws and harnessing its forces for the growth of a personality that is in harmony with it. (Al-Attas, 1979, p. 158)

I concur with the view of Al-Attas (1979) that the ultimate goal of education in Islam is to produce a good person. A person is considered as a good person when he acknowledges that he has been created to serve God and be His vicegerent. Thus, in order to achieve this goal, education should cater for the integrated and balanced growth of man in all aspects of his nature, namely: intellectually, spiritually, morally and physically through effective instruction method. Thus, in the following section, the early methods of instruction in Islam are reviewed and analysed.

3.3.4 Methods of instruction

Islamic education philosophy originated with informal channels connecting the Prophet Muhammad with a close circle of relatives and companions in the holy city of Mecca. The history of education in the time of the Prophet and Islamic tradition shows a variety of instruction methods such as *halaqah* (semi-circle), memorization, *kulliyyah* (lecture), *muhadathah* (discussion), dialogue, *mujadalah* (debate), experiencing, and *rihlah* (travel) were used (Ahmed, 1968; Hisham, 1994; Ishak, 1995).

The oldest place of learning during the time of Prophet was the *masjid* (mosque). The basic format of *masjid* education was *halaqah* (semi-circle), portrayed by the Prophet's companions who sat around him listening to his exposition of the sacred texts and scriptures (Ahmed, 1968; Ishak, 1995). These patterns of learning were dominant during the Prophet's life and subsequently during the time of his companions. In *halaqah*, students would normally sit around the teacher in a semi-circle. The teacher either stood or sat on a dais, cushion, or chair as he leaned against the wall or pillar (Ahmed, 1968).

The prophet used to sit in the mosque of Madinah surrounded by his followers in the form of *halaqah* while he was instructing them by repeating his *hadith* three times until they had memorized it (al-Bukhari, n.d., vol. 1, 76, 77, and 81). The development of the memory and memorization was a constant characteristic of the Islamic education which is centred on the Qur'an. Ibnu Qutaibah Al-Dinouri (Quoted in Al-Abrasyi, 1974, p. 183) argues that "the first rule of learning is silence, the second, good listening, the third, memorizing, the fourth reflecting, and the fifth, propagating".

Memorization with understanding, was among the common instructional methods employed in traditional Islamic education beside other methods, such as; repetition, *mudhakarrah* (reciprocal action to aid in memorising), note-taking, lecturing, the scholastic method of dialecticism (*jadal*), differences of opinion in the law (*khilaf*), and disputation (*munazarah*) (Hashim, 1994). I would argue here that memorization in this context is not necessarily rote learning but is stimulated by intelligence and understanding. Several Western writers also agree that memorization is incorporated into learning strategy in order to gain understanding (Biggs, 1994; Kember & Gow, 1990, 1991; Lee, 1996; Marton et al., 1996; Pratt et al., 1999). Moreover repetition and memorization that are usually associated with rote learning are very much part of meaningful learning (Lee, 1996; Marton et al., 1996).

The review of literature further shows that the Prophet had adopted 21 teaching techniques to support his teaching method (Al-Bukhari, n.d.). The techniques included 1) not boring the listener; 2) speaking at the intellectual level of the listener; 3) using questions and debate; 4) using analogies; 5) using drawings; 6) joining statements and hand movements while talking; 7) using an exhibit; 8) answering questions before they are asked; 9) answering questions by providing more than what was asked for; 10) turning a question to something that was not asked for because of the immense benefit behind the quality that it has been turned into; 11) letting others answer the question first occasionally; 12) taking advantage of special occasions; 13) using playful fun; 14) using an oath; 15) to repeat, repeat and repeat what is being taught; 16) summoning forward the listeners without telling them why; 17) holding the shoulders of a companion to get their attention; 18) using cliff hangers; 19) teaching people using stories and the accounts of the people that came before; 20) paying attention to students and give them advice; and 21) using anger when it is appropriate.

From the analysis, among the 21 teaching strategies adopted by the Prophet, there were several active teaching techniques (e.g., the use of questions and answers, the use of an exhibit, debate, the use of playful fun and stories). This suggests that the Prophet acknowledges the importance of active teaching and learning although he also employed traditional methods.

The analyses of literature further indicate that interactive methods of teaching were adopted in Islamic education tradition including observation and experimentation, reason and reflection; problem solving, dialogue, discussion, application, independent learning, and project based learning (Abdullah, 1994; Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978). These methods have been used by several Islamic scholars such as Al Biruni, Imam Abu Hanifah, Imam Malik, Abu Hasan al-Basri, and Wasil Ibn ‘Ata’ as teaching tools for their students (Abdullah, 1994; Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978). Moreover, as discussed and analysed in the previous Chapter 2 (section 2.6.2), several previous studies have supported the understanding that Islamic education strongly recommends teaching methods that are consistent with student-centred approaches (e.g., Sajjad, n.d.; Salimi & Ghonoodi, 2011; Zarei & Esfandiari, 2008).

The discussion in this section suggests that methods of instruction in Islam contain both, traditional and active teaching methods. This is not surprising as the Islamic philosophy of education emphasizes that learners should be active in their learning. Al-Ghazali (1997b) recognized that, according to Islam, knowledge has two expressions: 1) theory (knowing or ‘*Ilm*’); and 2) practice (doing or ‘*amal*’). These two dimensions are inseparable. Al-Ghazali (1978) claimed that “nobody can be learned unless he puts his learning into practice” (p. 71). He believed that “doing or ‘*amal*’” includes not only those manifestations of the five senses, but the practices of the heart as well. He emphasized that learning something without putting it into practice invalidates what has been learned.

Most importantly, the Islamic perspective of education maintains that true knowledge is the marriage of active virtue and knowledge, which requires both knowledge and practice. Abou-Hatab (1997) argues that higher cognitive skills could be developed through practicing and training in critical analysis by exploring, discovering, and using new ideas and tasks. I would argue that this can be achieved with the acknowledgement of individual differences. In regard to individual difference, Islamic philosophy

emphasizes the importance of adopting active teaching methods that are suited to a learner's ability, level of experience, and educational needs (Al-Attas, 1979; Al-Ghazali, 1978; Nasr, 1987).

3.4 Theoretical compatibility between Islamic learning theories and constructivist learning theories

Arguments in this chapter about Islamic teaching and learning show that, despite the knowledge (*'Ilm*) of being a sacred concept deriving from God (Al-Attas, 1990; Ishak, 1995), there is also earthly knowledge, such as *ulum aqliyyah* (rational science) that has to be actively discovered by human beings themselves (Al-Attas, 1979, 1990; Nasr, 1981). This indicates that Islam recognises learning as an active process and, therefore, that teachers should encourage and support learners to be active in knowledge construction. Theoretically, this seems to be compatible with the central principles of constructivist learning theories, active knowledge construction (von Glasersfeld, 1984; Vygotsky, 1962; Woolfolk, 2001), where students are active learners who do not passively acquire or absorb a new knowledge (Brooks & Brooks, 1999; Duffy & Jonassen, 1992; Hein, 1991; Kember, 1997; Krause et al., 2003). This has been acknowledged by some Islamic writers (e.g., Ann Brosseau, 2000; Lubis et al., 2011; Salimi & Ghonoodi, 2011; Zarei & Esfandiari, 2008).

Another argument in this chapter further indicates that the role of a teacher in Islam is as a *murabbi* (an educator), *mu'allim* (an instructor or a transmitter of knowledge) and *mu'addib* (a trainer of soul and personality) at the same time (Al-Attas, 1979; Halstead, 2004; Husain, 2001). In other words, a teacher, from an Islamic perspective, is not only responsible for transmitting knowledge to students, but also has the duty to build a student's personality and character, by facilitating, motivating and guiding their learning process. This means that the roles of a teacher in Islam as a facilitator and guide in developing and building student knowledge and personality also tends to, theoretically, be compatible with constructivist learning theories. According to constructivist learning, teachers have to take on new roles as facilitators of learning, rather than transmitters of knowledge (Brooks & Brooks, 1999; Moore, 2000; Wilson 1996). They are responsible for the acknowledgement of students' individual differences for building positive teacher-student relationship (Brandes & Ginnis, 1986; Lea et al., 2003; Rogers & Frieberg, 1994). Teachers should also encourage students to

explore their world and knowledge being active in the learning process (Brooks & Brooks, 1999; Pines & West, 1986; Simon & Shifter, 1991).

The last concept of Islamic teaching that seems to be theoretically compatible with constructivist learning is teaching method. Both Islamic perspective and constructivist perspective emphasize the importance of active teaching methods. Islamic teaching supports various active teaching methods being adopted. This can be traced back to the history of teaching instruction of the Prophet where he adopted various active teaching methods (Ahmed, 1968; Hisham, 1994; Ishak, 1995). Previous literature also reported that Muslim scholars (such as Al Biruni, Imam Abu Hanifah, Imam Malik, Abu Hasan al-Basri, and Wasil Ibn 'Ata') adopted interactive methods of teaching including observation and experimentation, reason and reflection; problem solving, dialogue, discussion, application, independent learning, and project based learning (Abdullah, 1994; Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978).

Constructivist learning theories also acknowledge active teaching methods such as dialogue, interaction, negotiation, collaboration, exploration of ideas and problem solving (Duffy & Cunningham, 1996; Karpov, 2003; Rogoff, 1990; Wilson, 1996). Therefore, it seems that this last concept, active teaching method, is also theoretically compatible with Islamic learning philosophy.

Table 6 presents a summary of my analyses of the compatibility of the Islamic and constructivism learning theories based on what have been presented and analysed in this chapter. The concepts analysed in Table 6 suggest that some tenets of constructivist and Islamic education principals may not be that different. Therefore, the compatibility of the Islamic and constructivist learning theories can be foreseen. In the Malaysian context, as an Islamic country, I would argue that most teachers and students wish for a transformation in education system which utilizes learning theories that suit their cultural and religion tradition context. Although there can be a critique of using a Western educational concept such as constructivism in an Asian context, the compatibility between these two theories can be the bridge to draw the two traditions together and as actually promoting similar educational approaches and goals.

Table 6: Theoretical compatibility between Islamic learning theories and constructivist learning theories

Key concepts	Islamic learning theories	Constructivist learning theories
Learning as an active process	The second type of knowledge, i.e., earthly knowledge has to be actively discovered and constructed by human beings themselves to compliment the knowledge revealed by God.*	Knowledge is not transferred passively, but is personally constructed. New meaning is actively assimilated into previous knowledge structures while encountering a new learning experience.
Role of teacher	A teacher is responsible for encouraging students to actively seek knowledge in order to raise their intellectual and spiritual level. A teacher plays the role as guide or facilitator** to assist students in their process to build character, knowledge and skill.	A teacher provides students with opportunities and guidance to construct and reflect on their own construction of reality. A teacher plays role as facilitator of learning rather than transmitter of knowledge.
Teaching methods	Various active teaching strategies that can support the two expressions of knowledge as delivering theory (knowing or <i>Ilm</i>); and participating in practices (doing or <i>amal</i>), such as questions and answers, demonstration, debate, the use of playful fun and stories, observation and experimentation, reason and reflection; problem solving, dialogue, discussion, application, independent learning, and project based learning.	Various active teaching strategies that enhance learners to actively construct or build new knowledge based upon past and current knowledge, such as problem solving, collaborative learning, independent learning dialogue, interaction, and negotiation.

*This excludes the first type of knowledge in Islam, i.e., revealed knowledge, which comes straight from God that is sacred and cannot be changed.

** In addition to their role as transmitters of knowledge.

3.5 Chapter summary

This chapter has reviewed and analysed two learning theories, i.e., constructivist learning theory and Islamic learning theory. These two learning theories have been applied in this current study. From both perspectives, meaning and knowledge are actively and socially constructed. These philosophies strongly underpin this study which reflects the importance of learners' traditional beliefs and cultural commitment in the development of meaning.

The chapter shows that constructivism is a theory of learning which holds that learning takes place on the basis of the previous social and cognitive experiences of the learner. The process of learning involves the construction of meaning regarding new phenomena using one's past experience and past knowledge while encountering new learning experiences. In this sense, learning becomes an active process rather than a traditional model.

Discussion on Islamic philosophy of education shows that the philosophy aims to produce individuals who, while serving God, are equipped to bear the responsibility of *khalifah* (vicegerent). In order to fulfil this aim, Islamic education should be developed to integrate a student's intellectual, spiritual, physical, and moral domains. Thus, Islamic education is concerned with theory and practice, and knowledge and action. In other words, according to the Islamic worldview, teaching and learning should be active process between learners and teachers.

This chapter further presents and analyses the compatibility between the Islamic philosophy and constructivist theories. The Islamic education philosophy includes students' learning as being didactic, acquiring, and active in the building of knowledge. The philosophy appears to be theoretically compatible with the notions of constructivist learning. The basic premise of constructivism is that individuals construct their own understanding of the world from previous experiences and past knowledge. Learning becomes an active process rather than passive traditional model. Constructivist learning appreciates that human learning is based on understanding, rather than knowing. Thus, to learn with understanding, students must make sense of what they studying by synthesizing new information and experience into the existing mental structure they already possess.

CHAPTER 4

EDUCATION IN THE MALAYSIAN CONTEXT

4.1 Introduction

In this chapter, Malaysia and its educational system are examined in order to provide the background of this research. The chapter begins with an overview of Malaysia's cultural, religious diversity and education system. Next, the country's educational system before independence will be discussed; this consists of a traditional Malay Islamic system and a colonial education system. Following this, the educational development after independence will be reviewed. Finally, several current developments, reforms and issues in Malaysia are also analysed and critiqued.

4.2 Overview of Malaysia

Malaysia is a Southeast Asian country with a population of 28,334,135 and is made up of thirteen states and three federal territories (Population and Housing Census of Malaysia, 2010). The South China Sea divides the country into the Malay Peninsula and Borneo, which are located to the West and East, respectively. The geographic position of Malaysia, located along the Straits of Malacca and the South China Sea, provides the country with economical and strategic importance (The World Fact Book, 2011).



Source: http://www.mymalaysiabooks.com/images/malaysia_states.jpg

The Straits of Malacca (which separate the Malay Peninsula and Borneo) serve as a passageway between the Indian and Pacific Ocean, thereby linking three of the most

populous nations of the world: India, Indonesia and China. As a result, historically, Malacca (Melaka) was not only a flourishing trading centre but was also important for spreading of the Islamic religion. Islam was introduced to the Malays by Indian and Arab merchants around the fourteenth century. Through the proselytizing activities of Muslim merchants in the prosperous Kingdom of Malacca, Islam spread to the surrounding region and became firmly established in the Malay Peninsula (Bureau of East Asia and Pacific Affairs, 2011).

Malaysia is a multi-cultural country consisting of three major ethnic groups, i.e., Malay, Chinese and Indian. The Malays are the dominant ethnic group in Malaysia. Each brings significantly different cultural beliefs, norms and practices. The diverse ethnic composition is reflected in many religious practices including Islam, Buddhism, Christianity, Hinduism, Confucianism and Taoism. The Malaysian constitution guarantees freedom of religion while making Islam the official religion of the country. The *Sultan* (King) is the head of the religion of Islam in each state. However, for those states not having a *Sultan*, the position of the head of the Islamic religion is held by the Yang di-Pertuan Agong. Yang di-Pertuan Agong is the Supreme Head of the Federation and the senior of the (willing and suitable) nine Malay sultans; he serves a five-year term. He is also the head of the religion of Islam in the Federal Territories. Today, approximately 61.3% of the population practices Islam; 19.8% practice Buddhism; 9.2% Christianity; 6.3% Hinduism; and 1.3% practice Confucianism, Taoism and other traditional Chinese religions (Malaysia Economic Planning Unit, 2011).

The Malaysian education system spans from pre-school to university. Pre-tertiary education (from pre-school to secondary education) is under the jurisdiction of the Ministry of Education (MOE) while tertiary education is under the responsibility of the Ministry of Higher Education (MOHE) (Ministry of Higher Education, 2011).

Children begin primary schooling at the age of seven for a period of six years. Primary schools are divided into two categories, the national primary school and the vernacular school. Vernacular schools use either Chinese or Tamil as the medium of instruction, whereas national primary schools use Malay as the medium of instruction for all subjects except English, science and mathematics. National-type schools are further divided into Chinese national-type schools and Tamil national-type schools. All schools use the same syllabus for non-language subjects, regardless of the language of instruction. Secondary education is conducted in secondary schools; this encompasses 3

years of lower secondary and 2 years of upper secondary education. Public secondary schools are regarded as an extension of the national primary schools. National secondary schools use Malay as main language of instruction. Upon completion of secondary education, students can opt to pursue 1 to 2 years of post-secondary education; this is the university entrance preparatory course (Ministry of Higher Education, 2011).

At the tertiary level, Malaysian institutions of higher learning offer courses leading to Certificate, Diploma, Degree and Postgraduate qualifications. Currently there are 20 public universities, 33 private universities and university colleges, 4 foreign university branch campuses, 22 polytechnics, 37 community colleges and about 500 private colleges (Ministry of Higher Education, 2011).

This section describes the main characteristic of Malaysia, its diversity, in terms of culture and religion among the members of its society. Whereas these diversities contribute to the richness of Malaysian culture, they also pose persistent problems associated with educational development. Malaya was colonised by the British from 1874 to 1957 (Shah, 2007). The arrival of the British had a significant impact on the education system in Malaysia. However, before colonisation by the British, Malaysia had already established its own educational system based on the Islamic perspective. In the following section, the Malaysian education system before independence will be discussed.

4.3 Educational development before independence

As the background to this study, in this section, the education systems before independence from British Empire in 1957, namely (1) The traditional Malay Islamic education system, and (2) The British colonial education system will be reviewed and analysed.

This section commences with a description of the traditional Malay-Islamic education before colonisation. Malays are differentiated from the other two major Malaysian ethnic groups, the Chinese and the Indians, by being closely related with the religion of Islam.

4.3.1 Traditional Malay Islamic education system

In early Malay society, formal education institutions began with an introduction to Islam. This is not surprising since Islam is a religion that holds knowledge (*‘Ilm*) in high regard. Traditional Islamic education and religion dominated the education of the Malay group (Abdul Kadir, 1970; Alsagof, 1985; Hashim, 1994; Hassan, 1980). In this section, the development of traditional Malay Islamic education system in the Nineteenth Century will be analysed. Traditionally, there were two forms of Islamic education system for Malays, i.e., (1) Qur’anic education, and (2) *Pondok* education.

1) Qur’anic education

The earliest form of Islamic education to be found in Malaysia was that of the Qur’anic school; this school of education played a significant role in the development of the local Malay-Muslim community (Alsagof, 1985; Chelliah, 1947; Kee & Hean, 1972). Malay Muslims had to be literate in Arabic and had to learn the Qur’an in order to understand and obey the demands of the religion. Therefore, it is still a tradition of Malays to send their children to attend Qur’an classes conducted by religious teachers; children commence these classes by the time they reach age of five or six.

Traditionally, the Qur’anic education took place, either in the homes of religious teachers, in a mosque or, in a *surau* (a building smaller than a mosque used mainly for religious purposes). Initially, teaching was conducted in the teachers’ houses, but transferred to mosque or *surau* because of the increasing numbers of children wishing to attend.

Content and method of instruction in a Qur’anic school

The significant emphasis of the Qur’anic schools was the recitation of the Qur’an. The children were taught to memorize short chapters from the Qur’an and to recite them in prayers (Abdul Kadir, 1970). Rauf (cited in Hashim, 1994) critiqued that the children practiced reading the Qur’an in a parrot-like fashion, chapter by chapter, until they reached the end. The children were expected to just memorize without understanding, as they had not been taught the Arabic language. As Winstedt (1948) describes, “Malay children were taught to chant the Koran from page to page in a language they did not understand” (p. 131).

Memorization was a significant instructional method employed in traditional Islamic education, particularly in Qur'anic learning (Chapter 3, section 3.3.4). In Islamic education, memorization of the Qur'an is generally considered the first step in understanding (not a substitute for it). The main objective of memorization was to ensure that the sacred knowledge (Qur'an) would be passed on in the exact form so that the same understanding, or meaning, would still be preserved in the future (Omar, 1993).

Furthermore, there was some positive effect of the Qur'an reading and memorization, as testified by Cheeseman (1955),

We are accustomed to hear scorn poured upon the parrot-like repetition of the Koran. But those religious classes marked the beginning of education in Malaya... I learned much there, including the important truth that the Koran even imperfectly understood can touch hearts and stir thoughts. (p. 31)

Although several Western observers characterize students who use memorization in learning as being rote learners (e.g., Ballard & Clanchy, 1991; Biggs, 1987; Burns, 1991; Samuelowicz, 1987), others concede that memorization is incorporated into learning strategy in order to gain understanding (Biggs, 1994; Kember & Gow, 1990, 1991; Lee, 1996; Marton et al., 1996; Pratt et al., 1999). Thus, I would argue here that memorization in Qur'anic learning is not necessarily rote learning, particularly when it is incorporated with understanding.

2) *Pondok education*

The next period of education in traditional Malay society was *pondok* education. The *pondok* consisted of a centrally located building, usually the teacher's residence or a mosque, surrounded by rows of small huts or inns. *Pondok* education was organized formally and was restricted to boys only. A *pondok* educational institution was funded by the surrounding community, donations and charity; it imposed no fees, but students developed self-sufficiency from their vocational and agricultural activities. Their length of stay varied according to the number of *kitab*s (religious books) they were mastering at the hands of the *tok guru* (the master) assisted by mature students known as *kepala tala'ah* (perusal heads/tutors). *Pondok*'s teachers were not paid a salary. They led simple lives, and worked from a sense of duty (Hashim, 1994; Roff, 2004).

Content and method of instruction in a pondok school

The content and methods of teaching in *pondok* institutions were dependent on the teachers. The overall system was *umumi* (unstructured). Malay boy students were not divided according to age group neither was their progress monitored through examinations but rather, it was *tok guru* (male teacher) who graduated his own students by way of a simple testimonial, upon satisfaction that a student had mastered a subject (Hassan, 1980; Ishak, 1995; Roff, 2004).

The most common teaching methods employed were lecturing, memorization, reading and chanting, *mudhakara* (discussion session) and copying, studying and commenting on texts (Ishak, 1987; Omar, 1993). Memorization was a significant strategy employed in the learning of Arabic grammar, Qur'anic verses, *hadith* and *tawhid*. First, the teacher would explain and elaborate difficult phrases and passages; then the students would memorize and copy the texts of the lesson. In order to facilitate a student's memorization process, several significant subjects such as *nahw* (grammar), *sarf* (morphology) and *bayan* (rhetoric) were also taught as these subjects were believed to assist the memorization process (Ali, 1987).

The most common teaching strategy in the *pondok* institution was *tadah kitab* or *buka kitab* (opening the book) method, by which a *tok guru* (teacher) would sit in the centre of a *halaqah* (semi-circle) formed by his students when delivering lessons, all of them referring simultaneously to the same *kitab* (Hassan, 1980; Ishak, 1995; Roff, 2004). Although discussion was not allowed by the teacher during the lesson period, there were times, even rarely, where teacher provided discussion session regarding issues outside the text (Hassan, 1980; Ishak, 1987; Omar, 1993). Moreover, students could wait until the end of the lecture to initiate a discussion or ask questions (Omar, 1993). In fact, several competent students would usually be appointed as the *kepala mutala'ah* (the heads of a study group). Their duty would be to repeat the teaching of the teacher to new students or to those who were lacking the ability in mastering the lesson taught.

From the above descriptions, it appears that students in *pondok* institutions were encouraged by their teachers to adopt roles, both as passive and as active learners. Although they were instructed to memorize their lessons, they were also asked to discuss their lessons (*mudhakarah*) with other students. Therefore, with the presence of active learning strategies such as *halaqah* (semi-circle discussion) employed by the

teacher, suggests that the early traditional Malay Islamic education did acknowledge learning as an active process and therefore, the utilization of some active strategies is considered as a complementary approach to the passive strategies.

However, Ishak (1987) seems to hold a different point of view. He criticised the fact that *pondok* students were regarded much like empty receptacles ready to receive knowledge. Yet despite their readiness to acquire knowledge and memorize it, they were not empty vessels who just receive knowledge without thinking. It can be argued that memorization was emphasized because it was regarded as the foundation for understanding and acquiring the Arabic texts, and not because they were regarded as passive learners.

My analysis of the literature indicates that this early development of the traditional Malay Islamic education system suggests that the system focused on both teacher-centred and student-centred learning approaches. Despite the fact that several of the teaching methods used seemed to be teacher-centred, emphasizing memorization and rote learning, the literature further reveals that the traditional Islamic education also valued active student-centred learning. For student learning that involved students in group discussion, the goal was the development of constructive and critical thinking. Students were provided with the opportunity to take responsibility for their learning.

Until the Second World War, the *pondok* institution was the quintessence of Islamic education in Malaysia. The objective of education was to achieve religious knowledge to serve the faith (Al-Attas, 1990), but was not vocationally oriented to prepare students for positions in government, teaching or other vocations. The educational system existed to meet the needs of the Muslim community. However, with the coming of the Western influence, these traditional educational institutions were gradually eclipsed by systems based on imported models. In the next section, colonialist education will be reviewed and analysed. As the legacy of colonial education is relevant to this thesis in the sense that, to some extent, it is still present in the former British colonies, some of the consequences of the implementation of colonial education will also be discussed.

4.3.2 British colonialist education system

British intervention in Malaya began in 1786 with the occupation of Penang by Francis Light. This was followed by the possession of Singapore by Sir Stamford Raffles in 1819. In 1824, with the Treaty of London, the British finalized their acquisition of

Malacca. Thus, by the middle of the 1820s, the British already occupied the three major ports of the Malay Peninsula to form the Straits Settlements. The Straits Settlements (Penang, Malacca and Singapore) grew rapidly; this was partly due to an influx of Chinese and Indian workers (Chelliah, 1947). The British imported Chinese workers for tin mines and Indian labourers for rubber plantations (Milner, 1986). The Pangkor Treaty of 1874 paved the way for the expansion of British influence in Malaya. The British completed treaties with some Malay states, installing ‘residents’ who advised the sultans (kings) and became the effective rulers of their states (Winstedt, 1948). These advisors held power in everything, apart from matters relating to the Malay religion and customs (Andaya & Andaya, 1982).

During the British colonial period (1874-1957), several missionary organizations were active in establishing schools in Malaya. Although the mission schools were not designed to overtly convert pupils to Christianity, they aimed to immerse students in the tenets of Christianity (Andaya & Andaya, 1982; Hashim, 1994; Ishak, 1995). Milner (1986) argues that the aim of these schools was “to combine the diffusion of general knowledge with the promotion of Christianity” (p. 84). The London Missionary Society was the pioneer of educational missions in the colony.

Because of the indentured labour system during the British colonisation, Malaya evolved from a primarily mono-ethnic society to a multi-cultural society (Chelliah, 1947; Milner, 1986). As a result, The London Missionary Society introduced vernacular schools in Malaya. The earlier Malay settlers were given Malay vernacular education (Milner, 1986). The British colonial administrators also provided formal schooling in Chinese vernacular and Tamil vernacular education. The primary objective of the vernacular schools was to teach the children to read portions of Christian Scripture in their own language or dialect (Milner, 1986). Even in Malay schools where Qur’anic lessons were held, the Christian Bible superseded the Qur’an as the class book (Hashim, 1994). Beside the vernacular schools, there were also schools which offered an English-style education system. The English education system was only available to those who lived in the towns and who could afford the necessary fees. The main goal was to provide the British administration and British economic concerns with English speaking clerical and lower ranking administrative staffs (Andaya & Andaya, 1982; Ishak, 1995). Table 7 shows the school organization during the colonial period.

Table 7: School organization in the colonial period

English school system	<ul style="list-style-type: none"> -In 1816, the British established Penang Free School, followed by the Malacca Free School in 1826 and the Singapore Free School in 1837. -Run by Christian missionaries. -Utilized English as the medium of instruction. -The curriculum remained Western-oriented curriculum. -Textbooks, traditions, and teachers were mainly imported from the United Kingdom and other British territories.
Malay vernacular School system	<ul style="list-style-type: none"> -Used Malay as medium of instruction. -The school curriculum was designed merely to ensure the Malays would be able to read and write simple letters in Arabic script and Romanized Malay. -Transmit Malay culture, rural and agriculture sector.
Chinese vernacular school system	<ul style="list-style-type: none"> -In 1815, three schools built in Malacca by the Christian missionaries. -Chinese school closely associated with the China education-oriented. -Propagator and preserver of Chinese traditional heritage. -The concept of a ‘Confucius revival’ was introduced throughout Malaysian Chinese schools. -Used Kuo Yo (Mandarin) as the medium of instruction. -Imported teachers, curricula and textbooks from China.
Indian vernacular school system	<ul style="list-style-type: none"> -Begin in the early 19th century -By 1870, several schools were set up by Indian labourers working on the rubber plantations or estates. -Textbooks, teachers and curriculum were imported from India. -Medium of instruction was Tamil.

Sources: Chelliah (1947), Hashim (1994), and Means (1969).

Although the presence of the vernacular schools may have satisfied ethnic interest in education; it failed to unite the whole Malayan community. In fact, the policy led to diversity and gaps in terms of economic and population distributions, cultural, linguistic and religious traditions. Such policies gave rise to problems and challenges for the Malaysian people. Gomez and Jomo (1997) critique that despite the formation of a plural society in Malaya with the mass migration of Chinese and Indians into the country; there was very little integration and limited interaction among the ethnic communities. The majority of Chinese immigrants were mainly involved in the urban-based tin mines, the Indians cloistered in semi-rural plantations with most Malays remaining as peasants in rural areas. In other words, the communities were largely kept separated by the fact of economic specialisation.

Furthermore, the vernacular school system that evolved catered differentially to the needs of the ethnic groups resulting from their participation in different sectors of the economy (King & Lillard, 1987). The English education served the Malay elite and

urban Chinese and Indians, providing education that had limited economic value; the Malay vernacular system sought to enhance the quality of Malay farmers and peasants; the Chinese system was oriented to the cultural needs of the community, while Tamil education served mainly in the provision of elementary schooling for the state's population (King & Lillard, 1987). Jomo (1991) argues that the four types of language-based schools under the British colonialism education system served only to maintain class and ethnic differences and the ethnic identification with economic activities.

The establishment of the English school system created a social gap in the Malayan community. Although there was a high demand for English education, the number of Malays enrolling in it was still small. The main reason for this was because most of the English schools were built in centres that were heavily urbanized, where the majority of the population was Chinese. Even though the English schools could be attended by students of different ethnic backgrounds, the reality was that English schools were inaccessible to the Malays who lived in poor rural areas (Watson, 1982). Therefore, only a minority of Malay who were among the elite and lived in the cities had access to an English education (Hashim, 1994).

Moreover, the colonial system was intended solely for the upper classes who would become the English-educated administrators. Andaya and Andaya (1982) argue that: "Only small local elite would be given the privilege of an English education to equip them for clerical duties within the colonial government bureaucracy or in European-controlled companies" (p. 222). Rudner (1994) further critiques that English education "... was definitely not seen as an agency for broader social modernization...The deliberately narrow provision of English-medium education for urban and upper income groups limited its developmental impact upon Malayan society as a whole" (p. 284).

Thus, the number of Malays attending English schools remained small compared to attendance in Malay vernacular schools. Malay education during the British colonial period is reviewed and analysed in the next section.

Malay education

Malay vernacular schools were first established by the British administration in 1816, as a subsidiary to the prestigious English-medium Penang Free School, which enjoyed the full support of the colonial government. In the middle of the nineteenth century, missionary bodies also developed several such Malay-medium schools but they failed to

last. The schools were rejected by the Malays who believed they constituted a challenge to their traditional way of life. Also, since the Muslim faith was dominant among the Malays, the education provided was suspect because it was closely associated with certain aspects of European culture, most notably Christianity (Ness, 1967).

In 1880, the colonial power expressed a more favourable attitude toward Malay education. As a result, the local government authorities took over the activities of Christian missionary bodies pertaining to Malay education. In order to entice the Malays to send their sons to school, Qur'anic instruction was provided. However, secular Malay education remained the focus of concern and separate from the religious education (Chelliah, 1960). Malay education was divided into religious and non-religious education. The existence of the two educational systems, the traditional religious, and the secular national, that ran parallel to one another, created and started the secularization of education in Malaya (Hashim, 1994). Education for the Malay Muslim community began to be divorced from religion; religious teaching had been the common practice prior to this secularization. Although the British did not interfere with the traditional Islamic education system, they created a considerable barrier, especially for Malay Muslim schools, as the two systems brought little hope for the survival of Islamic education, in its real sense (Hashim & Langgulong, 2007). When the colonial school system was developed, the importance of traditional Islamic schools declined (Watson, 1982). The Qur'an, or Islamic instruction, could be taught in schools, but it was strictly separated from Malay instruction, in which the morning lessons must be devoted to instruction in Malay; Qur'an instruction was confined to the afternoon (Chelliah, 1974).

The British colonial attitude toward providing adequate education for the Malays was ambivalent (Swettenham, 1906). Malay education was largely confined to four years of primary education. They only had opportunity to further their education beyond the rudimentary level by switching, to the Malay Special Classes in Government English Schools at the fourth grade (Chan, 1977). They were then allowed to proceed to secondary English education after two years of intensive coaching in English. Nevertheless, such opportunities were not many. Thus, many Malays remained entrapped in rural areas without any possible ways of upward social mobility. Undoubtedly, the policy of depriving the Malay peasantry of educational mobility was central to the policy of rule of the British. A statement in the Chief Secretary's Report of 1920 well reflected such British attitude and policies towards Malay education:

The aim of the government is not to turn out a few well-educated youths, nor a number of less-well-educated boys, rather it is to improve the bulk of the people, to make the son of the fisherman or peasant a more intelligent fisherman or peasant than his father had been, and a man whose education will enable him to understand how his lot in life fits in the scheme of life around him. (p. 29)

In relation to the school curriculum, the colonial authority was aware that their contents would only be restricted to the local village environment. Curriculum that could threaten the colonial order was not permitted. Therefore, the school curriculum was designed merely to ensure the Malays would be able to read and write simple letters in Arabic script (Standard One or Two) and Romanized Malay (Standard Three and above). As Roff (1974) argued, Malay education was designed to well equip the Malays into the village social and economic system, besides to orient them to the preservation of a traditional economy.

The British were particularly concerned with the possible repercussion of over-education among the Malay masses that would lead to the emergence of political awareness. Such development, as their experience in the Indian sub-continent had shown, was disadvantageous to their interests (Yahya, 2003). In other words, the British viewed much education for the Malay peasantry as a bad thing. Swettenham, for instance, had argued strongly against the provision of English education to the Malays (as cited from Stevenson, 1975):

The one danger to be guarded against is to teach English indiscriminately. It could not be well taught except in few schools, and I do not think it is at all advisable to attempt to give the children of an agricultural population an indifferent knowledge of a language that to all but the very few would only unfit them for the duties of life and make them discontented with anything like manual labour. (p. 57)

It appears from the literature that, the British educational policy for the Malays was designed primarily to preserve the traditional feudal structure of Malay society. The feudal structure of Malay was characterized by “the absolute authority of the rulers (sultans/rajahs) and the nobility at the top of the social hierarchy and the abject servitude of peasantry at the bottom of the social hierarchy” (Yahya, 2003, p. 62). The British

implemented a dual system of education for the Malays: one for the Malay peasantry, and another for the Malay nobility. The Malay peasantry was provided with a rural-based Malay vernacular education. The Malay vernacular education could only provide limited educational mobility to the Malays. They were restricted to four years of primary education. On the other hand, the British provided the Malay nobility with an English education to prepare them for government administration. These dualist systems of education served different purposes and needs of the British.

However, the appointment of Wilkinson in 1903 as the new Federal Inspector of Schools brought significant progress in Malay vernacular education. Wilkinson observed the inadequacy of the Malay schools for educating future Malay leaders. Wilkinson's effort to provide Malay leadership then, was evident in his proposal to establish a Malay Boarding School, later called the Malay College Kuala Kangsar. He developed his idea from the previous policy of reserving special educational opportunities exclusively for Malays nobility or aristocratic birth. The Malay College Kuala Kangsar was opened in 1905 to educate sons of sultans and chiefs. The College became a major producer of administrative elites (Roff, 1974).

Nevertheless Malay peasant education was to continue. In 1917, a report for a "revolutionary" curriculum for Malay vernacular education was submitted by Winstedt. The new curriculum emphasized handwork and gardening, physical training, and general games. The report recommended a compulsory education for Malay boys until they passed the fourth standard or completed six years in government vernacular school. The report led to the setting up of a Malay teacher training college in Perak in 1922; Sultan Idris Training College (SITC). The goal of the training college was to ensure that the peasant Malay teachers were better equipped to educate peasant to teach the curriculum. The college was the only tertiary institution available for graduates from Malay vernacular schools (Roff, 1974).

The contrasting roles played by Sultan Idris Training College and the Malay College were best exemplified by Roff (1974):

On the one hand, at Kuala Kangsar, there were the sons of the traditional ruling class and wealthy, undergoing training for entry into the English-speaking world of government and administration and occasionally the professions; on the other, at SITC, the sons of the peasantry and the poor,

undergoing training for return to the Malay-speaking world of the rural village school. (p.143)

In general, the British system had a significant influence on the development of education in Malaysia, especially in its early formative stage. This influence had both good and bad effects for Malaysian communities and, in particular, for the Malays. To date, Malaysian education still bears the hallmarks of British influence, albeit changed in many ways and expanded since the days of British rule. Most evident of the ongoing British influence on Malaysian education are the areas of curriculum development and administration. This is perhaps not surprising, because the Malaysian ruling elite in the first decade after independence had been trained and educated under the British. The bureaucratic structures had been set up by the British colonial authorities. Although Malaysianisation took place after independence, the structures of educational administration were strongly influenced by the British. The developments of comprehensive lower secondary schools as well as the continuation of academic upper secondary schools are remarkably similar to the British structure. The present three major public examinations such as; PMR or *Penilaian Menengah Rendah* (the Lower Secondary Assessment), SPM or *Sijil Pelajaran Malaysia* (the Malaysian Certificate of Education), and STPM or *Sijil Tinggi Pelajaran Malaysia* (the Malaysian Higher School Certificate) are based on the old British 'School Certificate' examinations.

4.4 Educational development after independence

The British policy during the colonial period brought about the migration of Chinese and Indians into Malaya, which led to diversity and gaps in terms of economic and population distributions. The disintegration of the Malayan community resulted from the diversity was one of the major challenges faced by the Malaysian government after the independence in 1957. This critical problem was caused by several factors such as language and religious differences, immigration policy, as well as economic development (Saad, 1986). Thus the main goal of the education policy during that period was to unite the children of the three main ethnic groups, i.e., Malays, Chinese and Indians, through national education system. To achieve this goal, the national school system adopted a common language (Malay), a common curriculum, and common public examination policies (Kee & Hong, 1971). The Malaysian government kept tight control on the national school system in terms of its curriculum, finance and administration. The transformation aimed to gain more efficiency in enhancing values,

beliefs, and attitudes to the identity and legitimacy of the various ethnic groups (Saad, 1986).

Several national integration strategies were conducted to map out a new education system. Educational reports, such as, the Razak Report (Report of Education Committee, 1956) and the Rahman Talib Report (Report of the Education Review Committee, 1960) that emphasized the need for achieving national integration by means of a common consensus between the various ethnic groups. The recommendations of these two reports were taken into consideration in the formulation of the Educational Act (1961), which subsequently directed the later development of education in Malaysia. The Education Act of 1961 outlined significant strategies aimed at revamping the fragmented education system of the British colonial era.

As a result of a very comprehensive study of the education system, as spelt out by the Education Act of 1961, a report known as the Cabinet Committee Report was released in 1979 (Report of the Cabinet Committee, 1979). The report is considered to be one of the underlying foundations for current national educational development and reform. The next section will touch on current educational developments, reforms and issues in Malaysia.

4.5 Current educational developments, reforms and issues

Current national educational developments and reforms are based on the National Philosophy of Education (Ministry of Education, 1990a). The philosophy had been written in 1988. The proclamation of the National Philosophy of Education was seen as a significant stage in the reformation of the education system in Malaysia since the philosophy then became the foundation of the national education system. The National Philosophy of Education was formulated as follows:

Education in Malaysia is an on-going effort towards further developing the potentials of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on a firm belief in and a 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 a high level of personal

well being, as well as being able to contribute to the betterment of society and the nation at large. (Ministry of Education, 1990a, p. 5)

Based on the National Philosophy of Education, numerous areas of education underwent further development and reform to enable education to become more accessible to the nation, in order to provide economic and social advances. Examples of these include: the New Primary School Curriculum and the Integrated Secondary School Curriculum (Ministry of Education, 1990b); the Smart Schools Project (Ministry of Education, 1997b); the Soft Skills implementation in higher learning institutions (Ministry of Higher Education Malaysia, 2006); and the New Standard Curriculum for Primary School (Ministry of Education, 2011).

In this section, educational reforms in the secondary school curriculum and the tertiary curriculum, will be analysed in the context of this study which focuses on a Malaysian university teacher education programme. First, the educational reforms in secondary school will be discussed, these include: (1) the Integrated Secondary School Curriculum, and (2) the Malaysian Smart School. This is followed by an analysis of educational reforms (e.g., the introduction of soft skills) in Malaysian higher education institutions.

4.5.1 The Integrated Secondary School Curriculum (ISSC)

The Integrated Secondary School Curriculum (ISSC) was introduced in 1988. It contains guidelines for teaching and learning approaches in the secondary school curriculum. The main principle of the ISSC is the integrated approach entailing the integration of knowledge, skills and values; the integration of theory and practice; the integration of curriculum and co-curriculum; and the school culture (Ministry of Education, 1988, 1990b, 1990c). The ISSC aimed to overcome the shortcomings in an old curriculum that was too content-centred and was overly focused on rote learning, examination and mere academic excellence (Ismail & Hassan, 2009; Joseph, 2006; Lee, 2000) by the introduction of student-centred learning approaches (Lee, 2000; Ratnavadivel, 1999).

My review of the document (Ministry of Education, 1990b) shows that there were several statements intended to promote student-centred learning notions for secondary schools teachers: First, the role of teachers is to improve the quality of questions not only by emphasizing the questions which require a low cognitive demand, such as

memorization of the facts, but also which require a high cognitive demand such as reasoning; second, teaching approaches should stimulate student questions, which were to be directed at the teacher as well other fellow students; and lastly, teaching approaches should reduce the amount of teacher talk, and subsequently encourage the amount of student talk.

The foundation of the ISSC is the National Education Philosophy (Ministry of Education, 1990b). Therefore, teachers must understand the philosophy, in terms of its rationale, contents, aims and objectives in order to better implement the principles of the ISSC. Their understanding of the integration concept should be accompanied by knowledge and practice.

However, from my reviews of previous studies of the ISSC, not all secondary school teachers implement the principles of integration and holistic and student-centred learning, as required by the ISSC (Ghafar, Hamdan, Sihes, & Harun, 2011; Ismail, 2000; Rahmat, 1990). This can be attributed to the teachers' attempts to implement government's policy in theory and not by putting the mandated teaching and learning methods into practice.

Findings from Ghafar et al. (2011) suggest that secondary school teachers have a clear understanding of the Malaysian secondary schools curricula, but do not know how to adopt the approaches required by the curricula. The finding was similar to that Rahmat (1990). All but two studies found that teachers were lacking in the necessary knowledge in regard to effective teaching and learning methods. Their studies showed that teachers understanding of government policies did not necessarily lead them to fully implement those policies. Rather, the studies suggested that the teachers were still unsure and lacked the confidence to use active teaching and learning approaches in their daily practices, but rather, continued to retain their traditional teacher-centred approach to teaching and learning.

The findings suggest that the implementation of the ISSC had an effect not only on secondary school teachers and their classroom teaching, but also on their professional development. Although the Ministry of Education had developed in-service training programmes to retrain more than 72,000 existing secondary teachers (Ministry of Education, 1992), these programmes were mainly concerned with the curricula and procedural knowledge of ISSC teaching (Konting, 1993), and did not focus on student-

centred teaching approaches. Teachers were left without the adequate knowledge required relating to student-centred learning. Therefore, I would argue that the Ministry of Education should provide more effective education training for in-service and pre-service teachers who could then function efficiently in line with the national philosophy to meet the new context and expectations.

Another factor that challenged the implementation of the principles of ISCC is the expected role of teacher. The role of teacher was expected to change from being that of a didactic transmitter of knowledge to that of a facilitator of learning (Lee, 2000; Ratnavadivel, 1999). However, previous studies have shown that not all secondary school teachers understood and accepted their roles as facilitators but preferred to remain with the roles as transmitters of knowledge (Ismail, 2000; Ismail et al., 2004).

A quantitative study by Ismail (2000) revealed that although the secondary school teachers understood the expected education concept under the ISSC, they were faced with several constraints in implementing the teaching and learning principles. They failed to take roles as facilitators as their primary concern was to transfer knowledge and complete the syllabus before the end of the year for the purpose of examinations. This was supported by another quantitative study by Ismail et al. (2004). The study found that secondary school teachers opted to take on the role of transmitters of knowledge for same reasons. First, examinations were given priority; and second, the school environment was very academic with great emphasis being given to academic excellence.

The findings from these two studies suggest that Malaysian secondary school teachers opted for teacher-centred approaches instead of student-centred ones, because they were evaluated on their completion of the prescribed syllabus. This was likely to be due to the Malaysian education system which still emphasizes the importance of examinations and is subject oriented (Ismail & Hassan, 2009; Joseph, 2006; Lee, 2000). Therefore, it would seem that in order to accomplish the government's policy, the national education system which has an emphasis on examination and academic ranking, should be revised. Subjects that have content overload that is likely to restrict the use of interactive strategies, should be identified.

4.5.2 The Malaysian Smart School

In 1997, the Malaysian government introduced “Technology Supported Smart Schools”. The Malaysian Smart School is defined as “...a learning institution that has been systematically reinvented in terms of teaching-learning practices and school management in order to prepare children for the Information Age” (Smart School Project team, 1997a, p. 10). The Smart Schools projects were intended to serve as centres of excellence educational change. They were commonly known as *Sekolah Bestari* and then as K-schools or knowledge-based schools. This massive project was implemented in 1999 with the creation of a group of about ninety pilot schools (Ministry of Education, 1997b).

The implementation of the Smart Schools project signified a dramatic change in the Malaysian education system. One of the pedagogical implications of Smart Schools is that teachers must be able to adopt elements of student-centred learning approaches in their teaching practices (Smart School Project Team, 1997a). The characteristics of student-centred learning are described as (Smart School Project Team, 1997a, p. 39): (1) an appropriate mix of learning strategies to ensure mastery of basic competencies and promotion of holistic development; (2) allowances for individual differences in learning styles to boost performance; and (3) classroom atmosphere compatible with different teaching-learning strategies.

The new pedagogy in Smart Schools moved away from the Malaysian conventional pedagogy (Kadir, 2006; Mustapha, 1998). The Smart School Conceptual Blueprint emphasizes the characteristics of students and teachers in student-centred learning environment when it refers to “students will learn to exercise courage in making decisions and assuming responsibility... students will learn to process and manipulate information...” (Smart School Project Team, 1997b, p. 130) and “teachers will now play the role of ‘a guide on the side’ thus doing away with their traditional role of ‘the sage on the stage’ ” (Smart School Project Team, 1997b, p. 131). This new role of students and teachers reflects student-centred learning notions as summarized by Huba and Freed (2000):

In student-centred learning, learners are actively involved and receive feedback; learners apply knowledge to enduring and emerging issues and problems; learners integrate disciplines-based knowledge and general skills;

learners understand the characteristics of excellent work; learners become increasingly sophisticated learners and knowers; professors coach and facilitate, intertwining teaching and assessing; professors reveal that they are learners too, and that learning is interpersonal, and all learners-students and professors are respected and valued. (p. 33)

However, the document also implies that the pedagogy advocated does not propose student-centred teaching should prevail all the time. Instead, it should be “increase[d] in age and maturity” (Smart School Project Team, 1997a, p. 39). This ambiguity produces challenges for the adoption of student-centred learning in Malaysian secondary schools. While the aim of Smart School is to ensure that Malaysian school students will experience a student-centred learning environment (Ahmad, 1998), the guidelines of the Smart School regarding the pedagogical methods required are not explicit. Abdullah (2006) argues that the pedagogical goals of the Smart School seemed to be suited to a variety of learning environments, ranging from those that are teacher-centred to those that are student-centred.

Another issue is the misunderstanding of the concepts of the Smart School. At the initial stage of Smart School project, many people, including parents and their children misunderstood the Smart School concept (Abdullah, 2006). First, they seemed to believe that the Smart School was a school for only academically clever students. Second, without the presence of technology or computers, a school could not be called a Smart School. These misunderstandings should be addressed. The Smart School is for all children (Abdullah, 2006) and the use of technology in Smart Schools is the key enabler in teaching and learning (Abdullah, 2006; Abdul Manab & Othman, 1999; Tan, 2006). This is in line with the goals of the national philosophy of education, equipping Malaysians with technological skills necessary in a borderless world. The rapid growth of Information and Communication Technology (ICT) has brought about a revolution in learning. Technological innovation in education has led to the application of new methods and instruments in the teaching and learning process (Luan et al., 2006; Neo & Neo, 2002; Yaacob, Mohd Nor, & Azman, 2005). Thus, teachers are currently faced with challenge of dealing with a new learning environment, which is borderless and resource rich. This exemplifies that teachers need to understand how an ICT-based learning environment, as intended by the Smart School education concept, affects their students' learning.

Ahmad (1998) argues that the Smart School is not about having computer and technology assisted teaching only, but that the focus is on enabling students to become resource based learners. This supports student-centred learning, which emphasizes that students actively discover and seek their own knowledge for themselves in the process of learning (Brown, 1994). Ahmad stresses the importance of ensuring that students move from environments that measure success by performance in public examinations. Moreover, despite the emphasis on the adoption of ICT in Smart School, the government also emphasized a radical transformation in the education system by reviewing the curriculum and pedagogy, enhancing the roles of teachers, students, administrators, parents and the community (Smart School Project Team, 1997a).

Within this Smart Schools scenario, this research aims to investigate education students' learning experiences in a Malaysian teacher education programme, since it is those students who will most probably be teaching in Smart Schools and who thus, play an integral role in the educational reform process. It is likely that if they have experienced teacher or student-centred approaches during their university training, they will be adopting similar models when they become teachers.

In this section, current curriculum reforms in secondary education level have been reviewed and analysed. In the following section, current curriculum reforms (i.e., the implementation of soft skills) in higher education institutions will be presented, as these are relevant to the research context, i.e., a university teacher education programme.

4.5.3 The implementation of soft skills in higher institution curriculum

Since 2006, the current curriculum used in all Malaysian Higher Education Institutes has been expected to integrate elements of soft skills (Ministry of Higher Education Malaysia, 2006). In the Malaysian context, soft skills incorporate all aspects of generic skills that include the cognitive elements associated with non-academic skills (Ministry of Higher Education Malaysia, 2006). Seven soft skill elements have been identified and chosen to be implemented namely: i) communicative skills; ii) thinking skills and problem solving skills; iii) team workforce; iv) life-long learning and information management; v) entrepreneurial skill; vi) ethics, morals and professionalism; and vii) leadership skills (Ministry of Higher Education Malaysia, 2006). Although there are no specific soft skills, the majority of these skills are associated with positive values, such as; leadership skills, team work, communicative skills, and lifelong learning. The

following skills are identified as being the most important skills to help people to interact with others; communication skills, negotiation, change adeptness, flexibility, teamwork, relationship building and listening skills (Chaudhry et al., 2008).

MOHE has developed a framework suggesting the approach that should be employed by teachers/lecturers for developing soft skills (Ministry of Higher Education Malaysia, 2006). A holistic approach is used to plan and implement the soft skills for undergraduate students of higher education. This approach is based on the combination of several programmes and main activities: (1) formal teaching and learning activities (including all curricula and co-curricula elements); (2) support programmes (having both an academic and a non-academic focus) and (3), the student campus life (student residences and the campus surroundings).

From this review and from the analysis of the three above approaches (Ministry of Higher Education Malaysia, 2006), the first approach (i.e., the development of soft skills through teaching and learning activities) seems to support student-centred learning as an approach to the development of soft skills in the undergraduate programme. The development of soft skills using teaching and learning activities consists of two models, namely: (1) stand alone subject model, and (2), embedded model. These require the expertise of the lecturers to adopt various student-centred teaching strategies such as questioning, class discussion, brain storming, team work, presentation, role play and simulation, task/project, field work and site visits (Ministry of Higher Education Malaysia, 2006). Teachers should undertake the role of facilitator. Students are expected to develop the seven soft skills by actively participating in classroom activities. It would seem that the activities need to be appropriately structured by the teacher; a teaching skill. Each element of the soft skills is spelled out in the learning outcomes and then translated into the instructional plan. In line with this, all the public universities in Malaysia have been instructed to review and redesign their existing curriculum by integrating and implementing soft skill elements into all courses for each of the programmes offered by the university (Shakir, 2009; Yassin, Hassan, Amin, & Amiruddin, 2008).

Criticisms from employers that most Malaysian graduates, though academically proficient, are inadequate in soft skills; such criticism has contributed to the infusion of soft skills into programmes at higher education institutions. Many employers have expressed dissatisfaction with their hired graduates, especially with respect to lack of

soft skills (Idrus et al., 2009). A survey conducted by Tong (n.d.) on Malaysian employers revealed that there was a significant gap between what Malaysian university currently offer and what industry demands. The study found that university programmes focus too intensely on scientific theories and technical knowledge in most subjects, which led to a lack of soft skills. Thus, the seven soft skill elements (as mentioned previously) are identified by MOHE because they are the most critical skills in the current global job market especially in the fast moving technology era (Ministry of Higher Education Malaysia, 2006).

Previous literature shows that the lack of soft skills amongst Malaysian undergraduates is partly attributable to the traditional teacher-centred learning approaches adopted during their school education (e.g., Ahmad, 1998; Ambigapathy & Aniswal, 2005; Md Yunus et al., 2006; Shakir, 2009; Song & Yuen, 2008). A study conducted by Md Yunus et al. (2006) revealed that undergraduate students were inadequate in soft skills because of their previous teacher-centred learning experiences. Their study showed that undergraduate students were lacking in problem solving skills such as decision making, and implementing and verifying solutions. Md Yunus et al. (2006) argue that the emphasis on examinations, especially at the secondary level education, has impeded the development of problem solving skills among students. This illustrates that teacher-centred learning approaches with an emphasis on memorization and examination during school education programmes have impeded the development of soft skills among undergraduate students.

Malaysian school students have been exposed to traditional teacher-centred learning such as rote learning styles and examination-oriented systems in their formative school years (6 years of Primary School and 7 years of Secondary School). The traditional teacher-centred learning did not encourage them to develop skills, in fact, they resorted to memorizing facts in order to excel in their examinations and tests; these are carried out on a monthly, semester, and annual basis (Ahmad, 1998). The over-emphasis on examination results has led them to adopt certain teaching and learning strategies such as rote learning and spoon feeding rather than acquiring generic skills (Lee, 1999). Malaysian school students are pressured by their parents, peers, and school to excel academically as a result of the examination-based education system (Ahmad, 1998; Shakir, 2009; Thang, 2003). In the process, they fail to develop the elements of soft skills, such as critical and analytical thinking, as most of their time is spent attending tuition classes, extra classes, and examination workshops to better prepare them for the

many upcoming examinations (Shakir, 2009). The above factors contribute toward the attitude and learning styles of university students who maintain the traditional studying patterns (Chan & Mousley, 2005; Thang, 2003).

In contrast, student-centred approaches provide students with learning experiences that allow them to hypothesize, predict, pose questions, research, investigate, imagine and invent (Isokoglu et al., 2009), that could assist in the development of their soft skills. Student-centred learning approaches could enhance students' soft skills through active strategies such as collaborative learning, project-based learning, discussion and hands-on activities. Glasgow (1997) argues that teachers in student-centred learning play roles as facilitators to encourage students' choice, discussion and collaboration, which assist them in developing generic skills such as leadership and communication.

Despite MOHE's initiative to enhance undergraduates' soft skills through the adoption of student-centred learning, a review of the literature found that lecturers encountered several obstacles to the incorporation of the soft skills (e.g., Hasbullah & Sulaiman, 2002; Idrus et al., 2009; Shakir, 2009). Idrus et al. (2009) found that lecturers faced several challenges in developing soft skills through student-centred teaching approaches, such as students' learning attitude in classroom, limited time to cover syllabus when using student-centred strategies, and the large numbers of students in classrooms. This was supported by Hasbullah and Sulaiman (2002), who claim that Malaysian lecturers tend to adopt didactic teaching approaches as they are burdened with heavy course requirements that must be fulfilled within a specified time frame. Shakir (2009) argues that soft skills elements are not easily taught. Acknowledging the situation in regard to the pressures of Malaysian examination-oriented system, I consider that it is not an easy task for lecturers to transform their own didactic teaching practices, as well as to transform undergraduates' rote learning approaches during their 3 to 4 years of tertiary education.

Therefore, I would argue that lecturers must be equipped with adequate knowledge of student-centred strategies and also experience a paradigm shift in their teaching philosophy. This would assist them in designing and organizing a student-centred curriculum. The integration of student-centred principles into the curriculum content would provide effective motivation for lecturers to embed all the elements of soft skills into the curriculum (Development of Soft Skills Based on Formal Teaching & Learning, Model 2: Embedded Model).

Lecturers should also promote soft skills by encouraging their students to participate in support programmes or co-curricular activities. I would also argue here that student experience is enriched through a variety of learning opportunities. Through co-curriculum activities, students are able to gain a physically and spiritually balanced and holistic education (Yassin et al., 2008). However, because support programmes are non-compulsory, the programmes seem to be of more benefit to active students rather than to those who are less interactive (Shakir, 2009). Therefore, the role of the lecturer is crucial in ensuring that all students can participate wholly in co-curricular or campus-based activities.

In conclusion, the introduction of soft skill elements to Malaysian Higher Education Institutions seems to, at the same time; suggest an MOHE initiative to enhance student-centred learning among undergraduates. Although soft skill elements and student-centred learning are two different things, they are aligned and complimentary. Soft skill elements could be best developed among undergraduates if student-centred learning is also promoted.

4.6 Chapter summary

The underlying foundations of Malaysian educational system today are derived from both an Islamic education perspective and from a Western perspective. The Islamic perspectives were those of the traditional religious contexts of the indigenous systems of moral and religious instruction in Malaysia that prevailed prior to Malaysian Independence. Meanwhile, the Western perspective inherited its foundation from British colonialism. These two perspectives have become the thrust of the national educational system. From time to time, the national education system has gone through many reviews to ensure that it will be congruent with the National Education Philosophy. This chapter further reviewed and analysed several curricula revisions, both in secondary school and at higher education institution levels.

This analysis of the curricula revisions suggests that the education environments in Malaysia are in the process of reform. Malaysia has taken the stand that student-centred learning approaches should be implemented in the teaching practices at all educational levels, in schools and in higher education. The national education system has determined that the student-centred learning is beneficial to lead effective teaching and learning. These changes have made new and more pressing demands on teacher

education and teachers. Here a dilemma emerges. How far are education students and teacher educators serious and successful in their adoption of student-centred learning approaches in their teaching practices? How effective is the implementation of the student-centred strategies in their classroom? Student teachers and teacher educators are now faced with the challenge of dealing with a new, more interactive, learning environment. This implies that education students and teacher educators need to understand how to construct a student-centred learning environment and to practice the student-centred approaches as intended by the national policies affecting teachers' teaching practices, as well as students' learning. Thus, this research seeks to investigate the learning experiences of students as future teachers and also the teaching experiences of teacher educators in a teacher education programme in order to find answers for the issues arising in regard to the adoption of student-centred learning approaches among Malaysian teachers and students. The research design of this study will be presented in the following chapter.

CHAPTER 5

RESEARCH DESIGN

5.1 Introduction

This study seeks further understanding of the teaching and learning experiences in a Malaysian teacher education programme, by posing the following research questions:

1. How do Malaysian teacher educators understand teaching in a university teacher education programme?
2. How do Malaysian education students understand learning in a teacher education programme?
3. What are the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices?

In this chapter, the main elements of the research design for my study will be presented. First, the philosophical background that underpins my study will be discussed; followed by an elaboration of the research methodology and strategy. Next, a discussion of participant recruitment and the justification of the data collection methods will be presented. Finally, this chapter will present the strategies for data analysing, before discussing issues of rigours consideration.

5.2 Research philosophy

Research ontology and epistemology refer to assumptions about the world and the nature of knowledge. The understanding of philosophical issues is crucial so as to assist the researcher to refine, identify and clarify the research design to be employed in a study (Denzin & Lincoln, 1994). The choice of paradigm is significant in informing and guiding inquiry, especially qualitative inquiry, as it will lead to the choice of an overall approach to the research process, and the ways in which to collect and analyse data. The research paradigm is the basic belief system or worldview that guides me not only in choices of method, but also in ontologically and epistemologically fundamental ways.

In this current study, I have adopted an ontological and epistemological approach based on constructivism. Guba and Lincoln (1994) described the concept of the constructivist

paradigm, which is also referred to as the interpretive paradigm. Their concept was based on ideas about studying human actions in reality, as opposed to experimentally. From their ontological perspective, reality is not an external phenomenon that is identified by the researcher; instead reality is defined from individual experiences and knowledge construction. They emphasized that the community and its values and norms are essential to the development of socially constructed knowledge. It was Guba and Lincoln’s (1994) concept of constructivism which informed this study. Their concepts underpin this study which reflects the perspectives of teacher educators and education students in regard to their own reality as teachers and learners and their notions of construction of learning. Table 8 below illustrates Guba and Lincoln’s (1994) concept of the constructivist paradigm in comparison to three other major paradigms, which are positivism, postpositivism, and critical theory.

Table 8: Basic Beliefs (Metaphysics) of Alternative Inquiry Paradigms

Item	Positivism	Postpositivism	Critical theory	Constructivism
Ontology	Naive realism- “real” reality but apprehensible	Critical realism- “real” reality but only imperfectly and probabilistically apprehensible	Historical realism- virtually reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallized over time	Relativism- local and specific constructed realities
Epistemology	Dualist/ objectivist; findings true	Modified dualist/objectivist; critical tradition/ community; findings probably true	Transactional/ subjectivist; value-mediated findings	Transactional/ subjectivist; created findings
Methodology	Experimental /manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental/ manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	Dialogic/ dialectical	Hermeneutical/ dialectical

Source: Guba and Lincoln (1994) p. 109

The constructivist paradigm points out knowledge or meaning as being subjective, varied, multiple, and socially constructed and transmitted through the interaction

between individuals and their world (Creswell, 2007; Crotty, 1998; Guba & Lincoln, 1994). Individuals develop concepts, models, and schemes to make sense of experience and subsequently, they continue to test and modify these constructions in order to develop new experience (Creswell, 2007; Crotty, 1998).

This paradigm suggests that the current study is constructed via the interaction between, and among, teacher educators and education students in the teacher education programme and me. Therefore, this research was undertaken within, and underpinned by, this paradigm with the goal to provide a better understanding of teacher educators and education students' experiences and perceptions. As we learn more about the world, human understanding necessarily shifts to incorporate the new knowledge. Constructivists argue that knowledge is constructed in the human mind, resulting from our interactions with the world. Teaching and learning perceptions are actively constructed and constantly evolving as a result of social interaction in a particular environment (Brooks & Brooks, 1999; Duffy & Jonassen, 1992; von Glasersfeld, 1996; Vygotsky, 1962; Woolfolk, 2001).

5.3 Qualitative research methodology

Since a constructivist paradigm has been adopted to guide my study, a qualitative methodology is employed for the research to investigate the experiences of teaching and learning among Malaysian teacher educators and education students in a teacher education programme. The constructivist paradigm underlies the qualitative research methods (Guba & Lincoln, 1994).

My study employs a qualitative inquiry as it uses a naturalistic approach that seeks to understand phenomena in context-specific settings, such as “real world setting [where] the researcher does not attempt to manipulate the phenomenon of interest” (Patton, 2002, p. 39). Qualitative research has an actual setting; therefore, it provides a point of view of real life (Creswell, 2005). It is a system of inquiry which seeks to build holistic, largely narrative, descriptions to inform the researcher's understanding of a social or cultural phenomenon (Wiersma, 1995). Therefore, with the nature of qualitative research which is that of holistic description, I had the opportunity to, effectively and suitably, study the process of teaching and learning in a teacher education programme.

Qualitative research involves an in-depth understanding of the reasons why and how people make choices about their actions (Stake, 1995). It is geared toward gaining a

further understanding of the ideas, feelings, motives, and beliefs behind people's actions. "In essence, qualitative research is oriented toward the search for meanings, that is, the interpretations and meanings people give to events, objects, other people, and situations in their environment" (Stainback & Stainback, 1988, p. 7). Since it emphasises people's lived experience, this approach is well suited for locating the meanings people place on the events, processes and structures of their lives (Creswell, 2007). Most importantly, a qualitative methodology has equipped me with a way in which to gather a broad range and variety of types of data for an inductive analysis approach. An inductive approach uses "detailed readings of raw data to derive concepts, themes, or a model through the interpretations made from the raw data by an evaluator or researcher" (Thomas, 2006, p. 238). McMillan and Schumacher (1993, p. 479) defined qualitative research as being, "primarily an inductive process of organizing data into categories and identifying patterns (relationships) among categories". This definition implies that data and meaning emerge from the research context.

The term 'qualitative research' is used predominantly to describe research conducted in a natural setting to investigate a social issue in contrast to the opponent quantitative positivist approach which investigates scientific matter (Creswell, 1994, 2007; Denzin & Lincoln, 2000). Qualitative research, broadly defined, means "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss & Corbin, 1990, p. 17) and is instead, the type of research that produces findings arrived at from real-world settings where the "phenomenon of interest unfold naturally" (Patton, 2002, p. 39). Unlike quantitative researchers who seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations (Hoepfl, 1997). The qualitative research has also been widely used synonymously with case studies (Merriam, 1998) and naturalistic inquiry (Lincoln & Guba, 1985).

The concept of naturalistic inquiry was introduced by Lincoln and Guba (1985) as a study of human actions in the natural, as opposed to the experimental realm. The naturalistic inquiry is an ideal form for educational research because; it provides thick descriptions, is grounded, holistic and lifelike; it simplifies data, illuminates meanings and can communicate tacit knowledge (Guba & Lincoln, 1994). Merriam (1998) further describes that naturalistic inquiry is a particularly good means of educational research for four reasons; (1) it can explain causal links in real-life interventions that may too

complex for a survey of experimental strategies; (2) it describes the real-life context in which an intervention has occurred; (3) it provides an illustrative account of the intervention itself; and (4), it can be used to explore those situations in which the intervention being evaluated has no clear single set of outcomes. In other words, the naturalistic inquiry is therefore, in contrast to experimental research, where the notion is to control the condition of the research.

The qualitative data that are collected over a sustained period make them powerful for investigating any process. The exploratory nature of the study requires the collection of time and data, and an emphasis on using the public voices of the participants. To meet with this requirement, research methods in the qualitative paradigm were considered to be the most appropriate (Lincoln & Guba, 1985; Merriam, 1998; Patton, 2002; Yin, 2003). It is critical to match the research methodology with the nature of the study so as to ensure that “the result understandable, credible, and relevant” (Patton, 1990, p. 149).

5.4 A case study strategy

Emphasizing on individual uniqueness, as well as focusing on participants understanding from their own perspective, has led to the application of a case study. According to Merriam (1998), case study is an “intensive, holistic description and analysis of a single unit or bounded system” (p. 12). Yin (2003) defines case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

Case study is one of research approaches used to carry out a naturalistic inquiry. It involves the study of an issue explored through one or more cases within a bounded system (Creswell, 2007). According to Creswell (2007),

Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case-based themes. (p. 73)

In a case study, a single person, program, event, process, institution, organization, social group, or phenomenon is investigated within a specified time frame, using a combination of appropriate data collection devices (Creswell, 1994).

The rationale for choosing a case-study design is because the main purpose of this study is to describe, in-depth, a particular context of teaching and learning which, in this instance, is a Malaysian teacher education programme. Stake (1995) defines case study as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (p. xi). Therefore, the case study strategy allows me to retain the “holistic and meaning characteristic of real-life events” (Yin, 2003, p. 2).

Another rationale for choosing a case study design is that it is also “useful in examining contemporary events” (Yin, 2003, p. 7). Case-study methods are beneficial for addressing questions about process, how or why something is happening (Stake, 1995; Yin, 2003). Therefore, a rich description of the subject is of much significance and thus, does not require any hypothesis to be deduced from theory to guide the research (Merriam, 1998).

Despite the rationale and strength of the case study discussed above, Yin (2003) notes some traditional criticisms or prejudices in regard to case study research. The first is in regard to the lack of rigour in the case study. The second, is that the case study provides little basis for scientific generalization and is not widely applicable in real life. The last, is that the case study takes too long and results in massive and unreadable documents. Although Yin (2003), in particular, refuted that criticism by presenting a well constructed explanation of the rigour issue, the differences between analytic generalization and statistic generalization, and the alternative ways of writing a case study, Yin concludes that a good case study is still difficult to implement.

Moreover, holding the status of insider researcher, I was aware of the potential implications of a case study. From the literature, it can be noted that there has been an ongoing debate concerning the strengths and weaknesses of insider research. Several researchers claim that insider researchers, who found familiarity with a community and its people, help to create instant access and rapport (De Andrade, 2000; DeLyser, 2001; Merriam et al., 2001; Nakhleh, 1981; Sherif, 2001; Stephenson & Greer, 1981). Some have argued that an insider’s closeness and familiarity with the group provided unique

insight into the under-represented and colonized groups to which they belonged (Baca Zinn, 1979; Banks, 1998; Paredes, 1978). Hence, their research could “make a great contribution, not simply to our ethnographic knowledge, but also to the theoretical treatment of human behaviour” (Ohnuki-Tierney, 1984, p. 585). Nevertheless, in discussing the insider-outsider debates, Labaree (2002) argues that the advantage insiders have in knowing the community may be strengthened or weakened based on the ways in which their various social identities may shift during interaction with participants, or based on the degree of perceived or actual closeness to participants as a result of shared experience or social identities (e.g., race, gender, age). Likewise, Naples (1996) also agrees that both the insider, as well as the outsider, have no monopoly on advantage, “insiderness or outsiderness are not fixed or static positions, rather they are ever shifting and permeable social locations that are differentially experienced and expressed by community members” (p. 140).

Therefore, as an insider researcher, I always keep in mind that there are also dilemmas and disadvantages of which insiders must be aware. Even though it can be more practical and easier and allows better access to both naturalistic data and to participants (Geertz, 1973), my involvement as insider researcher also means that I may find it difficult to understand some dimensions of social interactions because they have become familiar to me. There may also be some conflict between my role as a researcher and as a professional within the institution under study, as my participants may be people who have pre-formed expectations of my alignments and preferences in ways which change their responses in interviews. Thus, in order to address these possible issues, I have strove to develop a critical awareness of the methodological and ethical issues pertaining to the research. This will be discussed in the following sections.

5.4.1 A case study site

This research applies a case study strategy in a Malaysian university teacher education programme. The case study is the Faculty of Education as a case (bounded system) to explore teaching and learning experiences among teacher educators and education students.

As a public-funded tertiary institution, the university has taken initiatives to succeed in bringing the country to the forefront of world academia. The university is committed to

developing academic programmes that are of high quality, innovative and relevant to the aim of the National Education Philosophy in enhancing the human capital who is knowledgeable and competent, while being able to contribute towards the socioeconomic progress of the nation. To achieve this objective, the determination of the path of the teaching and learning, and the development of the curriculum, involves the stakeholders, including the Malaysian Ministry of Higher Education (MOHE), and the professional bodies. The university emphasizes the importance of providing and offering high quality and relevant academic programmes, as outlined in the National Higher Education Strategic Plan. One of the educational goals of the university is to ensure that graduates of the university will be able to demonstrate the knowledge and skills in their field of study, research and professional practice, relevant to the processes of critical thinking, creative thinking and problem solving. Consistent with its educational goals, the university is committed to producing graduates who are able to use learning methods effectively; this should include the latest technology that is available, in order to manage information.

To ensure that faculties/programmes/staff remain relevant to national and current needs, appropriate training opportunities are periodically provided for all staff members to enhance self-development. Academic staff will be given opportunities for the training in teaching and learning and to continuously improve their professionalism through ‘the centre of teaching and learning’ (or other methods including sabbatical leave and research leave). The university also makes compulsory revisions of the curriculum and reassesses them periodically. To promote the effective delivery of the curriculum through student-centred learning, the provision of physical space (e.g., lecture halls and computer labs), resource facilities (including virtual libraries), communication technology (Web, WiFi, e-learning), and research facilities are provided. The university has also implemented various programmes that link between academia and industry, i.e., a structured training programme for university students to enhance their generic/soft skills and expose them to the working environment. This demonstrates that the university is determined to ensure that the learning experiences will equip the graduates with high level of soft skills as expected by the Ministry of Higher Education (MOHE).

The faculty involved in this case study is the Faculty of Education which consists of several departments. The faculty offers undergraduate programmes (Bachelor in Education degree), Master of Education degree (MEd), and Doctor of Philosophy

(PhD). All programmes focus on curricula that are designed and developed based on outcome-based education (student-centred learning), as outlined by the MOHE and Malaysian Qualification Agency (MQA). In line with the university's education goals, the faculty emphasises the implementation of various effective pedagogical practices focusing on creative and critical thinking through student-centred learning approaches and the utilization of Information and Communication Technology (ICT). The faculty is also involved in a curriculum transformation plan by developing soft skill elements (as required by the Malaysian Qualifications Framework) in the process of teaching and learning, and in other supporting activities such as extra-curricular activities. From the activities (curricula and co-curricula) to which undergraduate students are exposed in order to engage in continuous self-improvement, to demonstrate leadership and positive professional qualities, as well as to be able to communicate effectively with other professionals and members of the community. This transformation has brought new opportunities and responsibilities for academic staff, which include a new expectation that all academic staff to become 'facilitators of learning'. In this context, an attempt to develop effective approaches in teaching and learning is not merely a forced condition of new policy; it is a major part of institutional identity, which motivates staff to desire to work in similar ways.

5.5 Participant recruitment

The research participant recruitment began after receiving approval from the Auckland University of Technology Ethics Committee (AUTECH) on 30th November 2009. Since the research aims to explore teaching and learning experiences in a Malaysian teacher education programme, the main participants are Malaysian teacher educators and Malaysian education students from a university level teacher education programme. Purposive sampling to identify and select research participants was chosen because it enabled the incorporation of my research interest and purpose. In purposeful sampling strategy, "the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 125). Moreover, purposeful sampling is commonly used in qualitative research since a deeper understanding of the case can be attained to address the central questions of research (Creswell, 2007; Merriam, 1998; Patton, 2002).

Creswell (2005) reported that in qualitative research, “we identify our participants and sites based on places and people that can best help us understand our central phenomenon” (p. 203). Therefore, to better understand this phenomenon, the qualitative researcher purposefully or intentionally selects individuals and sites. This understanding arises through a deeper understanding of the people or site, which can drive to information that allows individuals to learn about the phenomenon.

The literature identifies several qualitative purposeful sampling strategies (Miles & Huberman, 1994; Patton, 1990). In this research, a qualitative snowball sampling was used. Snowballing or chain sampling was widely used in the qualitative study (Cohen, Manion, & Morrison, 2000; Lofland & Lofland, 1995). It is a form of purposeful sampling that typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to participate in the study (Huberman & Miles, 2002; Patton, 1990). Researchers may pose this request as a question during an interview or through informal conversations with individuals at a research site (Creswell, 2005).

Prior to starting the recruitment, I had clearly set the criteria for the selection of participants. Firstly, all the participants (teacher educators and education students) came from the teacher education programme under the Faculty of Education. Second, the teacher educators were involved in teaching education students in the programme for the required semester (December 2009 to March 2010). Thirdly, the teaching experience of the teacher educators was divided into two ranges of period: 1) 1-10 years; and 2) More than 10 years. Finally, the education students selected were final year students enrolled in the Bachelor of Education.

There were a total of 19 participants involved in this study (Table 9). All participants were provided with (1) a participant information sheet (Appendix 1a and 1b); and (2) a consent form (Appendix 2a and 2b). The sample sizes were believed to be adequate because the responses during the interviews had provided a saturated, varied, rich, and in-depth, data which enabled me to explore the teaching and learning experiences in the programme. It has been suggested that a sample of twelve participants may be sufficient to enable the development of meaningful and useful interpretations for such a study (Guest, Bunce, & Johnson, 2006). Furthermore, from the literature, there is “no description of how saturation might be determined and no practical guidelines for estimating sample sizes for purposively sampled interviews” (e.g., Guest et al., 2006, p.

60). However, some researchers provided guidelines for actual sample sizes although they gave differing ranges (Bernard, 2000; Creswell, 2007; Guest et al., 2006). For example, Bernard (2000) suggested 36 interviews for ethnographic studies; while Creswell (2007) recommended between five and 25 interviews for a phenomenological study and 20 to 30 for a grounded theory study; and Guest et al. (2006) proposed a sample of six to 12 interviews.

Table 9: The number of participants

Participant	No
Teacher educators	7
Education students	12
Total	19

5.6 Data Collection Methods

In my research context, I employed multiple research methods. Semi-structured interviews were used as the main source of evidence. They were then supported and triangulated by other sources, i.e., document reviews (such as Ministry of Education (MOE) and Ministry of Higher Education's (MOHE) policies; faculty and departmental course materials and lecturers' lesson plans), classroom observation and stimulated recall interviews. Silverman (2001) claimed that interviews, questionnaire, observation and analysing documents are always combined in qualitative research as these methods are powerful in their provision of in-depth and detailed description, understanding and knowledge of particular phenomena from the participants' perspective (Merriam, 1998; Patton, 1990).

The application and combination of several research methodologies contributes to triangulation in research. Triangulation is a powerful strategy in qualitative research that enhances the credibility and trustworthiness of the results (Lincoln & Guba, 1985; Patton, 2002). In my study, classroom observations that were backed up by stimulated recall interviews and other sources of data provided me access to the teacher educators' interpretations of their actions, cognition activities and perceptions.

As mentioned earlier, my study employed multiple data collection methods. The data collection methods for this study consisted of five stages, which will be discussed in the

following subsections. The overall data collection framework that emerged from the case study research is presented in the following Table 10.

Table 10: The framework of data collection

Stage	Purpose	Research methods	
1	Obtain information about teacher educators teaching experiences and form the basis on next stages investigation.	Semi-structured individual interview (teacher educators)	Document analysis (Ministry of Higher Education, Ministry of Education, faculty, teacher educators, students and own written field notes)
2	Obtain information about education students learning experiences based on individual.	Semi-structured individual interview (education students)	
3	Obtain further information about education students learning experiences in groups to construct meaning collectively.	Focus group interviews (education students)	
4	Obtain additional information about what is actually happening from observation, rather than relying on merely perceptions of what is happening.	Classroom observation (focused on educators' teaching practices)	
5	Obtain further elaboration from teacher educators about specific elements of teaching approaches observed in the classroom to obtain their tacit thinking and the explicit and elicit cognitions underlying their observable actions.	Stimulated recall interview (teacher educators)	

5.6.1 Semi-structured interviews

This study employed semi-structured interviews as the main data collection method due to the flexibility afforded to the researcher to modify the questions to understand the phenomenon investigated. Robson (2002) stated that the order of questions can be modified based upon the interviewer's perception of what seems the most appropriate.

This enables the researcher to ask additional questions and further explanations in regard to some points to gain in-depth understanding. As Creswell (2007) suggests, in qualitative research, interviews with the open-ended questions should be selected in order to obtain from participants the best voice regarding their experiences and perspectives unconstrained by any experiences and perspectives of other researchers or previous research findings. Interviewing is a suitable research method to gain information that involves interaction between researcher and interviewee (Robson, 2002).

However, I am aware of several limitations in regard to the interviews. First, responses from participants during interviews may be biased by their psychological or emotional condition, or merely by memory failure. Second, their responses may be biased as they may tell me something what they thought I wanted to hear. The biases may lead to incomplete reports or possibly to those lacking in truth (Marshall & Rossman, 2006). Third, the nature of an interview that is carried out within a limited period of time may discourage participants from participating, and thus may cause difficulty in finding subjects.

In the current study, there are a total of 26 interviews (Table 11). I conducted; semi-structured individual interviews with teacher educators and education students, focus group interviews with education students, and stimulated recall interviews with teacher educators, after observing their actual teaching. By employing multiple sources of evidence, the data collected were triangulated to find a convergence of information about the subject researched.

Table 11: Total number of interviews conducted

Type of interview	Participant	No
Individual Interview	Teacher educators	7
Individual Stimulated Recall Interview	Teacher educators	5
Individual Interview	Education students	12
Focus Group Interviews	Education students	2
Total		26

From my experience in conducting semi-structured interviews, the interviewer and participant interaction is a complex phenomenon. Both parties may bring bias, predispositions and attitudes that potentially affect the interaction between them. Thus, from the beginning, my professional experience had to be relied upon for the establishment of a positive rapport with the interviewee; this was achieved by being sensitive to verbal and nonverbal cues, maintaining non-judgmental behaviour, and being respectful of the individual's opinions and comments. Professional experience developed during ten years in the education world assisted me in this field research.

During the interview sessions, only the participant, I as a researcher and the audio-recorder were present. All participants seemed very comfortable, even with the presence of the recorder, and all allowed the interviews to be recorded; the recorder did not appear to have any influence on their conversation. In fact, some of them reminded and assisted me to test the recorder before the session commenced. The interviews were recorded for the purpose of accuracy and spontaneity. Assurance of confidentiality was given to the participants in the study through the Consent Forms (Appendix 2[a] and 2[b]).

All the recordings, both in individual interviews and in focus group interviews were transcribed verbatim. The transcriptions of the interviews were conducted in the same language (the Malay language) as was used in the interviews. The Malay language was maintained in order to maintain authenticity. However, all the quotations used in the reporting were translated into English by a professional translator. The transcripts were read to identify the issues and aspects raised by the participants. A form was developed to organise the issues and relevant aspects of study. This form consists of three main columns: aspects, contents, and comments. In the aspects column, the elements raised by the participants were listed; the contents column presented the excerpts related to each aspect, and finally the comments column recorded my remarks on, and questions about, each excerpt. The questions recorded in the comments column provided the basis for some of questions asked in focus group interviews and stimulated recall interviews. The former were conducted with students and the latter with the teacher educators.

5.6.2 Individual interviews

Individual interviews were the main method of data collection in this research. Individual interviews were chosen because they provide a valid and effective way of

investigating participants' experiences and perspectives. According to Creswell (2005), one-on-one interviews are ideal for interviewing participants who are not hesitant to speak, are articulate, and who can share ideas comfortably.

As described in Table 10 (p. 102), the first stage of data collection procedures began with semi-structured individual interviews with the teacher educators, followed by interviews with the education students in the second stage. The individual semi-structured interviews assisted me to have a clear understanding of the questions to be explored. Prior to interviewing, the interview questions (Appendix 3a) had been designed to explore how teacher educators experience teaching and learning, and what the understanding of teaching is in relation to their teaching approach. Interview questions (Appendix 3b) had also been designed to explore the way in which education students experience learning, and what are the learning strategies that they adopt.

Each individual interview lasted between forty-five and sixty minutes. All the interviews with teacher educators were conducted in the interviewees' office. Meanwhile, interviews with education students were conducted in the counselling laboratory. To facilitate active participation from the participants, the teachers and the students were interviewed at their preferred time, and in their preferred language, i.e., Malay.

5.6.3 Focus group interviews

After completing the individual interview sessions with students, I conducted two focus group interviews with all those involved (Table 10, p. 102). The focus group interviews had the potential to produce important insights concerning the way in which students understood and perceived learning, since they involved the interaction of participants who came from a variety of fields of experience. A focus group interview has the potential to raise awareness (Robson, 2002) and to facilitate engagement between its participants to construct meaning collectively (Bryman, 2004). Moreover, Morgan and Krueger (1993) argue that the advantages of focus groups for investigating complex behaviours are a direct outcome of the interaction in focus groups, what has been termed "the group effect" (Carey, 1994; Carey & Smith, 1994). During the focus groups, participants question each other and explain themselves to each other. Such interaction offers valuable data on the extent of consensus and diversity among the participants (Morgan & Kruger, 1993).

However, focus groups also have potential for weaknesses. Saferstein (1995) noted that the agenda and form of discussion in focus groups were determined mostly by the moderator, rather than by the ongoing work of the group. Moreover, the moderator's efforts to guide group discussion had the ironic consequence of disrupting the interaction of focus group members (Agar & MacDonald, 1995).

In the context of this study, each group consisted of six education students who had participated earlier in the individual semi-structured interviews. I used data gathered from the individual interviews to structure the focus group interviews with the education students. I discussed the research topic with the group in regard to their learning experiences in the teacher education programme, and asked them, as a group, how they thought and felt about the issues (Appendix 4 for interview questions for focus group). Each interview did not exceed 90 minutes and was audio-recorded.

5.6.4 Classroom Observations

Observation is the process of gathering open-ended, firsthand information by observing individuals and places at a research site (Creswell, 2005). In observation method studies, "the major data gathering technique is participant observation and the focus of the study is on a particular organization or some aspect of the organization" (Bogdan & Biklen, 1992, p. 106). Usually, a specific part of the organization is considered for study. This could be a particular place in the organization, a specific group of people within the organization, or a specific activity carried out by the organization. Bogdan and Biklen (1992) recognized the fact that "to study a particular group out of the context of a world that is normally integrated, is an artificial act, but a necessity to make research manageable" (p. 49).

After individuals and focus groups interviews, I conducted classroom observations (as shown in Table 10) in order to obtain deeper insight. Conducting observation provided the opportunity for me to observe classrooms, rather than relying on the perception of what was happening which had resulted from the interviews. By conducting observations, researchers have the opportunity to record information as it occurs in a setting, to examine actual behaviour, and to study individuals who have difficulty verbalizing their ideas in interviews (Creswell, 2005). In addition, "the qualitative researcher's goal is to better understand human behaviour and experience" (Bogdan & Biklen, 1992, p. 107). In other words, the descriptions, analysis, and interpretations of

observation data are the heart or core of describing human behaviour and experience. According to Robson (2002), classroom observation will provide a researcher with direct and real data as “at the heart of every case study lays a method of observation” (Cohen & Manion, 1991, p. 125). Most importantly, Maxwell (2005) claims observation is significant for getting at tacit understandings and ‘theory-in-use’, and aspects of the participants’ perspective that they are reluctant to reveal directly in interviews.

The classroom observations conducted in this study involved five teacher educators who had participated earlier in the semi-structured individual interview. Two of the classes met twice weekly for 1.5 hour sessions, one class met twice weekly for two hours, and another for a one hour session, and the other two classes met for three hours, weekly. All classes were conducted for a total of three hours per week. The classroom observations were conducted in order to supplement data obtained by semi-structured interviews. During the observations, teaching practices and data obtained from course documents (e.g., lesson plans, course outlines, etc.) were analysed using classroom observation sheets (Appendix 5).

Table 12 shows the details of classroom observations conducted with five teacher educators who agreed to be observed in their actual teaching practice.

Table 12: Details of classroom observations conducted

Teacher educator (*Pseudonyms)	Gender	Year of teaching experiences	Teaching period hours
Safuan	Male	1-10	3.0
Ilyas	Male	More than 10	1.5
Robert	Male	More than 10	1.5
Noor	Female	More than 10	3.0
Mary	Female	More than 10	2.0

*To protect the participants’ identity and privacy, pseudonyms rather than names are used.

As mentioned earlier, the observations focused on teacher educators’ teaching practices, and therefore, there was no observation of students. An observational protocol (Appendix 6) was provided to all teacher educators before the observations were

conducted; this was to explicate details on observation procedures. Even though the observation did not focus directly on students, student reactions about what happened in their classroom were noted.

According to Bogdan and Biklen (1992, p. 107), “the successful outcome of a participant observation study relies on detailed, accurate and extensive field notes”. In the context of the present study, field notes refer to data collected by me as a passive observer in the classroom setting. As a passive observer, I was able to observe from a corner of the classroom and write field notes during each class session. My field notes captured (a) dialogue between educators and students; (b) descriptions of the physical setting; (c) student/teacher interactions; (d) instructional content and activities, and (e) my own subjective reflection and analysis. All of the data on the observations were coded in classroom observation sheets (Appendix 5). I designed a list of teaching aspects and employed it as a guideline for observing teaching practices. For each aspect, a comments’ column was prepared; this was used for note-taking or describing what was observed.

5.6.5 Stimulated recall interviews

After all the individual semi-structured interviews with teacher educators and education students had been carried out, I conducted a stimulated recall exercise with the teachers in order to further interpret the classroom dynamics. Stainback and Stainback (1989) argued that observation research can be effectively used in concert with, and as a complement to, other data collection procedures such as interviewing. They emphasized that “where the participant observation is used in conjunction with interviewing, the researcher is provided the opportunity to study the relationship between the natural participant’s words and their deeds” (p. 51). The most common form of stimulated recall interview is the person-to-person encounter in which one person elicits information from another person.

The stimulated recall interviews led to further information that had been missed or had been unclear during the observations, and was also be used to check the accuracy of the observation. The stimulated recall interviews were used to identify teacher educators’ ‘tacit’ thinking explicit and elicit cognitions underlying their observable actions (Clark & Lampert, 1986; Kagan, 1990). The interval between the first individual interview, the classroom observation, and the stimulated recall interview, varied among the

participants in order that it could fit into the individual educators' timetables. The shortest interval was two weeks and the longest, five week.

When the participants returned for stimulated recall interviews, the purpose of the session was first described to them, then the way in which the session would be conducted, followed by what they were expected to do. The stimuli employed in this study were the excerpts from the individual interviews and the aspects observed from their classroom teaching. During the stimulated recall interviews, I described what had been observed in the written description, and, for a deeper understanding, asked the teacher educators to, clarify, elaborate and comment on their actual teaching practices. Apart from the questions relating to the participants' teaching practices, additional questions were asked when necessary. The venue for the stimulated recall interviews was the same as for the individual interviews. The length of the interviews ranged from 45 minutes to 140 minutes. All participants spoke in Malay, and occasionally used some English words or phrases. The interviews were audio recorded and the recordings were transcribed.

5.6.6 Documents

Document analysis was also employed in this study starting from early in stage 1 of the data collection methods, and continuing through to stage 5 (Table 10, p. 102). Documents were collected from several sources, including, the Malaysian Ministry of Higher Education, the Ministry of Education, the Faculty of Education, and from the research participants (teacher educators and students). The documents, with their data on various teaching and learning phenomena, were enriching.

I gathered and analysed official documents and guidelines relating to teaching and learning from the Ministry of Higher Education and Ministry of Education. These included such items as; educational journals, policies and reports, acts, and ordinances, either directly, or indirectly, dealing with education, as well as journals, articles, political party memoranda, news papers and studies undertaken by various individuals to indicate some of the more important social, political, cultural and educational conditions prevailing in Malaysia. The collection of the documents helped to further my understanding of the education system of the country, both in schools and in higher education institutions. Most importantly, the documents provided information regarding educational philosophies and policies in Malaysia.

Simultaneously, I collected and analysed documents related to the faculty, such as; course outlines, programme reports, official memos, minutes, records and archival material. These documents provided information regarding the faculty's goals, the expectation of teaching and learning practices, and curricula designs. I also gathered documents from teacher educators who participated as research participants. Documents such as lessons plan, lessons notes, questions for student assignments, and teaching strategy guidelines were compiled and analysed. The documents gave some direction for later interviews, either with the donors of the documents, or with their students. I further analysed my 'researcher-generated documents'. These were such items as; written field notes, diary or log books of activities, and the reflective notes which I had been prepared during the investigation period. This assisted me in gaining a better understanding and the opportunity to reflect on other research methods. The document collection continued until the end of data collection period.

5.7 Strategies for data analysis

In this study, I employed M & H's Interaction Model for Qualitative Data Analysis (Miles & Huberman, 1994) to analyse the data within and across each data source (individual interviews, focus group interviews, observation and stimulated recall, and documents). The model indicates that data analysis revolves around three interrelated activities which flow from the data collection. These activities are data reduction, data display, and conclusion drawing and verification. In this section, the strategies for the data analysing are discussed with reference to three stages: 1) Stage one (manual); 2) Stage two (NVivo); and 3) Stage three (interpretation of data).

5.7.1 Stage one: Manual review and reflection

The first stage of data analysis was a manual review and reflection, involving data generated from all 19 individual interviews; two focus group interviews; five classroom observations; and five stimulated recall interviews. The initial analysis was from the interview data (individual and focus group) that was conducted upon the completion of the transcripts. This was followed by classroom observation data (classroom observation sheets) and finally, by stimulated recall interview data.

The primary purpose was to identify topics which were raised by the participants. Initially, I listened carefully to the recorded interviews and read the transcripts several times. I also analysed the classroom observation sheets. I read, edited, and checked the

data, paragraph by paragraph, for accuracy. At this early stage, the checking was executed manually.

This first stage identified several types of topics in the participants' data, most of which were descriptive in nature. For example, with teacher educators' transcripts, the first type raised was of teaching preparation phases, including "*continuous self preparation*", "*lesson plan*", "*course outlines*", "*course content*" and "*teaching objectives*". Another type was of teaching experience, including "*own experience*", "*learn from others experience*", and "*reason learning from others experience*", next was on teaching activities, including "*types of activities*", "*learn from others teaching experiences*", "*characteristic of teaching activities*", "*problems with implementation of teaching activities*". There were also types of data relating to assessment and students' learning behaviour, on assessment, including "*exam-oriented*", "*test*", "*examinations*", and "*marks allocation*". In addition, there was some data on student learning behaviour, consisting of "*respect*", "*shy*", "*active*", "*passive*", "*cooperative*" and "*demanding*". Two types on teacher understanding of learning characteristic and teaching characteristics also emerged, on learning characteristics, including "*learning from new information*", "*differences in learning*", "*knowing students' learning style*", and "*student's learning attitude*", and for teaching characteristics, including "*knowledge explanation*", "*providing understanding*", "*focus on student's learning*", and "*relationship with students*".

Meanwhile, in the education students' transcripts, several topics raised, for example: educational experiences, including, "*school learning experiences*", and "*university learning experiences*". The next set of topics related to learning activities, consisting of types of active learning activity, namely; "*group work*", "*presentations*", "*questions and answers*", "*assignment projects*", "*article searching*" and "*working with peers*", "*learn from others*", and "*learn by doing*". This was followed by learning problems, consisting of "*time constraints*", "*financial problems*", "*cooperation among friends*", and "*course content*". In addition, learning notions, such as; "*understanding*", "*memorizing*", "*repeating*" and "*absorbing*", including, learning from new information, "*learning from reading*", "*learning from application*", "*learning by understanding*", "*learning from outside*", and "*learning by asking*", were raised. Students' experience in regard to teaching approaches was another type of issue raised in the interviews, for example; "*teaching styles*", "*note taking*", "*direct lecture*" and

“problem with active teaching”. The final topic was type of teacher role including; *“teacher as transmitter of knowledge”*, *“teacher as expert”*, *“teacher as facilitator”*, *“teacher as skill builder”*, *“teacher as active actor”*, *“teacher as learner”*, and *“teacher as guidance”*. The identified topics and relevant dialogues were then organized and put into a memo of reading data, and were used as the basis for the second stage of data analysis.

5.7.2 Stage two: Coding with NVivo

In this second stage, the data analyses were completed with the assistance of the NVivo programme, computer software that is designed specifically for qualitative data analysis, applying the concept of grounded and inductive analysis (Bazeley, 2007; Gibbs, 2002). Most importantly, NVivo was capable of supporting a more rigorous, manageable, ordered and organized analysis, since one of the key problems in qualitative research is the massive database it requires. Since qualitative data analysis amasses volumes of raw data; therefore, it is significant to maintain the data in an organized way (Merriam, 1998; Stake, 1995; Yin, 2003).

After all the data were read, checked and edited, they were imported into NVivo for analysis. Afterwards, the categories were coded by key terms, key events, or actions. As a constructivist paradigm case study, the codes for the data were not conceptually driven, and thus, I needed to develop a data-driven perspective and understanding. This step was the start of coding. The data were marked and categorized according to meaning into free nodes in NVivo. In NVivo, the data were first coded as “free nodes” (Gibbs, 2002, p. 31), which was the simplest way to indicate a group of materials sharing a basic meaning, idea or concept. Coding in qualitative research is a way of classifying (Miles & Huberman, 1994).

At the ‘free nodes’ stage, or ‘open coding’, the data were carefully read to code an event or idea. Data was analysed line by line, where each sentence was coded. The passages or sentences which exemplified the same concept were coded with a particular node. Subsequently, the codes were repeatedly compared to other codes to search for overlaps or repetitions. The nodes which represented identical concepts were then merged into one node. As the analysis proceeded, nodes emerged, and the relationship of the nodes was clarified. During this stage, new nodes were added as required and therefore the nodes were constantly being refined. In addition, Bogdan and Biklen (1998) also

suggested “playing with different coding possibilities” (p. 183) before narrowing them down for sub codes under the major code categories by themes. Reflective notes during the interviews were also applied since they could be helpful in identifying the possible coding categories (Bogdan & Biklen, 1998).

Then, I organised and sorted the ‘free nodes’; these ‘free nodes’ appeared to represent a more general concept of categories of nodes, the ‘tree nodes’. ‘Tree nodes’ are an arrangement of nodes in a tree structure, or hierarchy, to elaborate their relationship (Gibbs, 2002). I analysed and explored the relationship of nodes constructed as ‘tree nodes’, and made connections between them, then clustered them in meaningful and broader conceptual categories. The meaning was once again abstracted from the coded incidents into broader conceptual categories (Gibbs, 2002).

5.7.3 Stage three: Data interpretations

The third stage analysis in this study identified categories or themes which were able to provide answers to the research questions. Although the NVivo assisted in organization and keeping track of the many disordered documents and records, I was aware that the application of NVivo was only to facilitate the mechanical tasks of the analyses, such as data storage, data retrieval, and database auditing, while the analytic and interpretive tasks were the responsibility of me. As Stake (1995) posits, qualitative research requires a substantial emphasis on interpretation by the researcher. Therefore, I continued with the data interpretation as the third stage in the process. In comparison with the ‘free nodes’ and ‘tree nodes’ in the second stage, this process was more analytical and theoretical. It concerned the seeking of linkages among the broad conceptual categories, and making choices from the themes that emerged from the earlier analyses.

5.8 Establishment of trustworthiness

I carried out several strategies in the current research study to establish the rigour of the data and findings. The main emphasis was on rigour as there is a particular emphasis placed on this as the criteria of goodness for qualitative research (Marshall & Rossman, 2006). Yin (2003) suggested four tests which have been commonly used to establish the quality of any empirical social research, including case study research. The four tests are: construct validity, internal validity, external validity and reliability.

While Yin (2003) suggested the four tests in relation to rigour, Lincoln and Guba (1985) suggested another term for rigour, i.e., 'trustworthiness'. Lincoln and Guba (1985) explained this 'trustworthiness' with four issues i.e., credibility, transferability, dependability, and confirmability. They mentioned that the aim of 'trustworthiness' in a qualitative inquiry is to support the argument that the inquiry's findings are "worth paying attention to" (Lincoln & Guba, 1985, p. 290). They describe the term "credibility" as an evaluation of whether or not the research findings represent a "credible" conceptual interpretation of the data drawn from the participants' original data (Lincoln & Guba, 1985, p. 296). 'Transferability' is the degree to which the findings of the research can apply or transfer beyond the bounds of the project. 'Dependability' is an assessment of the quality of the integrated processes of data collection, data analysis, and theory generation. 'Confirmability' is a measure of how well the inquiry's findings are supported by the data collected (Lincoln & Guba, 1985). Thus, in addressing confirmability, the role of triangulation was also emphasised, to reduce the effect of investigator bias.

In this study, the rigour of the data was addressed through several strategies to establish trustworthiness as suggested by Lincoln and Guba (1985), namely credibility, transferability, and dependability and confirmability.

5.8.1 Credibility

I first emphasized the credibility of the data in the addressing of the issues of trustworthiness. Ensuring credibility is one of the most important factors in establishing trustworthiness (Lincoln & Guba, 1985). I employed several strategies including; 1) triangulation; 2) peer debriefing; and 3) member checking.

Triangulation

The triangulation method is typically a strategy for improving the trustworthiness of research or evaluation of findings. It is considered as one of the rigorous strategies to be adopted in data analysis to enhance the credibility of the qualitative research (Lincoln & Guba, 1985; Patton, 2002). Mathison (1988) elaborates this by saying:

Triangulation has raised an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology. (p. 13)

Most importantly, triangulation accommodates with paradigm of the current qualitative study, which is constructivism. The paradigm views knowledge as socially constructed and may change depending on the circumstances. Crotty (1998) defined constructivism from the social perspective as “the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context” (p. 42). In any qualitative research, the aim is to “engage in research that probes for deeper understanding rather than examining surface features” (Johnson, 1995, p. 4). The constructivist notion, that reality is changing whether the observer wishes it or not (Hipps, 1993), is an indication of multiple or various possible diverse constructions of reality. Constructivism values multiples realities that people have in their minds. Therefore, to acquire valid or trustworthiness multiple and diverse realities, multiple methods of searching or gathering data are in order.

In this study, I used multiple methods of data collection, such as; individual interviews, focus groups interviews, observations, and stimulated recall interviews (as discussed in the previous section 5.6) to improve the trustworthiness of the research. These methods not only generated rich data from lengthy interviews, but also provided opportunity for re-interviewing the same participants (as described in section 5.5). The information on what a particular participant said about the same thing at different stages (please refer to Table 10, p. 102) of the interviews and what different participants said about the same issue were compared and cross-checked for consistency. When differences were identified, efforts were made to examine and understand when and why they occurred. This process guaranteed in-depth and detailed analysis and identification of different perspectives.

Peer debriefing

I had frequent debriefing sessions with supervisors and colleagues. The collaborative sessions provided me with feedback and constructive comments. Through discussion, others brought shared their experiences and perceptions and thus my own perspective was widened. Besides participation in the university’s seminar and presentation, my involvement in various international conferences such as: (1) the Annual Conference of the Australian Teacher Education Association (ATEA), in Townsville, Queensland, Australia (Tengku Kasim & Furbish, 2010a); (2) the Lifelong Learning International

Conference 2010 (3LInC'10), in Kuala Lumpur, Malaysia (Tengku Kasim & Furbish, 2010b); and (3) the 1st Academic International Conference 'Exploring Leadership and Learning Theories in Asia (ELLTA), in Penang, Malaysia (Tengku Kasim & Furbish, 2011), has equipped me with formative feedback and constructive critique as well. Questions and observations have enabled to the development of a fuller explanation of the research design.

Member checking

I employed 'Member Checking' as one of the strategies to enhance the trustworthiness of the research data. Member checking is an important measure taken for establishing credibility (Lincoln & Guba, 1985; Patton, 2002). The member check is the process whereby the data are reviewed by the participants (Lincoln & Guba, 1985).

In the current study, I completed member checking with five of the seven teacher educator participants, and with eight of the twelve education student participants involved in the individual interviews. The others participants were unavailable. The complete interview transcripts were returned to the participants to check for the accuracy of transcription. In this procedure, the participants were encouraged to read, respond to, and comment, add further reflections or elaborations, and make additions and changes to the transcript. They were asked to consider whether their words matched with what they had actually intended. They were also encouraged to review a summary of the preliminary results. The outcomes from several of the participants were amazing. They answered several standardized questions and offered few comments regarding the findings. The checked transcripts then were used for the data analyses. This member check process further improved the clarity of the data, and added value to data reconstruction and analysis.

5.8.2 Transferability

Lincoln and Guba (1985) suggest that it is the responsibility of the investigator to ensure that sufficient contextual information about the fieldwork sites is provided to enable the reader to decide whether to make a transfer of the findings to their own context. Moreover, it is important to provide a sufficiently thick description of the phenomenon under investigation, in order to allow readers to have a proper understanding of the study. Thus, in the context of my study, I have provided the widest range of information in relation to the data collection methods, such as; the research

strategy adopted (Chapter 5.4), number of participant involved (Chapter 5.5) and the number of the data collection methods (Chapter 5.6).

5.8.3 Dependability and confirmability

In addressing the issue of dependability (the term of reliability in qualitative research used by Lincoln and Guba, 1985), the research design for this study was reported explicitly, including, its implementation, and the operational details of data gathering (sections: 5.3, 5.4, 5.5 and 5.6). This enables readers of the research report to develop a thorough understanding of the methods and their effectiveness. Lincoln and Guba (1985), who stress the close ties between credibility and dependability, argue that, in practice, a demonstration of the former goes some distance in ensuring the latter. Thus, in order to address the dependability issue more directly, the processes within the current study were reported in detail, thereby enabling a future researcher to repeat the work.

Lincoln and Guba (1985) emphasize the significance for the research process to be logical, well documented and capable of being followed by other researchers. They suggest that all research findings must be clearly derived from research data. Thus, the roles of triangulation in promoting confirmability have to be emphasised in order to reduce the effect of investigator bias. Miles and Huberman (1994) consider that a key criterion for confirmability is the extent to which the researcher admits his/her own predispositions and I attended to this in section 5.2. They also suggest that researcher should also acknowledge the beliefs underpinning decisions made and methods adopted, as well as the reasons for favouring a certain approach, and I have addressed these in section 5.6.

5.9 Chapter summary

My study employs a qualitative case study approach to investigate the experiences of teaching and learning in a Malaysian university teacher education programme. There were a total of 19 participants involved in my study, i.e., seven teacher educators and twelve education students. Data for the study were collected with the use of several methods: 1) Individual interviews; 2) Focus group interviews; 3) Classroom observations; 4) Stimulated recall interviews; and 5) Documents. Classroom observations were conducted after the individual and focus group interviews. There were five classrooms involved for the observations carried out in the study. The

stimulated recall interviews were held with the five teacher educators after the completion of the classroom observations. Documents from the faculty and research participants (e.g., programme reports, course pro forma, lesson plans, course outlines and guidelines relating to teaching and learning approaches), and those from the ministry (e.g., policies and reports, acts, and ordinances) were reviewed and analysed.

In this study, the M & H's Interaction Model for Qualitative Data Analysis was employed to analyse the data within and across each data source (individual interviews, focus group interviews, observation and stimulated recall, and document analysis). The data analyses were also carried out with the assistance of the NVivo program, computer software for qualitative data analysis. There were 3 stages in data analysing process: 1) Stage 1: manual review and reflection; 2) Stage 2: coding and NVivo; and 3) Stage 3: interpretations of the data. From the data analysis process, several major themes emerged. Those themes are presented in the following two chapters.

CHAPTER 6

TEACHING EXPERIENCES OF TEACHER EDUCATORS

6.1 Introduction

This chapter presents data from a case study that was conducted within a Malaysian university teacher education programme. My study involved teacher educators and education students as the participants. The chapter will present the data from teacher educators comprising of four main themes that emerged from interviews and classroom observations (Chapter 5, section 5.6). The data were analysed to answer the following research questions:

Research question 1: How do Malaysian teacher educators understand teaching in a university teacher education programme?

Research question 3: What are the relationships between teacher educators' perceptions of teaching and their actual teaching practices?

6.2 Teacher participants' profiles

Seven teacher educators in the teacher education programme participated in my study. They were selected based on the criteria of the study (Chapter 5, section 5.5). To protect the participants' identity and privacy, pseudonyms rather than their names were used. Table 13 presents the profile of the participants.

Table 13: Profile of teacher educators

Teacher educators (Pseudonyms)	Gender	Ethnic	Teaching experience (years)
Azzam	Male	Malay	1-10
Safuan	Male	Malay	1-10
Ilyas	Male	Malay	More than 10
Robert	Male	Non-Malay	More than 10
Noor	Female	Malay	More than 10
Mary	Female	Non-Malay	More than 10
Fatimah	Female	Malay	1-10

The first research participant was Azzam. He started his teaching career as a secondary school teacher before becoming one of the university educators. He agreed to be interviewed only once, without participating in classroom observation and stimulated recall interview as his schedule during the research period was very full. During our interview, he provided valuable insights and views regarding aspects of teaching. He was a very supportive interviewee and answered all my questions without any hesitation. His vast experience in teaching helped him to, very succinctly, elaborate on his teaching philosophy.

Safuan, was the second interviewee and he agreed to participate in both interviews (individual and stimulated recall) and in the classroom observation. During the interviews, he related his university teaching with his previous school teaching experiences. His wide experience in education made him confident when talking about his teaching beliefs and philosophy.

Ilyas offered to be interviewed and observed for research purposes without hesitation. He revealed his teaching experiences, including his teaching beliefs and philosophy. As an experienced lecturer with a teaching background of more than ten years, he carefully elaborated each of his sentences to make me understand better what he meant. He preferred to provide examples in his responses during the interviews. This approach can also be observed from his classroom teaching. His teaching style made his explanation clear and explicit.

As the only non-Malay male participant, Robert also provided valuable ideas and thoughts. He talked about his teaching experiences, covering his previous learning experiences. His university teaching experience of more than ten years gave me better opportunity to explore deeper into his beliefs about teaching approaches.

The first female participant was Noor. Her teaching experience started in the university teacher education programme more than ten years ago. She shared her teaching experiences, which were filled with useful points to be acknowledged. She appeared to be very careful when talking about teaching philosophy, and particularly those philosophies relating to the religious aspects of education.

Mary is the only female participant who is non-Malay. She has a teaching background in schools and universities. Her experiences and ideas about teaching added more beneficial information. Although she is a non-Muslim, she seemed to be knowledgeable

about Islamic teaching principles. During the interviews, she provided some of her views regarding Islamic teaching principles. This also can be observed in her teaching practice. She sometimes relates her teaching materials to religious aspects.

The last participant was Fatimah. She only gave permission to be interviewed once, without classroom observation, or a stimulated recall interview. During the interview, she preferred to talk about the active teaching approaches that she adopted with her students. She described how she practiced the active strategies in her teaching and how her students responded to those strategies.

6.3 Overview of themes

By employing the M & H's Interaction Model for Qualitative Data Analysis (Miles & Huberman, 1994) and with the assistance of NVivo to analyse data from the teacher educators within each data source (individual interviews, observations and stimulated recall interviews), four main themes emerged. These four themes reflect the teaching experiences of the seven teacher educators. The inductive analysis, as discussed in the previous chapter (Chapter 5, section 5.7), produced the following theme categorisations: the themes involve several issues, such as; beliefs about teaching, adopting transmissive teaching approaches, employing interactive teaching approaches, and building relationships with students inside and/or outside the classroom.

The themes revealed two perspectives about teaching among the Malaysian teacher educator participants, i.e., first, traditional didactic teaching (transmissive teaching approaches) and second, active teaching (interactive teaching approaches). The emergence of a student-centred perspective in this study, i.e., interactive teaching approaches suggests that the Malaysian teacher educators were in the process of transforming their teaching by adopting transmissive teaching approaches to also employ active teaching approaches. This seems to support the Malaysian government's initiative to shift the Malaysian education system from traditional teaching to active teaching (Ministry of Education, 1997a; Ministry of Higher Education Malaysia, 2006). In the next section, the first theme is presented, i.e., teachers' beliefs about teaching, as their beliefs seemed to influence their transition in teaching understanding and behaviour.

6.4 Theme one: Belief about teaching

“All knowledge comes from God”

The first theme that emerged from the data relates to beliefs about teaching from the perspective of the Islamic philosophy. According to the Islamic perspective, all knowledge comes from God. It is interpreted by the soul through its spiritual and physical faculties. In Islam, the concept of knowledge dominates all aspects of an individual's intellectual, spiritual and social life. An excerpt from Safuan reflects his understanding about teaching that relates to Islamic teaching philosophy.

All knowledge comes from God... it exists naturally in learner's soul, but it will not become actual knowledge without the effect of us, teachers... we're God's workers, we have God's trust to inculcate goodness in people, as the end of education would be to produce good people... thus, we cannot only concentrate to students' learning, but have to take into consideration both the spiritual and the intellectual aspects of the student... (Safuan)

As a Malaysian Muslim teacher, Safuan had been exposed to Islamic teaching and learning principles. His Islamic teaching and learning context had influenced his beliefs about teaching. The Malaysian education system with the emphasis on “beliefs on God” and “holistic and integrated” (Ministry of Education, 1990) had also affected his understanding about teaching. He stated that he has the responsibility to educate students in all aspects of life, spiritual and intellectual as instructed by the God.

Similar beliefs were suggested from the comments of other participants. Azzam mentioned that, as a Muslim, he has the responsibility to ensure all students have a good education. He related his statement with the words of the Prophet.

All students should have opportunity to get good education. As teachers we should provide students with good ideas, thoughts, knowledge, and skills. We should always encourage our students to be motivated to learn until the end. As the Prophet said, seek knowledge from the cradle to the grave! (Azzam)

6.4.1 Belief and the role of teacher

Ilyas explained that his role as a teacher is to educate and encourage students to enhance their potential and ability. From Islamic teaching principles, a teacher is responsible to assist students increase their level of potential and ability, as well as to provide knowledge. Teachers are, therefore, considered as the facilitators of learning, as well as the experts in knowledge. The data showed that Ilyas's response regarding his role as a teacher was influenced by Islamic beliefs when he related his teaching task to the Islamic perspective on the role of the teacher. This reflected his philosophy of the role of the teacher.

They [the students] can gain more learning potential and ability through effective classroom activities. Therefore, I provide opportunities for them to participate in classroom activities such as discussion, presentation and others... Islam encourages us to improve our students' potential... the teacher's role includes developing students' abilities as well as improving their intellectual... through merely lecturing in class, all this purpose cannot be achieved. We must incorporate learning activities as well so that they [students] can have chance to be active in their learning. When they [students] manage to solve problems in their learning, they will have confident in their works, that's the aim of Islamic education... (Ilyas)

Noor made similar statements about teaching. During the stimulated recall interview, she related the importance of managing different students' personalities with Islamic perspectives. Her belief reflected the Islamic teaching philosophy that encourages teachers to be good with students. According to Islamic teaching philosophy, a teacher must be good to students and treat them as his/her own children. A Muslim teacher cannot remain silent while his/her students choose the wrong behaviour but should provide advice through suggestions and encouragement. Being good to students is among a teacher's duties towards students, as a teacher should not concentrate on students' learning only, but also give attention to their conduct.

As teachers, we have to deal with different students' personalities. Through effective teaching approaches, we have opportunities to know different learning styles and different personalities... we might meet positive personalities as well as negative ones. But our role as Muslim teachers is to

not label students with bad personalities, although they may have problematic personalities... (Noor)

However, as a non-Muslim teacher educator in the Malaysian teacher education programme, Mary seemed to also acknowledge the purpose of education in Islam (i.e., to develop the whole person) in constructing her philosophy of teaching. This reflected her philosophy of effective teaching. From the individual interview with her, she frequently related her beliefs of teaching with Islamic teaching goal when she referred to *“I think Islam taught teachers to educate students in all aspects, not only focused on academic...”* (Mary). This might be because of her educational background. Her previous educational experiences were in Malaysian multicultural context with Islam as the dominant influence, which emphasizes the Islamic philosophy in teaching and learning. Although she was not a Muslim, her knowledge about the beliefs tended to be embedded in her philosophy. This was evident from my classroom observation on her. I saw her asking her students to have good manners in learning and to use proper skills to interact with peers. She related the importance for students to develop skills and knowledge with Islamic education goal, i.e., for the balanced development of all domains of life. When questioned during the stimulated recall interview, she related her beliefs of teaching with the emphasis of Islamic philosophy regarding the balanced development of individuals, as stated in Malaysian National Education Philosophy. As discussed in Chapter 2, section 2.5, the influence of Islamic perspective in Malaysian educational system is embedded in the Malaysian National Education Philosophy.

Of course we want to build students to be good people, not only in academic performance, but we must also stress on students' whole development. Here, we train them to be good teachers, as well as good individuals. Let's think of our Malaysian National Education Philosophy; it is clear there that the teacher should emphasize all students' aspects. And from what I understand, that is what Islam asks, right? That means, that, as teacher, although you think you should give students knowledge; you must remember to give the chance for them to improve on other aspects, as well as the academic. For example, involve them in learning activities... I believe when they are involved in various activities, meaning that you support Islamic and social commitment... (Mary)

6.4.2 Belief and active teaching

The interviews revealed that several Muslim participants related their teaching strategies adopted with the purpose of teaching in Islam, which is to guide and help learners to be good individuals in all aspects of lives. This reflected their philosophy of teaching that teachers do not merely transmit knowledge to students; rather that teachers are mainly responsible for actively developing students as whole, in the; spiritual, emotional, and physical domains. Azzam related his teaching strategies with his attempts to discover individual differences among students, in order to develop them as good Muslims. In Islam, the formation of good character is concerned (*akhlaq*). The major purpose of education is to produce God-conscious (*taqwa*) men who obey God's commands and avoid His prohibitions, and who would also be useful to the community.

Through various classroom activities, we could realize our students' differences, strengths and weaknesses... we then could help and guidance them to grow as good Muslims... (Azzam)

This was supported by his colleague, Noor, who stated that the key role for a teacher was to guide students for the happiness in their lives. She related with the purpose of education in Islam, when she referred to "*Islam emphasizes the proper development of the individual that must be harmony between the material and the spiritual elements*" (Noor). She seemed to endorse Islamic teaching philosophy as her belief when she related the purpose in choosing teaching strategies with the purpose of teaching in Islam. She explained that teachers should adopt effective teaching strategies in order to enhance students' effective development.

The main purpose of teaching in Islam is to provide assistance and guidance to learners... so, through the effective teaching strategies we can help our students in many ways, rather than only provide knowledge... in other words, teachers should knowledgeable in employing teaching approaches... good teaching strategies will lead to effective learning... (Noor)

During the classroom observation, I noted that Ilyas employed one of the active teaching strategies, i.e., collaborative learning with his students. Active teaching strategy (e.g., collaborative learning, project-based learning, independent learning etc.) requires teachers to be active in facilitating the students learning process instead of merely delivering knowledge to them. When asked the reason why he employed the

strategy, Ilyas explained his reason by relating it to Islamic teaching belief. This reflected his philosophy of teaching.

Group work among students can enhance students' learning climate to a mutual and democratic consultation atmosphere or what Islam said as syura... students should be encouraged to have mutual respect among their friends and also with teachers. I believe, through positive group work management, syura in learning will be achieved... (Ilyas)

As a non-Muslim, Mary also seemed to acknowledge the Islamic perspective to encourage students to be active in learning. According to an Islamic perspective, learners are required to be active in learning by actively seeking knowledge and then applying their knowledge in their practice. Mary explained how she managed to motivate her students and involve them in learning activities when she connected the activities with the Islamic perspective of active learning. Her approach reflected her philosophy that teaching should be based on individual experience and context.

I believe students' learning, well, their learning performances will be enhanced through integrative method of teaching. I always motivated them to actively engage in whatever teaching methods I adopt in class. They seem to enjoy themselves and have fun through various activities. They love to learn by doing. Nowadays, learning has been transformed. No more learning like in our time, listening, taking notes, memorizing and then, sitting for exams. Despite the educational trends, I understood that it is also what the Islamic perspectives are. My students were motivated when I related the activities to their beliefs... (Mary)

The Islamic teaching philosophy that emerged from the data suggests that the Muslim participants hold teaching philosophies that are congruent with their religion beliefs. As Muslim teachers, this is not surprising because Islamic perspectives had already been instilled in their educational background since their school days. In the Malaysian education context, Muslim students have been exposed to Islamic principles through a compulsory subject, known as *Pendidikan Islam* (Islamic Education) at their primary and secondary education level. Therefore, their religious culture influences their teaching philosophy. For the non-Muslim teacher (Mary), her previous learning experiences in Malaysian Islamic context seem to influence her understanding about Islamic teaching.

6.5 Theme two: Transmissive teaching approaches

“I’m a transmitter”

The data extracted suggested beliefs about teaching being a transmission approach among most of the teacher educators who were interviewed. According to a transmissive perspective, effective teaching begins with a commitment to the content or subject matter. Therefore, teachers are regarded as transmitters of a given body of knowledge. From this perspective, learners are considered as a ‘container’, that is to be filled with knowledge. This perspective can be observed from several excerpts from the participants, *“I have to transmit knowledge and give information, especially to those passive students who learn better through that way...” (Ilyas)*. This was supported by Safuan *“as a teacher, I think I am responsible for transmitting knowledge and skills to students... by emphasizing that all the lesson’s coverage will assist students to be well prepared for exams and tests” (Safuan)*.

When teachers believe that they are responsible for transmitting knowledge, this perspective is likely to affect their teaching practice. Teachers will provide clear teaching objectives, prepare well-organized lectures, make efficient use of class time, answer students’ questions, and set high standards for students’ achievement. An excerpt from Noor reflected this belief. She reported that even though she used some active teaching strategies, sometimes she did employ the transmissive approaches such as giving direct lectures or notes. She seemed to agree that the transmissive approaches were also useful as these approaches lead to effective learning.

I myself still prefer sometimes to use the traditional teaching styles such as giving lectures, and preparing lecture notes for students... yes; I’m kind of a transmitter [of knowledge]... I don’t see any problems in continuing that style... rather, I believe in certain cases, a teacher has to transmit knowledge to his/her students... (Noor)

6.5.1 Transmissive teaching strategy

Direct instruction

The first transmissive teaching strategy found in the data was direct instruction. This is a lecturing method of teaching. Many teachers who adopt this teaching strategy believe

it can cover a large amount of material in a short period of time. Teachers who employ a direct instruction strategy believe that they must effectively and efficiently teach a body of knowledge and, in addition deliver a way of thinking that is similar to that in the text or, is inherent in the teacher's own philosophy. Several participants in this study shared a similar understanding of the strategy and embraced a similar reason why they employed this direct instruction strategy in their teaching approach. The following excerpts show their understanding of the significance of direct lecturing, "*even though sometimes the active teaching strategy is good for student learning, I also believe that one way to cover all the knowledge required under one subject is best through lectures...*" (Safuan); "*we don't have enough time to use many kinds of learning activities in class to help them... only through lectures are we able to reach our teaching and learning goals...*" (Ilyas).

For some of the teacher educator participants, the most important aspect of teaching is the provision of information for students. Thus, some of them reported that, the adoption of a direct instruction approach can assist students better to acquire information regarding the topics being discussed. From classroom observations, I observed that Noor would lecture for the first hour of her teaching period. When asked, during the stimulated recall interview, for the rationale underlying the practise, Noor explained that:

Well... actually, I prefer to give lectures straight away, very fast lectures, I introduce students to the relevant sub topics of the day's topic... explain what seemed important, and then give them my teaching materials... by doing that, I never fail to cover all the syllabus ... and most importantly, the students seemed to understand and learn... (Noor)

Note giving

The second transmission teaching strategy found in the data concerned the provision of lecture notes by lecturers to students. Several of the participants appeared to support the notion that effective teaching must be accompanied by the provision of teaching notes or materials to be provided by the teacher. This perception seemed to bring to the teachers the value of preparing knowledge for students in order for the students to learn. This practice could be observed in Ilyas's class. I observed that he provided his students with lecture notes. During his teaching, he asked his students to refer to particular pages

for review. During the stimulated recall interview, he was asked the reasons for his approach, he answered;

I think it is better to provide students with teaching notes... may be they will lose the opportunity to learn and seek information for themselves, but they will understand better when reading the teaching notes... of course they can still increase their understanding by doing some extra reading from sources other than the notes... (Ilyas)

The data suggested several reasons why teachers provide notes for students. Some teachers mentioned that they prepared the notes for their students as students frequently request teaching notes and prefer to read notes rather than find out for themselves. The following quotation may illustrate the reasons:

They preferred to receive and keep information for them... actively come to class, take notes, receive information and keep that information for the purpose of examinations. And you know, even for the examples in exams, they give exactly the same information as the examples in lecture notes... they seem to feel secure by following what the notes say... (Noor)

As a result of the above understanding in regard to teaching, some participants prepare a compilation of teaching notes to be given to their students. They seemed to believe that by doing that; their students will be mentally prepared before their lecture period. For examples;

... even though I provide them with the compiled notes, I guide them first by lecturing to them and, at the same time, reviewing the topics in the notes... from there we build discussion... what they understand or what they were still confused about... (Safuan)

I normally compile lecturing notes to provide for my students... so that students would have written materials... as their reference, either for their tests, exams or assignments... they need some facts, something that can be regarded as their basic right... (Ilyas)

6.5.2 Significant factors

The data showed that there were significant factors prevalent in the adoption of the transmission teaching approaches among the participants. Firstly, the teacher educators' prior learning experiences; secondly the teacher educators' personal beliefs; thirdly students' negative attitudes towards active teaching approaches; and fourthly, examination-centred learning among students.

Prior learning experience of teacher educators

The first factor in the employment of transmissive teaching approaches among the participants is the participant's own education experience. During the stimulated recall interview, Noor stated that her traditional teaching strategies (the direct lecture and provision of notes) had some relationship with her own previous learning experience.

We used to learn from teachers who used that style of teaching [transmission teaching approaches]... we had been trained with that approach. We were trained with that system a long time ago...one must read a lot of books in order to get a lot of information. Then we were also requested to take notes during lecture times. When we managed to take notes appropriately, then we could answer examinations successfully. So, it can't be denied, we were exam-oriented products and we succeeded... and most important, we could learn effectively through the methods... (Noor)

Other participants shared a similar opinion. Because of personal learning experience during her teacher training programme, Mary reported that sometimes she preferred to adopt traditional transmission teaching approaches because she believed in the benefits they provided to students.

I was being taught in traditional ways, all courses used lectures... although sometimes I felt tired and bored with the style, the knowledge they gave us was useful... I can still remember some of the lectures... so powerful... so, why cannot we use the style now? Yes, I agree with the active [teaching] style, but sometimes we need knowledge from teachers... (Mary)

This first factor suggests that for some teacher educators, their current teaching approaches had been influenced by their previous learning experiences. However, the data further revealed that the teacher educators were in a phase of transition where they

were working out their ideas, for example “*Yes, I also agree with the active [teaching] style*” (Mary). This suggests their understanding that both traditional and active teaching approaches is probably good.

Teacher educators’ beliefs

The data showed the second reason for the adoption of transmissive teaching approaches is teacher educators’ beliefs regarding the approaches. From the interviews and stimulated interviews conducted, I found that some participants viewed teaching as a transmission teaching process. Some participants embraced the belief that teachers are responsible for transmitting knowledge to students. Azzam stated that “*the most important task of a lecturer is to teach... Therefore, teachers need to transmit knowledge, especially to passive students...*” (Azzam).

This was supported by his colleague, Fatimah, who commented that “*Teaching should emphasize coverage so that students will be better prepared for standardized exams and tests... thus, a teacher should utilize transmission instruction as a pathway to improve students’ knowledge and life skills*” (Fatimah). Several participants also seemed to embrace the traditionally-based conception of teaching, in which they viewed teaching as “*process-product curriculum for direct instruction*” (Ilyas), and learning as essentially “*a matter of storing information for later recall*” (Noor).

The responses from some participants during the interviews suggested that they acknowledged that teachers are the experts from whom students have to acquire knowledge. Robert mentioned, “*Indeed... they [the students] could construct new information based on their own experiences, but they are still young... still studying. They still need to acquire information from lecturers who are knowledgeable and have valuable experiences...*” (Robert). This was supported by his colleague, Noor, who explained, “*I always guide my students in their preferred learning activities. They have their own choice, I know. As individuals, they are all special, but we, the teachers sometimes know better what is good for them...*” (Noor).

Students’ attitude towards active teaching approaches

The teacher educator participants commented that some students still preferred to be passive learners with a passive role as learner. Indeed, during the classroom observation, I observed that some teachers tried very hard to interact with their students,

as the students were very quiet in class. It was very hard to get any questions or comments from students during the lectures. However, the students did respond when they were individually called upon to answer:

... most of them were still remain passive and hold the perspective that lecturers should be active in teaching and not students in learning... they were still in their old thinking that examinations are the most important things on which to concentrate. Well... they are still of an examination oriented mind. Everything must be evaluated by final exams, and the scores from those exams are very important to them... (Noor)

Her colleague, Azzam also reported the same experience. He mentioned that some of his students were shy and quiet in learning, and did not prefer to be active in class.

From my own teaching experiences, not all students prefer to involve themselves in active teaching approaches. Most of them are quite shy to openly give opinions in class, some are too quiet and are very soft-voiced in giving ideas, and they aren't brave enough to confront other peers' opinions in class... (Azzam)

This third factor relates to students' learning attitudes. The data revealed that, for some teachers, students' attitudes challenged them to shift their transmission teaching practice to an active approach. The teachers reported on how frustrated they were when some students did not take their approaches seriously, when they were endeavouring to bring the students to meaningful learning by engaging in active teaching strategies, such as; collaborative learning, project-based learning, classroom presentation and independent learning. The teachers commented that some students did not cooperate as fully as they had expected, and that such situations had reduced their motivation to fully adopt the active teaching strategies and had influenced them in turning back to transmission teaching methods. This suggests that, in the teaching transformation from a traditional transmission approach to an active teaching approach, the positive attitudes of the students and their responses towards active learning are of importance in order to provide the motivation for teachers to commit to the adoption of an active teaching approach.

Examination-centred learning among students

Some of the teacher educators related their experiences in the adoption of a transmissive approach in conjunction with their, traditionally, examination-centred teaching for students. They explained that some students are only concerned about examinations instead of trying to appreciate the importance of their learning. The teachers reported that, because of that perception, some students preferred to be passive learners waiting to be spoon-fed by teachers. The following excerpt illustrates the point.

Some of them [the students] were still in the old stage, traditional learning, as they had been taught throughout their previous education. Waiting for us, as lecturers to provide everything... they still believe that learning means receiving knowledge from teacher and that teaching is to provide knowledge to students... what they concerned only their examinations... (Fatimah)

Similarly, during the stimulated recall interviews, Robert also mentioned that some of his students studied very hard throughout the semesters in order to acquire good results in their examinations. He reported that the students were not active in class, but were passive students who came to class just to listen to lectures and then struggled with the lecture notes. Therefore, according to Robert, there was nothing wrong with direct instruction or lectures. He mentioned that *“one of teaching purposes was to help students with their learning preferences, if students preferred to learn in a particular way for them to get better grades in examinations, so why not... teachers should support...”* (Robert). His perspective was supported by Mary; she described how her students followed whatever she put in her lecture Power Point notes when answering examination questions. She described her students as “robotic learners” who learned just for the purpose of passing the exams, *“Some of them were robotic learners... just followed my sentences in my Power Point notes... they could even memorize my examples in the notes...but, yes, they could answer best in the exams...”* (Mary).

As a result, some of the education lecturers seemed to believe that it was difficult to change the Malaysian education students’ learning approach as the students were accustomed to the traditional teaching approach since starting school. Unsurprisingly, some participants tended to agree that traditional teaching approaches were the best teaching approaches to suit the Malaysian exam-oriented education systems. Azzam mentioned that;

It was quite difficult to shift their perception from waiting to absorb knowledge from their lecturers to that of learning by doing or building knowledge themselves. Our [Malaysian] educational system has, for ages, treated students, as receivers, they just receive and gather information from teachers. Furthermore with the standardized examination that they have to sit, it is more convenient to use traditional teaching styles... (Azzam)

The responses from Azzam reflect his educational belief that the context of learning may influence student learning behaviour. He stated that the Malaysian education system has led Malaysian students into a passive learning culture. The Malaysian education system which, for long decades, has relied heavily on tests and examinations has resulted in the students understanding that learning is for knowledge acquisition, rather than that, learning is for understanding. The significance from this situation is that, in order to transform students' beliefs about learning, the Malaysian education system and, in particular, the examination system should be revised. Efforts must be made by government, policy makers and administrators, as well as parents, to expose students to the real meaning of learning, which is learning for knowledge construction, instead of knowledge acquisition.

6.6 Theme three: Interactive teaching approaches

Theme three which emerged from the data was connected to facilitative teaching style, in contrast to transmission teaching style (theme two). Facilitative teaching involves teachers in facilitating student learning by encouraging students to be active in their own construction of meaning. Teachers are the facilitators for their learners in the development of skills, not only in regard to the outcomes of learning but also, on the application of knowledge.

6.6.1 Facilitative teaching strategy

“I’m a facilitator”

While the data in theme two (section 6.5) show teacher preferences in regard to direct instruction and experts in content, the data also suggest that most of the participants in this study agreed with the facilitative teaching strategy and the role of teachers as facilitators of learning. The responses from most teacher educators demonstrated their understanding that a good teacher should serve as a facilitator, so that students can

further develop in their own learning experiences. It appears from the interview data that the teachers endorsed the characteristics of a facilitative teacher.

I believe all teachers should guide and advise their students, as well as being facilitators for their learning. Even though we are so busy in our teaching jobs, and other administration tasks, we still have to spend time with students. You know... giving them guidance according to their assignments and teaching content. (Azzam)

From my observation of Noor's classroom, I noted she endeavoured to facilitate student learning in the classroom by helping and guiding students in group discussion. She offered some guidelines for the topics discussed, but also encouraged her students to use their own creativity to make the discussion more fruitful. She frequently interrupted the students' discussions by posing questions or providing feedback. When asked during the stimulated recall interview about the rationale of her style, she replied that;

Through the students' group discussions, I can facilitate student learning rather than merely transmit information during my lecture... I give them problems to solved, and give space for them to find solutions by exchanging ideas and thoughts in groups... But I think I still need to increase their levels of thinking by asking questions and giving comments. My instruction seemed to be able to lead the students towards further development of the concept discussed... (Noor)

For some participants, their roles as facilitators mean that they have to know how to explore and facilitate students' learning ability. Some of them reported that teachers must know what a student needs and be aware of their learning problems.

I don't agree with some teachers who see themselves as just instructors... they need to be facilitators or motivators to their students... we are here to prepare our students to be teachers. So our roles here are not only to transmit the knowledge, but also to equip them with learning needs... (Ilyas)

“I’m a skill builder”

While some participants talked about their roles as facilitators of student learning, others seemed comfortable to use another term which is “skill builder” to describe their role. For some of them, their roles as teachers meant that they were not only responsible for the delivery of knowledge, but also for the development of student behaviour and skills. This can be seen from the following excerpt;

Although teachers have to deliver knowledge to students, they also have to build student behaviour and skills... in other words, a teacher as a skill builder, has the responsibility to develop students’ skills, their learning skills and also other important skills in life... (Azzam)

Noor and Mary related skill building with the objectives of the National Education Philosophy, which is to promote students’ development in all aspects of lives.

We, lecturers try very hard to instil learning skills into our students. Normally what we do is to work through the medium of student assignments and projects. Like me, I gave the students group projects to handle by themselves, but I did not leave them alone like that, I still performed my role, I observed their progress week by week. I know their progress well because they have to report to me all their project plans. I still guide them; advise them on what to do... (Noor)

We have to build their [students] behaviour and skill as well... our roles are not just limited to developing students’ cognition but also their skill, emotions and conduct, as expected by National Education Philosophy. (Mary)

For some participants, they had to be “skill builders” as they were required to infuse skills into students through the curriculum. They mentioned that they are expected to play the roles of facilitators or skill builders through the infusion of soft skills. This reflects their support for the policy of soft skills that was introduced by the Malaysian Ministry of Higher Education, to be implemented for all undergraduates in higher education institutions.

Now we have, what we call ... soft skills evaluation. We evaluate how good a student is at various generic skills, for example, how they lead their group

during class group discussion, or evaluate their lifelong learning skills, such as their usage of learning technology... The soft skills implementation actually helps us in the whole development of the student. We have to stress and build skills through our teaching... be facilitators and skill builders... Otherwise we are only transmitters of knowledge, just focussing merely on the intellectual aspect, and ignoring the other rest of the other aspects, such as emotional and physical development. They are our future school teachers; we want them to be good and balanced in all aspects of development... (Fatimah)

The quote from Fatimah above suggests that her teaching philosophy is that teachers should be responsible for the development of students' skills as well as their knowledge.

6.6.2 Various active teaching strategies

My analysis of the data suggested that the interactive teaching approach was considered by most participants to be a part of an active teaching strategy. During the interviews, the participants reported that, in order to help them facilitate student learning, they adopt several active teaching strategies in the classroom. Their responses suggest their understanding that adopting active teaching strategies are useful for enhancing student learning. They seemed to value active teaching strategies as being complementary to their adoption of traditional teaching strategies. Some teachers reported that they start their class with direct instruction (giving lectures), then follow it with active strategies (e.g., group work, problem solving, projects etc.). Others described that they give lectures after their students have finished doing their own presentations, which are the outcome of their group discussion.

Even though I keep one section of the lecture period for direct instruction, I do implement an active teaching strategy as a students learning approach. I normally ask a lot of questions to my students regarding points presented earlier in my slides. Other than that, I also form groups among them to settle cases. The students have to be really active in their groups in order to handle the tasks well because, after that, they have to present all the outcomes to the class. Also, they have to score good marks... I give marks for the presentation of their performance and skill... (Noor)

A quote from Robert reflects other participants' perception regarding active teaching strategies. For Robert, the adoption of active teaching would promote student learning. He emphasized the benefit of employing active strategies in enhancing students' learning, such as active teaching, compared to merely using passive strategies; active teaching can stimulate a student's mind for effective learning, it assists the student in the recall of, and the refreshment of, previous knowledge, provides an opportunity for students to apply new knowledge in a new situation based on their own experience and ability, and prepares the student by way of problem solving skills.

I agree that active teaching strategies will assist our students to learn effectively on their own... we can say that the active strategies can stimulate our students' minds and feeling... Through engaging in classroom activities, students have the opportunities to recall and refresh previous information and apply the information in a new form and shape it according to their experience and ability... They might look busy when engaging in classroom activities or completing assignments, but actually we help them a lot through all those activities and tasks. The tasks give them the chance to provoke their minds and to work hard to solve learning problems. They would never have found all those skills if they only had direct instruction.
(Robert)

The data suggested similar understandings among most participants regarding the importance of adopting active teaching strategies. From classroom observation, I noted that Mary used student working groups as her teaching approach after giving a direct lecture for the first half an hour. She designed issues to be solved by the groups. After group discussion for the next half an hour, she asked the groups to present their findings to the class. When asked for the reasons why she preferred the approach, during the stimulated recall interview, she explained that when a lecturer employs several kinds of teaching activities, *"they will make his/her teaching more effective... the methods are effective in order to stimulate students to learn well by interacting with others"* (Mary).

The data indicated that most teacher educators employed several active teaching strategies in their classes. During interviews, they reported that they expose several active teaching strategies, such as; project-based learning, self-accessed learning, collaborative learning, and class presentation, in their classroom.

Project/problem based-learning

The most common active teaching strategy mentioned by the majority of the participants was project/problem based-learning. The teachers explained that they provide assignments that require students to manage projects and solve problems. They described that some projects have to be implemented by groups and some in pairs or individually; these are given early in the semester and should be submitted at the end of the semester. They stressed the importance of adopting project-based learning for student learning because of its value for learning. This suggests their belief that the strategies provide a wider range of learning experiences and develops more soft skills rather than learning outcomes. For example, Robert believes, that through the implementation of project/problem based-learning, students shift their role from on that of being a passive learner to that of being an active learner and that this can build up the development of soft skills, such as communication and leadership skills.

Students prepare themselves with a new experience... the real situations to get into... the roles of students not only to just rely on class lectures to get the information but also learn from the fieldwork... they could develop their communication and leadership skills... (Robert)

This reflects his teaching philosophy that through active teaching (i.e., completing projects), students can enhance their soft skill elements such as communication and leadership skills. This suggests that the active learning strategy complements the government's initiative to implement soft skills for undergraduate students of higher education.

During the stimulated recall interview, Noor described the benefits of applying a problem-based learning strategy to enhance student learning skills, "*the strategy really improves their skills when they are struggling to solve the problems by themselves*" (Noor). She explained how the students became motivated to learn through the strategy, "*they enjoyed exploring new ideas by themselves and they seemed very interested to share their ideas with others and solve the problem together*" (Noor). Other than the benefits of the strategy to her students, she did relate the benefit to herself as a teacher;

Sometimes their ideas in solving the problems were unique and I agree I learn too from their work. Some ideas looked very fresh and fruitful. They

related their own experiences to build the explanation. I think the strategy enabled them to think well and be creative... when they tried to modify some ideas and opinions; the ideas seemed very significant... (Noor)

Independent learning

The second teaching strategy under this theme was students' independent learning. The teachers reported that they asked their students to actively seek information and knowledge by themselves, both inside and outside, the campus. Some teachers revealed that they instructed their students to find relevant articles as supporting documents in understanding their lecture notes. They also mentioned that sometimes they asked their students to interview other important people on a particular topic in order to improve their knowledge. There was a common belief among most participants about the importance of independent learning. This belief has resulted in the adoption of independent learning strategies. As Azzam said, "*the best method to use in order to ask students to learn is through their own accessed learning*" (Azzam); Ilyas mentioned that "*students should be encouraged to use self-accessed learning, to seek information independently... that will bring their success in learning*" (Ilyas).

Some participants related their reasons for selecting the independent strategy. They reported that incorporating student-centred teaching strategies, such as the independent learning strategy, contributes benefit to students. This indicates the participants' teaching philosophy that an active teaching strategy can lead to effective learning. For example, Mary reported that she prefers to request students to seeking information for themselves because of the advantages of the strategy. Mary explained how the strategy "*could enhance students' responsibilities in learning and their ability to work independently*" (Mary); and Ilyas said, "*through the strategy, they get to know their own pace of learning*" (Ilyas).

While some participants mentioned the advantages of independent learning for promoting student responsibility and student-centred learning, Azzam explained about "*students' autonomy and flexibility*" that underlie the strategy. He stated that by adopting the strategy, he provides "*the students with opportunities to tailor the subjects taught more to their own learning needs and styles*" (Azzam). His responses suggest that learning should focus on students' individual learning needs and abilities.

When asked the reason why she preferred to adopt an independent learning strategy in her teaching, Noor explained that the strategy helped her to accomplish teaching objectives, i.e., to guide students to actively seek and build knowledge by themselves. She reported that through independent learning, students are given opportunities to decide their own learning goals, and to manage their own learning activities. From my observation made of her in her three-hour teaching practice during one of her courses in the programme, she did encourage her students during the class to search for more information regarding what she had explained as the day's topic, and motivated her students to work independently at their own pace by making use of a range of learning materials and by requesting the students to discuss their findings in their next class. She agreed that, initially, it had been very hard for her to adopt the strategy as some of her students were reluctant to get involved. As a step to encounter the problems, she reported that she provided some psychological support when asking the students to adopt the strategy, such as listening to the students' comments and suggestions; providing prompt feedback and guidance; considering the students' needs; and providing assistance when required.

Collaborative learning

Collaborative learning and group discussion were also amongst the significant active teaching strategies chosen. The teachers reported that they provide their students with assignments to be completed in groups, which require students to discuss and solve problems that could not be achieved by one individual, alone. The teachers described that sometimes they allocate certain time during their lecture periods to provide an opportunity for students to work in groups, and if they have time constraints, they ask their students to continue their group work outside the lecture hour. The teachers mentioned that they adopt group work for their students as they believe its usefulness. This could be evidenced when participants reported that their students "*learn better through classroom group discussion*" (Ilyas), "*the students enjoy their learning moments through discussion with peers*" (Robert), and "*group discussion leads the students to understand better the topics presented in lectures*" (Noor).

Robert and Ilyas supported the collaborative learning strategy to be employed in classroom for the benefits it could offer, such as providing the opportunity for students to freely express ideas, thoughts and opinion, and also to upgrade students' learning skills (e.g., communication skills, problem solving skills and confidence skills). This

reflects their teaching philosophy that learning from peers contributes benefits to students.

I asked my students to work in groups so that they could discuss the problems with their peers... there is always a gap between students in a class... not all students understand the subjects well... so through group discussion, they can exchange ideas and opinions... (Ilyas)

I prefer to use a group discussion method as my teaching approach... it is a good method in order to stimulate students to interact with others... and through discussion, a student will become more confident with what he/she is thinking... this gives more impact rather than thinking alone... (Robert)

Similarly, Mary also stated that active strategies such as collaborative learning can motivate students to learn. She emphasized that through collaborative learning; her students helped and encouraged each other to construct knowledge.

In group discussion, there are some good elements to be instilled into our students... for instance, they can be motivated to help each other, express opinions with friends and build good communication skills... From group discussion, students are encouraged to build their own knowledge through their own experiences. They are allowed to give ideas using their own sentences, and then construct those ideas into a good explanation to be discussed in class... (Mary)

Classroom Presentation

From the data, it appears that most teacher participants prefer to adopt students' group presentation as one of their teaching strategies. Several participants adopted the classroom presentation as the completion of a student assignment, "*they must present their projects before submitting the assignments*" (Ilyas), "*from classroom presentation, only we can know their works, their assignments...*" (Robert), "*they were shy and afraid during their classroom presentation, but they had to, they were their assignments... they should know that's all for their own good...*" (Azzam). Other participants adopted the students' classroom presentation strategy as the weekly topic presentation; however, it was without relation to any marks or assignments. The teachers reported that asking students to make a classroom presentation was useful as

the strategies shifted students from their passive role in learning towards an active participation in learning.

They presented particular topics from the 14 weeks syllabus... instead of hoping for one way teaching, they played their active roles as well. The coverage of the topics was still from the lesson plan. They [the students] took over the class started from week 11 in groups... they had to be active in seeking and understanding the topics that they wanted to present... (Noor)

Without classroom presentation from students, learning will remain one way and will be teacher-centred ... they just sit down there, keep quiet most of the time. They just wait to be fed by the lecturers... No... no... cannot be like that. They must be active too... that's why, for the weekly topics, I asked students to make a presentation in groups, presenting what they understood from the topics... (Mary)

The acceptance and preferences of the various active teaching strategies revealed above by most teachers reflected their philosophy of teaching that students learn by doing, rather than by passively absorbing knowledge.

6.6.3 Significant challenges

Despite the active teaching strategies employed by the participants, my analysis of the data further suggested that some conflict arises regarding these strategies. It seems that some participants encountered challenges in the implementation of the active strategies. The first challenge is time constraint in adopting active teaching strategies, and second is student resistance to active strategies.

Time constraints

The first challenge identified in the interview data is time constraint. Ilyas explained about the time constraint he experienced when adopting the student-centred strategies, "*we as teachers don't have enough time to supervise all groups...*" (Ilyas). Similarly, Azzam and Safuan also seemed to agree with the statement that time constraints always prevents them from adopting active teaching strategies, proficiently.

Sometimes classroom activities really disturb our teaching. If we give too much time to questioning and answering in classroom in order to entertain all students... that will take a lot of time... in fact we don't have sufficient time in a class period... (Azzam)

In active teaching strategy, we have to provide them ample time to interact with their friends... simultaneously, we also have to spend time with them... to guide or help them. But, how can we do that? We don't have enough time for that, just three hours per week... (Safuan)

The data revealed that, for some teachers, their time in the classroom was very valuable. They expressed their worries that, if they employ active teaching strategies, they will not be able to finish teaching according to the syllabus. This reflects the teaching philosophy that, teaching means transmitting of knowledge from teachers to students, which requires a considerable amount of time.

Student resistance to active strategies

While several participants related their challenges to time constraint, other participants raised the issue of student resistance. A student's resistance to classroom instruction is often viewed as the student's critical rejection of formal academic content, either in passive or active approaches. For some teachers, active teaching strategies are not easy to implement in the classroom when some of the students do not want to be involved. This is evident from the following excerpt:

Not all students preferred to come and discuss their learning matter... they just want to quickly grab the information from lectures, without participation in class. Most of them were still waiting for our notes and lectures... they seemed not to want to express their own ideas and thoughts, didn't want to analyse and judge... some of them had good ideas to discuss, but they were still looked for the easiest way to get information... (Ilyas)

This was supported by other participants. Safuan stated that some of his students were reluctant to give commitment to group discussion as they believed "*it was not as beneficial as listening to lectures...*" (Safuan).

They [the students] seem not to enjoy themselves when we give just part of the topic or just the lesson outlines. I think they are still thinking that the old

traditional teaching approach is best, and therefore they prefer that style instead of an active style... some of them even refuse to participate when asked to present their work in front of class... (Safuan)

In their journey to move from their traditional teaching towards active teaching approaches, some of the teacher educator participants seemed to be challenged by the problems (i.e., time constraints and student resistance to active strategies).

6.7 Theme four: Relationship with students inside and/or outside classroom

The last theme lays out the efforts of some participants in establishing the teacher-student relationship both inside and outside the classroom. A quote from an interview with Azzam is considered as the starting point to reflect the significance of the relationship. Positive teacher-student relationship is considered as influential for students' academic achievement, skill development, and motivation for learning. As a lecturer, Azzam seemed to hold a philosophy that building relationships with student is crucial, either inside or outside the classroom.

I believe it is part of the concept of education; to build good relationships with students... it helps to build their confidence, motivation, and courage to learn... I spend some time with them, inside and outside the classroom... and I myself even met my students outside the campus when they have some urgency to meet me... sometimes we met at café or restaurant nearby... (Azzam)

The data showed similar support regarding this issue. Several participants acknowledged the importance for them to build relationships, even after lecture hours or outside the classroom, *"I think it's better for a teacher to build a relationship with their students outside lecture hall as well..."* (Safuan); *"not just to limit the relationship with students to class period only..."* (Ilyas); *"the interaction process should cover inside and outside the classroom..."* (Noor); *"teachers should no longer be so powerful in class... or even outside class... we should be friends with students..."* (Fatimah).

When teacher-student relationship matters, the teachers' and students' relational experience is engaged, connected and respectful of others. This aspect of the phenomena is revealed in the data that showed teachers' concern for their students' learning, issues and problems.

Sometimes students just need our ears to listen to their problems... maybe regarding assignments, searching literature, group problems, peers problems and others... I try to spend time with them after class... And I welcome them to see me if they need more time. They can feel free to discuss everything with me... (Safuan)

I do give advice to students when realize they have problems... some students even ask for help regarding their personal problems, sometimes family issues or even financial issues... for me that's okay to spare time for listening to students' problems, they need us... (Noor)

6.7.1 Acknowledging individual differences

Each student should be treated by their teachers in a different way... teachers cannot just employ a similar approach to all students... Teachers should know how to explore a student's learning ability... in doing so; teachers must know what a student needs... their learning problems. Some students, whose learning performances are very good, have attitudes, that are not good... we don't want to produce students who are doing well in exams, but fail in good behaviour... (Ilyas)

Some teachers stressed the significance of the teacher-student relationship in order to understand students' differences; knowing students' differences means acknowledging their strengths and weaknesses. For instance, Safuan explained his principles of teaching as *"teachers have to know students' strengths and weakness in order to help them..."* (Safuan). Therefore, he emphasized that he opens *"a lot of space for students to freely ask me any question, whether the questions are related to topics presented in class, or not. I always encourage them to talk in class..."* (Safuan). He explained how he believed that *"when they [the students] talk, we can know exactly what they think. Then we can shape their thinking..."* (Safuan). During classroom observation, his attempts to acknowledge his students' learning differences were detected. He offered guidelines to students who seemed to have problems with their discussion, and let those who seemed to move smoothly to proceed with their discussion. He also offered further assistance to those who needed to come and see him after class hours.

During a stimulated recall interview with him, he explained why he needs to acknowledge students' differences and treats them with the necessary guidance.

I have to use different styles with my students. Their levels of thinking, their abilities are not same, so our teaching approaches should be different too... we cannot judge all students as being the same, and use one method to suit all... (Safuan)

His colleague, Noor seemed to agree with his opinions. Noor further explained how she felt regarding acknowledging individual differences, “*different approaches may be suitable for different students...*” (Noor); thus, she seemed to believe that as teachers;

We have to mix different kinds of activities in our teaching approaches... different styles of teaching approach will lead students to different levels of understanding and the motivation to seek extra knowledge. Therefore, we should know our students well, which ones are active and which ones are passive, we don't have to ask questions to those who are already active, because they are the ones who will ask us, however, for those who are passive, they are our target in the asking of questions... (Noor)

A comment from Mary reflected the sub themes raised by many of the teachers;

I believe all students have their own strengths and weakness in learning. In order to know their ability and potential, I have started to give them classroom tasks and presentations from the beginning of the semester. From there, I could be aware of their stages. Some students achieve as far as the comparison stage, others to connection and relation and the analysis of the topics, and yet others, can introduce new ideas and make suggestions to improve the topics. But of course, there are also some students who are still in their old box, and don't try to get away from the topic... (Mary)

6.7.2 Dealing with student personality

Good teacher-student relationship acknowledges differences among students. While some participants reported their understanding of individual differences, others connected the importance of dealing with and managing students' personalities. For example, Azzam, tried to deal with differences in his student's personalities. His responses tended to show his philosophy that dealing with students' personalities was part of a good teacher-student relationship.

We can assist students in building good personalities through our teaching approaches... also, from our relationships outside the class... we can guide which personalities are good and should be improved and continued... we need to deal with students' personalities... as well as helping them in their learning... some of my students were really shy and reluctant, really scared to go and present in front of class... especially when there was a big crowd... (Azzam)

Azzam seemed to accept that good teacher-student relationship inside and outside classroom can help teachers in dealing with students' personalities. The data also suggested similar understanding from other teachers regarding dealing with student personality. For instance, Robert mentioned "*avoid labelling students with problematic personalities...*"; Safuan talked about "*don't get frustrated when handling the students' personalities*"; and Fatimah suggested that all teachers should know how to "*treat all students' personalities in a good manner...*".

Quietness and shyness in students were the most common personality traits discussed in the programme. Most participants reported that their students were too shy and quiet in the classroom, even though they were involved in classroom activities. As Robert mentioned, "*They were really shy in class... some of them were even really reluctant to go in front of class to give a presentation... they were reluctant to share ideas even though they have brilliant ideas in their writing tasks...*" (Robert). Mary explained how she struggled to motivate her students to be active in classroom activities.

Some students didn't want to become involved in class discussions, didn't want to share ideas with friends... some of them felt insecure about the answers... That's why they didn't want to answer in class, not because they didn't know, but they didn't want to be ashamed of or laughed at in front of others... I normally didn't force them to talk in that situation, but I would eventually encourage them after that... (Mary)

The data showed that some teachers related their students' personalities to not being confident or being scared to confront teachers and peers. For example, Fatimah reported that some students appeared to be fearful about providing opinions in the classroom. She explained how she tried to assist her students in classroom;

I made a clear explanation that actually they [the students] didn't have to be afraid... they were already equipped with the knowledge and knew about the topics from different angles, from previous subjects, from other semesters... they just need more confidence and support... (Fatimah)

6.8 Chapter summary

The chapter presented data from interviews and classroom observations with Malaysian teacher educators. Four themes have emerged from the data. First, establishing beliefs about teaching (i.e., Islamic beliefs); second, adopting transmissive teaching approaches; third, employing interactive teaching approaches; and lastly, establishing relationships with students inside and/or outside classroom. The themes recognise and paint a picture of the complexity of teaching and the issues of the transition to student-centred learning in the Malaysian teacher education programme.

The emergence of the four themes showed that, while most participants used traditional teaching approaches (adopting direct instruction/lecture and note giving), they also used some elements of active teaching. My analysis of the data suggested that most of the participants exposed their students to active teaching approaches, such as; project-based learning, independent learning, collaborative learning, and class presentation, in their classroom programmes. The data indicated that they acknowledge the importance and benefits of active approaches to their students' learning. Their responses elaborated their acceptance to move from being subject, or content, based to being student focused.

However, certain responses from some participants pointed to reasons for not being able to satisfactorily adopt active teaching approaches. Issues such as the activities suggested being time consuming, and student resistance to active learning, were raised as challenges to employing an active pedagogy. This reflects the fact that there is still room for improvement in the Malaysian teacher education programme.

CHAPTER 7

LEARNING EXPERIENCES AMONG EDUCATION STUDENTS

7.1 Introduction

This chapter presents the results of the data collected from interviews with Malaysian university education students. In this chapter, the participants' profiles are presented along with evidential data to identify the four major themes that emerged from the analysis.

7.2 The participants and the methods

All student participants involved in my study were education students enrolled in the Faculty of Education in a Malaysian university teacher education programme. There were a total of 12 final-year education student participants, all in their early twenties. To protect the students' identity and privacy, pseudonyms rather than their names are used. Seven were male (Azman, Anuar, Furqan, Khairul, Musa, Nabil, and Rahman), and the other five students were female (Ayu, Kamariah, Nurul, Rahimah, and Siti). The students were all Malays.

As described in Chapter 5 (section 5.6), data were collected from education students by means of semi-structured individual interviews and also, focus group interviews. The individual interviews were conducted with the 12 education students, and there were two focus group interviews (Table 5.4). Each group consisted of six education students who had participated earlier in the individual interviews. The research questions for the individual interviews are presented in Appendix 3(b) and interview questions for the focus group interviews are presented in Appendix 4. Thus, the discussions in this chapter will be based on the analysis.

7.3 Overview of themes

Through the use of qualitative data analysis, as outlined by Miles and Huberman (1994) and with the assistance of NVivo to analyse data from the participants within each data source (individual interviews and focus group interviews), four themes were identified. These four themes highlight many of the academic and logistical complexities of the learning experiences for the participants. These themes involve issues in learning

through traditional direct instruction, participating in active learning activities in the classroom, individually taking responsibility for learning, and establishing the role of Islamic beliefs about learning.

7.4 Theme one: Learning through traditional direct instruction

The first theme that emerged from the data was student experiences with traditional learning. Traditional learning involves students receiving information imparted by classroom-based instructors through direct instruction or lectures. When asked what was meant by traditional teaching approaches, the student participants related their understanding of traditional ways of teaching with direct instruction, i.e., lecturing. They reported that the traditional direct instruction as one approach to promote content mastery among students was still well used by some of their teacher educators.

During a focus group interview, Ayu stated that *“Several lecturers prefer to directly transmit all subject contents. Of course they allow us to think about the materials presented, but first we have to obtain all the information... and one way to get more information is from lectures...”* (Ayu). Musa supported her statement by stated that;

Normally when a lecturer adopts direct lecture as a way to deliver information to students, he presents subject contents using Power Point slides until end of the class period. He gives detailed explanations of the contents. Then, at the end he will ask questions and ask for feedback from us. But there is no time for us to ask questions, we have to rush to other classes and the other students waiting for the next class need to enter the lecture hall as well...so if we have something to ask, we have to wait until the next class or meet the lecturer later in his/her office... (Musa)

7.4.1 More concentration and attention during direct instruction

Some participants reported that they preferred the direct instruction method, i.e., lecturing, as long as the lecturers know how to make students pay attention, *“I can pay attention well when a teacher gives direct lectures in a simple or relaxed way, not too complicated or strongly emphasizing on the course syllabus...”* (Siti). Nabil seemed to agree and believe that the traditional direct lecturing could be effective when the lecturers are knowledgeable in their field and know how to promote student interest in class.

There are some lecturers who still prefer to use the direct lecture as their teaching approach. But that's fine. Some of them can attract students' concentration in class. They do make students understand. They seem very knowledgeable in their field and know how to make students become alert and able to concentrate on the lessons taught. Sometimes they stop during their lectures, and start to question students on what he or she had explained before... sometimes they did make jokes that makes the classroom more fun and livelier... (Nabil)

Others showed their preferences for lecturing when lecturers, by means of effective presentation, know how to keep student attention, as Anuar commented;

Some lecturers adopt mainly a lecture style in their classes, and most of us prefer that teaching approach... may be because those lecturers know how to attract student attention with their interesting style of presentation, making lots of jokes in class... sometimes they relate their jokes to our situation, that is so interesting, we can get more information from the lectures and at the same time, have fun... (Anuar)

While Anuar mentioned his preference for attention and good presentation from the lecturers, Rahimah and Rahman talked about their preferences for those lecturers who provide meaningful examples during lectures.

I prefer direct lectures when teachers provide a good explanation with examples. Sometimes the teachers try very hard to make us fully understand the topic presented. They want to get our attention to the day's topic by relating the topic to examples; sometimes the examples are quite close to our lives, which lead to better understanding... (Rahimah)

I prefer when a lecturer gives good examples in his lecture, or relates his lecture to a real situation, such as a school practicum, a student's behaviour and others... the examples give more energy and strength to my learning... I can concentrate on that kind of lecture for even up to a three hour period... (Rahman)

It seems that good presentation and meaningful examples during lectures are able to build participants' motivation for learning. Khairul, however stated that for him, direct instruction assisted with visual aids such as Power Point slides or website pictures could

enhance his motivation to learn. He further compared the strategy with the active learning.

When they give direct instruction facilitated with good Power Point slides, with pictures, or linked to some website, I think these are more effective for my learning. I can give my full attention to the topic discussed. Sometimes the method is much better than participating in classroom activities. Well, for me... some classroom activities might be ineffective when students don't know how to give attention to the activities... (Khairul)

Most participants reported that they were comfortable with direct lecturing because their teacher educators adopted strategies in order to provide in-depth explanations to them.

Some lecturers, even though they use direct lectures, they were still effective. They know how to transfer the facts or knowledge nicely... sometimes they look serious, but they are better able to give deeper explanation and understanding to students through their broad explanation...in comparison to some of the learning activities that request us to do all by ourselves... (Ayu)

Responses from the above participants revealed their philosophy that learning requires concentration and attention that will lead them to understanding. They seemed to perceive that traditional passive direct lecturing would support them considerably, in conjunction with concentration and understanding on the part of the audience.

7.4.2 “More explanation means more understanding”

Some participants expressed their opinion that the most important goal of learning is to obtain understanding. For them, passive learning approaches such as listening to direct lectures and note-taking provide them with the understanding of the lessons taught. Therefore, they mentioned, that as long as the lectures provide them with better understanding of the lesson taught, they don't worry about the teaching approach used. During the focus group interview, Khairul expressed his opinion regarding the issue.

Even though I like interactive learning strategies such as group work and field-trips, I do prefer traditional teaching approaches as I can give full concentration to the lesson taught, and I can understand well from the

teaching, I don't care about the teaching method used by the teacher, as long as I can understand their lessons... for me understanding is important in learning... without understanding I cannot learn well, and how can I do well in examinations later? But through lectures, I can get more explanation; more explanation means more understanding... (Khairul)

This was supported by Nabil who further stressed that the important factor in learning is to understand the lessons taught by lecturers. Therefore, his concern was how the teacher would deliver information to students.

The problem is not with the lecturing method, but the way they present the materials, how they deliver the contents... if they know how to ensure students' understanding, I think there's no problem with the traditional way... moreover, from my learning experience, through lectures, I can understand lessons taught, better, compared to learning by myself, or doing projects. Yes, I agree I learn and have fun through projects, but in certain cases, I follow better through the lecture style of teaching where the lecturer explains in detail in regard to the topics, and this helps me to better understand... (Nabil)

The responses from Khairul and Nabil, above, reflected their belief that learning must be accompanied by a process of explanation as it brings better understanding. This suggests their philosophy that teachers are expected to be very knowledgeable in their subject disciplines in order to deliver the learning content.

7.4.3 “Learn from experts”

Several Malaysian student participants provided reasons why they preferred the traditional direct instruction approach. They mentioned that the traditional approaches were normally provided by teachers who were knowledgeable in the lessons taught. The participants' reactions towards learning appear to be affected by the way they perceive their teacher educators as experts in the context of the student-teacher relationship in the learning situation. This perception of the students may be culture bound, as Malaysian students hold beliefs that regard teachers as experts. During the individual and focus group interviews, the participants stated that teachers should be experts in order to teach students. When asked what they meant by expert, they defined an expert teacher as someone who is knowledgeable in their subject matter, and not necessarily expert in

how to teach students. They explained that although some expert teachers merely employed traditional teaching approaches such as direct lecturing, they were welcomed by students because of their knowledge, experience and insight. During the individual interviews, Rahman stated that students chose subjects because of the lecturer's knowledge and not because of their teaching approach. This suggests his philosophy of learning that knowledge and content are the important elements of learning, rather than teaching methodology.

Some lecturers are very expert in their field. Everybody wants to go to their class because of their expertise, their huge knowledge of the lessons taught, they know how to answer when students ask questions... even though they still adopt traditional ways of transmitting knowledge, they are knowledgeable, and we have no problems with their teaching approaches, as we want to learn from experts...to get their knowledge... (Rahman)

This was supported by Ayu. During the focus group interview, Ayu also reported that she prefers to learn from direct instruction. She stated her belief that knowledge delivered by intelligent and wise people will lead her learning to success.

They are experts and smart... I would follow whatever the teacher says, what he teaches during his lectures is definitely important and useful for us, for our success... accepting teachers' knowledge is important, compared to finding and building understanding by ourselves, a direct lecture is easier and is effective... because the teacher knows best what is good for their students... (Ayu)

While some student participants reported several of the benefits of learning from experts through direct instruction, others raised disadvantages regarding direct instruction (lectures). Furqan reported that normally during lectures, interaction with the lecturers is difficult.

We feel that our role as students is not to question why, or what, to lecturers regarding their teaching lessons, but to accept entirely what is presented to us in class... we cannot freely expressed our opinions or ideas in the classroom... sometimes, their way of communication makes us feel they are experts in their fields and therefore we have no rights to intervene in their teaching approach... although we do have some ideas, but it is really

difficult to interact with them... moreover, they are busy with their lectures and have no time to really interact with students... (Furqan)

7.4.4 “Learning through memorization”

Data from focus group interviews with students suggested that the students identify memorization as a strategy for them to learn. They reported that they use memorization as the first step in understanding their lessons. They seemed to believe that through memorization, they can enhance their understanding. This suggests their belief that memorization is not an end in itself, but as a prelude to deeper understanding. During a focus group interview, Rahman and Kamariah reported that;

I memorize texts that seem to be important... normally I choose and highlight first those texts that are significant to be remembered... memorizing texts helps me later in my understanding of the lessons... through repetition of the texts, I can memorize deeply the texts and that helps my learning process... indeed, I learn though memorization, it is easier to understand something when you remember it... (Rahman)

I do memorize, especially when it comes to facts or data that I have to remember... certain facts are hard to follow during lectures, but through memorizing later, I can understand what seemed difficult in class before... By putting knowledge in books or lectures' notes inside our head, it will help our understanding... (Kamariah)

While some students reported memorization as a step to understanding, others reported that they started to memorize texts or phrases only after they understood the texts. They described how they understand their lessons first, and as an attempt to keep remembering the points, they memorized the texts. Although they already understood the topics, they reported that memorizing is significant for their examinations. For them, success in learning is dependent on their grades and scores in examinations. They reported that they study hard to get the best score in their examinations. They mentioned that they can answer all the questions better in the examinations when they memorize important parts of their lessons. This suggests their understanding that memorization is important to help them towards success in examinations. An excerpt from a student illustrates the point;

Well, understanding is important... I make sure that I understand the lessons first before I plan to memorize the important parts... when I understand, it helps me in memorizing. The process became easier and faster... although today I understood the lessons, but I still need important terms or sentences from the topics, sometimes they are provided with excellent words and unique analogies... therefore I memorize all those significant and useful sentences in order to help me later in exams... of course during exams I can answer questions from my previous learning... but to support my discussion or argument, I need those beautiful sentences from the books or the lecturers' notes... (Siti)

Responses from some students regarding memorization suggested that they view that 'photocopying' texts to memory can enable them to reflect on them later, to help them in integrating the texts with their prior learning and experience. This suggests that for the students, their memorization learning strategy is not surface learning or merely preparation to success in examinations, but can be considered as deep learning which assists them for good understanding and better answering in examinations. Deep learning focuses on understanding material by linking different topics together, and processing information; compared to surface learning that focuses on reproducing materials without understanding.

7.5 Theme two: Participating in active learning strategies

Despite students' positive comments about passive learning, the data also highlighted that students value active learning approaches in their learning. The active learning approaches are learning strategies that emphasize students' engagement and ownership of the content material and encourage reflection by the individual as part of learning processes. As Malaysian students, who have been accustomed to a traditional learning environment during their earlier education in Malaysia, active learning approaches employed by teachers are intended to result in a shift where students move from being mere listeners of lectures, to becoming active learners. Student-centred strategies employ active strategies such as; collaborative learning, classroom presentation, project-based learning, and independent learning. This suggests that active learning is an interactive aspect between the teachers' teaching style and the students' learning strategies.

For Azman, although he prefers the direct instruction method, he still needs interaction with teachers. He reported that he feels distance from the teacher who employs a lecturing approach. He further commented that most of the time, the teacher who gives lectures is pressured to finish his or her points without considering any interaction with students. Therefore, he mentioned that, due to this, he also prefers to learn from teachers who adopt active learning strategies combined with a direct lecture. He explained how he can interact with teachers through active participating in the classroom, compared to just attending lectures. This suggests that despite their acceptance of passive traditional direct instruction, the participants also preferred to be active learners by engaging in the classroom activities provided by some lecturers.

7.5.1 Enhancing skills through active learning

Most participants found that by being involved in active learning strategies, they develop their learning skills. They reported that through active learning they are able to apply new information and skills immediately, *“outside activities provided me some useful knowledge and skills that may not be gathered in classroom. I learned to know about the real situation and related issues...”* (Nabil).

Several participants reported that active learning strategies promote their communication skill levels and competencies in areas such as leadership. Below are dialogues among members of the focus group regarding this issue;

I think I prefer to be actively involved in class learning activities when the subject's nature is to make us think. From those activities, they will lead us to creative and critical thinking to solve any problems, and at the same time we can gather other skills like communication skills, group management skills and others... (Siti)

Well, I agree with that, classroom activities are really good, sometimes from our site visit assignments; they give a lot of benefits for me. I can learn more on how to socialize and make formal communications with other authorities. Those are skills we don't learn in classroom... (Khairul)

Responses from Siti and Khairul suggested recognition of active learning strategies as being complementary methods for developing critical skills, such as; communication, leadership, and problem solving. These skills are characterized as soft skills, which are

very important to undergraduate students, and are expected to be infused by teachers through course curricula (Ministry of Higher Education, 2006).

7.5.2 Active learning for future teaching career

Data from individual and focus group interviews revealed that students believe that active strategies, such as; discussion, independent learning, and classroom presentation are effective learning approaches, especially because of their role in shaping their own future teaching practice. During a focus group interview, Furqan and Rahimah mentioned that;

We, as future teachers, need to know new teaching and learning strategies... such as independent learning, problem solving, reflective thinking and others. So that, when we become teachers, we will know how to adopt these strategies effectively in our own teaching practices and help students to learn better. That's why I like to adopt all these strategies now... (Furqan)

I should be active in class. Moreover, here I got a lot of opportunities to be active in class. Most lecturers adopt active learning strategies as their teaching approaches. Maybe some students seem more active and powerful in class, but actually lecturers give equal chance for every student to participate. It's all up to us. I will make sure that I will also implement the same methods when I become a teacher so my students will learn better... (Rahimah)

The responses above indicated that, as the students were in a teacher training programme, they were likely to be sensitive and see teaching methods as utilitarian for their future occupational endeavours.

7.5.3 Active learning strategies

The data revealed several active learning strategies adopted by Malaysian student participants in their learning, namely; collaborative learning, classroom presentation, project-based learning, and independent learning. Several of the excerpts from participants during individual and focus group interviews illustrate the point.

Collaborative learning

The most common active learning strategy mentioned by majority of participants was collaborative learning. The student participants reported that they were provided by teachers with two forms of collaborative learning; the first is “*informal learning group*”, and the second is “*formal learning group*”.

The student participants mentioned that through informal group discussion (in a group of three to five), they are expected to solve a problem or question. They reported that through informal group discussion, they are “*better able to understand the teaching material and had opportunity to apply what had learned*” Kamariah. They further explained that for the informal learning group, they are asked to turn to their “*neighbour/friend and discuss a topic or question posed by teachers within a single class session... normally for two or three minutes*” Ayu.

They reported that the second type of group work (i.e., formal learning group) is more professional, where several teams are established to complete a specific task or assignment. The students mentioned that they are divided into groups of seven to ten to carry out a project or research. Compared to the first group discussion, this formal group had more time to complete the task, normally several weeks, or almost throughout an entire semester.

Furqan stated that the opportunities his teachers gave him in class really lead him to effective communication and discussion. His friend supported his statement by mentioning that;

The learning activities [collaborative] are really fun. We can express our thoughts and ideas freely without worrying about making mistakes. When we do not know how to settle a problem, then we can ask for help from other groups. Also, we can ask for assistance from the lecturer...
(Kamariah)

By engaging in collaborative learning, the students reported that they gain knowledge not only from their teachers, but also through cooperation with each other, in pairs, or in groups. Data gathered from the focus group interviews show that students are advantaged when they work with their peers compared to only listening to lectures from teachers. Anuar explained that “*I learn best through cooperation with others in group,*

by listening and having other friends' ideas and opinions in class, rather than only listening and taking notes from lecturer" (Anuar). Nabil seemed to support this notion. Nabil reported that *"I learn more through group discussion in classroom, as I have friends to rely on when I don't understand something, and also teachers who can give advice..."* (Nabil).

My analysis further suggested that, through meaningful collaboration, the participants turn to their peers for help, or that they help their peers. One student in a focus group commented;

During the classroom group discussion period, normally 15-20 minutes, we just express our own ideas, without looking into any resources or lecturer's notes... we try to help each other to solve learning problems, either assignments or lessons, there is always give and take during the discussions... (Kamariah)

For some students, the collaborative strategy provided guidance and assistance in learning. They mentioned how they help each other in group discussion. Several participants related the benefits of collaborative learning strategy with understanding. They mentioned that the strategy would enhance their understanding regarding materials presented or topics discussed in class: *"Group discussion is very useful to enhance understanding regarding certain topics"* (Khairul) and *"I learn more effectively when studying in a group. I can enhance my understanding through exchanging ideas with friends"* (Azman).

A comment from Ayu reflected another participant's views regarding the benefit of the collaborative strategy;

I prefer to join study groups; I love to discuss a lesson with friends, rather than reading and memorizing alone. I had an experience where I could easily answer the exam questions which I had discussed earlier with friends before the exam. I scored a good result in the paper as I put some important points that had emerged from the discussion. I think, teachers also want us to give extra information based on our own understanding rather than just put in their lecture notes' points... well, I realize that my understanding improved through discussion with friends... (Ayu)

Participants' responses show their understanding of the importance of adopting collaborative learning because of its value for learning. This suggests their beliefs that the strategy provides a wider range of learning experiences.

Classroom presentation

The individual and focus group interviews provided further evidence that classroom presentations are valued by most participants as an active learning strategy. During an individual interview, Ayu reported the benefits of her experiences in making a classroom presentation, such as; a better understanding of teaching materials and an improved confidence in answering questions.

I prefer when we have assignments which require us to make classroom presentations. These tasks need us to study thoroughly in order to deeply understand the topic and to prepare answers to questions from our peers. Sometimes, as back up, we think about what questions will arise so that we can prepare the answers... those are all our responsibility... (Ayu)

Several participants mentioned that classroom presentation made them feel more responsible in their own learning, "*when making a classroom presentation, I have to be fully responsible for the contents...*" (Rahimah); "*we have to prepare everything from the beginning to the end for the purpose of classroom presentation...*" (Rahman).

Project-based learning

The interviews identified project-based learning as a third active learning strategy that students found valuable. The students reported that they had been exposed to assignments by several teachers that requested them to complete a project in a group. They described that some of the projects being implemented were designed by teachers and some were organized and developed by themselves (as they were allowed to choose their own preferred topic and had full independence on how to manage the project). Khairul revealed his previous experience in a project assignment designed by his teacher. The project requested him to be involved in a camp, a challenging outdoor environment, out of his comfort zone (campus life). He reported that at the camp he and his friends were challenged in their physical fitness, by life skills, such as approaches to problem solving, and the ability to work as a part of a team. He reported that the project experience was very useful and effective in enhancing his role as a student.

I prefer to be involved in field projects. Last semester I had several projects to be completed... very tiring but I enjoyed them very much... And for one particular course, I didn't have to attend any class, just joined a camp and completed a project... I had to be active in order to survive... had to be really independent, learned how to solve problems by myself... most importantly, I learned to cooperate with others... (Khairul)

Most participants seemed to realize the benefits of project-based learning to them as students, "*the project implementation provided more understanding compared to direct teaching approaches*" (Kamariah), and "*I gained better understanding and skills during completion of course projects...*" (Azman).

Independent learning

The participants reported that they are also being introduced to independent learning as one of their learning strategies in the programme. They mentioned that they are required by their teacher educators to access multiple sources for their own learning, "*lecturers always ask us to seek extra knowledge rather than only to what have being told in the classroom*" (Khairul). They further explained that they were aware of the benefits from this strategy, "*I learned that many advantages we can get from self searching...*" (Siti). During the focus group interview, most participants seemed very comfortable with their roles as active students learning independently.

I prefer going to library too, doing some reading and research. Yes, I really learn something by own reading. Of course, I relate my readings to the lectures notes. I like to explore and explore new things through reading. Sometimes I find some unexpected things or ideas from books. I really enjoy accessing new things... (Siti)

I would search the related topics from the internet, or borrow some books from the library. I would ensure that I was prepared enough with the topics, so that I know what points to be discussed, and I could also make comments to others... (Khairul)

In conclusion, the second theme suggested that despite participants' experiences with passive learning strategies (theme one: section 7.4), they also accept the need to actively engage in active learning strategies, such as; participating in collaborative learning, classroom presentation, project-based learning and independent learning. The

participants' experience with active learning strategies evidences their acknowledgment of active learning strategies because of their value. This suggests a student philosophy of learning in which effective learning should contain both passive and active learning strategies that are complementary to one another, rather than as being conflicting ideas.

7.5.4 Significant challenges

Despite the active learning strategies adopted by the student participants, and allowed for by their instructors, my analysis of the data further suggested that a degree of tension arises in regard to these strategies. This point indicates that some student participants face challenges in the adoption of active strategies.

Perception about teacher educators as experts

A major obstacle emerging from the data that seems to interfere with the adoption of student-centred learning in the Malaysian teacher education programme was the education students' perceptions of their teacher educators. From the interviews, the students' reaction towards learning appeared to be affected by the way they perceived their teacher educators as experts in the learning situation. For some of the students, teachers' ideas should be respected and cannot be questioned. This suggests that their perceptions may be influenced by the context of their culture, which regards teachers as being knowledgeable and as experts in their field.

Some of the students reported that their learning environment prevents them from being active learners although sometimes they prefer to be active and take more responsibility in making decision for their own learning. As Anuar commented, "... *they are experts... the teacher knows better what would be good for their students...*" (Anuar). This was supported by Nurul who said, "*I believe a good lecturer is someone who is really knowledgeable in his field. He can teach what he is supposed to teach. In other words, he is an expert*" (Nurul).

This suggests that the Malaysian learning context that still considers teachers as experts may possibly hinder the implementation of student-centred learning that emphasises teachers as facilitators rather than experts. Further data regarding students' perceptions of teachers as experts can be found in this chapter, under theme one, section 7.4: "*learns from experts*".

Inadequate guidance from teachers

The second impediment to student-centred learning is inadequate guidance from teachers when students employ active learning strategies. The data revealed that students require clear guidelines and instruction from teachers when engaging in active learning strategies, such as project implementation and group discussion. Some students mentioned that sometimes they are left by themselves in the classroom to complete learning tasks without the relevant guidance from teacher educators. They commented that some teacher educators have even left them in class to independently solve learning problems in groups for more than half an hour without any direction from teacher educators. They reported that although they prefer to have autonomy and power in learning, some guidance from teachers is still required. Their responses suggest that the teacher's presence and guidance are two important elements in motivating students to participate well in active learning strategies.

Khairul talked about the problems he has faced in group discussion because of the absence of teachers, both during and after class periods.

Some teachers did give us group work. But we felt like we were not being facilitated at all by the teachers. They just let us do our work in groups; they never wanted to know our problems, or the progress of our tasks. What they needed was just the outcomes. Well... sometimes we really needed them, we didn't know how to solve problems... we really needed guidance on the tasks, but didn't know where to go, or whom to ask... some group members were not able to discuss outside class hours. They preferred to do it during class periods. But not all lecturers allowed us to have the discussion during class... because of time constraints... (Khairul)

This comment from Khairul tends to prove that even though he expresses a preference for learning in groups, mistakes may be made if he and his friends are left by themselves to discuss and exchange ideas without sufficient input from lecturers. This suggests that as a student, he wants to be facilitated by teachers as part of his learning process. His comment was supported by Musa and Nabil who reported the same thing regarding the issue.

Some lecturers did give us freedom to manage our group work. They just told us what we should and should not do. However, for those students who

were not really motivated in the work, or assignment, they would not be happy with just some clues like that from lecturers. They wanted more explanation; otherwise they would lose... (Musa)

I think when a lecturer assigns issues for students to solve in group works; he or she should monitor or control the groups' management. Don't just let everything to students to handle. Some students really don't know how to manage a group discussion.... We need teachers' help... (Nabil)

This reflects the participants' philosophy of learning, that although students are expected to be active in learning process, that does not mean that teachers can give up their responsibility for facilitating and guiding students' learning. Their comments suggested that they need teachers' existence and guidance. Their responses indicated their belief that students and teachers each have significant roles and tasks in the knowledge building process and that dispensing relevant roles and tasks are necessary for learning to occur.

Time constraints in the application of active learning strategies

Even though the student participants acknowledged the benefits of active learning strategies, such as classroom presentations, they further reported an issue from the presentation of strategies. It seems that time limits prevented participants from being really involved in presentation, "... *not all members of the group had an equal chance to present their work because of time constraints...*" (Siti); "... *it would be better if all the group members had the opportunity to give presentations... but there's not enough time for that...*" (Nabil). Rahimah also revealed that;

... because of time constraints, we did not get an equal opportunity to express our opinions although we had already spent a lot of times in preparing the materials... we tried our best during our discussion group, but then the lecturer just chose one or two groups to present their outcomes... we sometimes felt that the lecturer didn't appreciate our efforts... at least give us some time to share with others... that's will motivate us for further discussion... (Rahimah)

Their comments above suggested that, although students prefer to engage in classroom presentation, the time constraints faced by their lecturers in implementing a strategy fail to allow for students' participation. This situation leads to ambivalence among several

students. For them, their work should be acknowledged by the provision of time for them to present their solution to the whole class. This reflects their learning philosophy that teachers should motivate students to learn by managing class time well, and by appreciating students' efforts.

7.6 Theme three: Taking responsibility for their own learning

The third theme that emerges in my study is the degree of students' self-perceived responsibility towards their own learning. Students who are responsible will do the academic work without constant reminders from teachers. This supports the notion of student-centred learning. The findings show that participants acknowledge the element of active learning approaches which emphasises a student's responsibility for deciding what and how to learn so that he/she can play an active role in their learning. For example, Nabil reported that in "Psychology" class in which he had enrolled, the lecturer provided an opportunity for students to engage in group work and to be fully responsible for the completion of the group assignment.

The teacher asked us to learn some of the course content on our own... she divided us into groups and gave problems related to the topic for us to work on... we discussed in group, shared ideas and we decided ourselves what we should do... finally, we managed to form strategies for solving the problems... my understanding regarding the topic was much better through the discussion. I believe, learning is my own duty, although teachers give instructions, we should take responsibility for our own learning. Moreover, some teachers did encourage us to read and learn before we come to class...
(Nabil)

This theme illustrates several aspects of developing independence. The participants were aware of their own responsibility to play an active role as a student, rather than a passive one.

7.6.1 Learner autonomy

Evidence from the individual and focus group interviews suggested that most participants prefer to be active students with greater autonomy in learning processes. The data revealed that most participants regard themselves as having an active role in their learning processes, "*we have to be active learners and know how to self-monitor*

our own learning process...” (Siti); and “*we learned actively to decide what we need to know... to find success...*” (Musa). An excerpt from Kamariah reflects another participant’s view regarding learner autonomy;

In group discussion, we normally independently chose aims and purposes for our topic. We then could freely set our own goals and chose materials that we thought suit best with our topic... we also have the authority to decide appropriate methods and tasks for the topic... of course then we should take responsibility to carry out the chosen methods and tasks by ourselves...(Kamariah)

Anuar stated that he is an autonomous thinker when playing an active role as a student. He explained that he needs to give his opinion to others in order to build more connection from the existing knowledge to new knowledge, “*I prefer to be an autonomous thinker and explorer so that I can express my own thoughts regarding anything...*” (Anuar).

Rahman reported that he prefers full autonomy to be active in his learning.

For me, I believe as an undergraduate learner, I have the autonomy to schedule my time to learn by myself. I cannot rely on lecturers to tell me what to do or what to study. The most important thing for me is to be smart in managing and controlling my time. I have to divide carefully my precious time between my study and other activities... and I am happy with the styles... (Rahman)

During the focus group interview, while some participants reported that they have autonomy in their active learning roles, Azman revealed how he believes the active strategies empower him to make his own learning decisions. This seems as though autonomy and empowerment are the same. He mentioned that he “*could decide the best ways of learning, the necessary recourses and structures of acquisition within the classroom activities*” provided by lecturers. Nabil added that he could make his own decision in terms of learning resources, “*Students have great responsibility to find other alternatives if they did not understand [the lesson] from that particular teacher. I always make my own decisions regarding learning resources...*” (Nabil).

Some participants reported that they become more analytical and critical thinkers when they play an active role as a student, *“I know through being active in learning, it will help me to think more analytic and critical...”* (Musa). They are willing to seek and digest information on their own, *“the teachers allow us to interpret and reflect to get more analytical and critical thinking regarding the lessons... and we manage to construct our own learning”* (Khairul).

Siti seemed to accept that the active role of learner would bring students to the building of critical thinking and the achievement success in learning.

By being involved in classroom activities, we know how to think clearly and analyse everything regarding the topic. Perhaps, those sorts of activities are good in building our critical thinking and success in learning... although at first it was hard to follow all the activities, I tried my best to participate as I know the benefits of them... (Siti)

Participants' feedback showed their attempts to take responsibility for their own learning. Their acceptance to play active roles as students and autonomous learners reflects their philosophy of learning, that students should be more responsible in their own learning, rather than dependent on teachers. However, data from focus group interviews further revealed that some participants put conditions on taking more responsibility for their own learning. While several participants mentioned their approval of being autonomous learners, some other participants reported that they were only willing to be engaged in active learning, provided that their lecturers instructed them to do so. They mentioned that they need their teachers' guidance to give direction in their learning process, such as which learning activities they should approach, what kind of learning goals they should design, and what learning tools they should use.

This reflects that for some students, they need teachers' instruction and guidance in their attempts to be more responsible learners. The significance of this would be for teachers to enhance their roles as facilitators; they could then provide better assistance if required to students. The data revealed that teachers are expected to be knowledgeable with their teaching content, as well as having the pedagogical skills to develop students' learning responsibility.

7.6.2 “Actively seek out and build meaning”

According to constructivist learning theories, new knowledge arises from an individual’s active construction drawing on unique prior experience and knowledge. Learners’ prior experience and knowledge can be considered as prior learning. The data revealed that Malaysian student participants had been provided opportunities to actively seek out and build their own meaning of the subjects’ matter being studied. Several participants explained how their lecturers adopted teaching strategies in order to help them relate new knowledge with the previous one. They revealed that, through different types of classroom learning activity, their lecturers encouraged them to organize their prior knowledge by asking them to explain how they thought and shaped their responses by connecting them to previous learning. Participants also mentioned that their teachers help them to summarize what they had learned and help them to apply it to a novel situation by integrating new information with what they already knew.

They reported that through active learning strategies such as, project-based learning, independent learning and classroom presentation; most teacher educators created opportunities for students to draw on their experiences and interpretations; this was evident from a student’s individual interview;

The active learning strategies were helpful in developing our knowledge... from our project assignments and articles searching, we were given opportunities to actively seek out and build meaning from information and previous experiences... through our assignment classroom presentation, dialogues between us and teachers provided more spaces for us to share connections and make links... sometimes the teacher guided us in learning, but mostly it was from our own discussion... (Khairul)

My study showed that some students made meaning of their learning situation through a weaving of their prior learning with new learning opportunities. Musa stated that his teacher educators sometimes asked him “*to find connections*” between what he “*already knew with new content of materials*”. Nurul explained that her lecturers did encourage her to formulate what she knew by “*forming creative connections between prior knowledge and new possibilities*”;

We were given various learning activities to participate in classroom by our lecturers... The opportunities offered some potential for us to discuss and

seek out own understanding and meaning regarding the topics taught, we were encourage to form our future meaning that should integrate our previous personal experiences and understanding with new ones... the activities supported our ways to relate past and current experiences... (Nurul)

Most participants further reported that they prefer to be active learners by creating new knowledge for their own learning. They related that they had begun to realize that knowledge must be actively created rather than passively received from lecturers, “*It is the student’s responsibility to create the knowledge and understand... not just acquiring knowledge from experts like lecturers ...*” (Rahimah). Several participants reported that at first they felt burdened with learning tasks that required them to produce their own knowledge. The following excerpt may illustrate,

...at first, I felt terrible with this type of learning... but then I realized I also had to explore and produce knowledge for my own learning, I can’t just rely on lecturers to give everything to me, or only wait for lectures’ notes... now, I think I’m ready whenever the teacher ask me to build up own meaning and understanding regarding the lessons... (Rahman)

During a focus group interview, while Azman believed his “*prior experiences contributed to build further learning*”, Nabil and Khairul mentioned that they developed “*meaningful understanding*”, when they formed new learning from their previous experiences.

When I combined new information together with my experiences, my understanding regarding certain topics became clearer and meaningful... in fact, I could explain the topics to those who didn’t understand... sometimes it was not really my own experiences, but my friends’ or someone that I know... (Nabil)

This strategy had assisted me in better understanding and acquisition of knowledge. It helped me in thinking better rather than just receiving information directly from teachers... of course we had to do more work, but learning seems more meaningful and relevant to my lives... (Khairul)

Responses from the participants seem to reflect that their roles as active learners make them feel quite responsible in active knowledge construction process for material that has not been explicitly discussed in class.

7.7 Theme four: The role of Islamic belief in learning

The fourth theme that emerges from my analysis of the data is the influence of Islamic belief on students' learning approaches. Several participants' perspectives regarding the adoption of active learning are based on their Islamic beliefs and views. This reflects their philosophy of teaching and learning. Several student participants in this study related their active engagement in various classroom strategies in the programme to Islamic education philosophy. They seemed to acknowledge the commonalities between active learning strategies and Islamic learning perspectives.

7.7.1 “Islam teaches us to be active learners”

During the focus group interview, Rahimah reported her preference to be an active learner by actively participating in classroom learning activities. She explained that, at the beginning, it had been difficult for her because of the notions of active learning that required her to be more responsible in giving ideas and opinions in front of others. She reported how she felt more comfortable and secure to be “*an active listener*” by listening to others' arguments and discussion rather than to be “*an active participant*” in group discussion, expressing her own ideas in front of others. However, she reported that she tried to put away her fear and feeling of not being confident to confront and argue others' opinions when she believed that to be successful in learning; she had to change her old passive learning methods to active learning. Moreover she realized that Islam expects student to be active in learning. According to the Islamic learning perspective, students are encouraged to challenge others' statements as long as it does not relate with something absolute from the two main sources in Islam, i.e., the holy Qur'an and hadith. Rahimah related her transformation from passiveness to activeness in learning with Islamic philosophy, “*Islam teaches us to be active learners*” (Rahimah). This suggests that her perspectives of teaching and learning are influenced by and congruent with her religion belief.

I believe education is not merely the process of acquisition of information, whereby the teacher imparts knowledge that the student may absorb. Rather, it is knowledge construction through doing or practice, as required in Islam.

That's mean, as students, we have to be active in our learning process in order to build meaningful learning...Islam teaches us to be active learners, not just passively waiting for absorbing knowledge from teachers... (Rahimah)

7.7.2 The importance of knowledge acquisition and active doing

Musa relates his learning beliefs to Islamic philosophy of education, which emphasizes the importance of knowledge and doing. He mentioned that learning should involve both knowledge acquisition and construction.

Learning is only effective when it is put into practice, rather than simply memorizing information, Islam expects us to be active... thus, as students we have to be active to practice our knowledge and skills. For example, participating in various classroom activities set up by lecturers... through participating in various classroom activities, students would feel that they have been appreciated and respected by teachers... moreover, Muslim teachers are encouraged to build good relationships with students, therefore when teachers asked us to do something in class, we should participate... (Musa)

The student participants' preferences for active learning seem to lead them to perceive their roles as active learners. Several participants related their understanding of their roles as students with Islamic perspective of teaching and learning. When asked his opinion about students' role during a focus group interview, Azman agreed that "*students should be active learners*". He related active learning with Islamic teaching history that encourages students to be active in learning process.

We should be active in our learning, sometimes we are required to receive knowledge, and at other times we need to be active, need to seek own knowledge and build our own meaning... just reflect back to our Islamic education history, the Prophet and Muslim scholars really encouraged their students to be active in knowledge seeking... We need to be active and understand well the Islamic education perspective regarding students' roles. Even though we need to acquire knowledge from teachers, that doesn't mean we need to be passive, instead we are asked to be active, creative and critical in our learning... therefore; we must grab all learning activities

prepared by our lecturers, such as group discussion, project implementation, etc... (Azman)

The response from Azman, above, was not really surprising as he is an Islamic student. He reported that during his educational training, he was exposed to the Islamic teaching philosophy. Kamariah also related her understanding of learning from an Islamic perspective. For her, students must be active in learning and meet all the coming challenges, as Islam expects students to be active.

We have to be active in learning, involve in classroom activities, try to finish whatever tasks that lecturers gave us... although some tasks were quite heavy and complicated, but we have to complete them successfully... we have to manage our work wisely, that's what our religion ask us... (Kamariah)

Similarly, another student, Nurul, seemed to embrace Islamic philosophy when she related student's role as an active learner.

As Muslims, we must be active learners in order to discover the larger connections between knowledge and skills we are learning, rather than memorizing isolated bits of information. By being active, we can focus on important aspects, rather than superficial coverage of the lesson... (Nurul)

A response from Furqan during the interview shows that he has views himself as knowledge constructor as taught by the Islamic teaching principles.

As students, we are knowledge constructors, although we receive knowledge from teachers, we still have our own roles, we need to seek information, we still need to build our own meaning. Islam emphasizes both building and memorizing knowledge for learning... (Furqan)

All the responses above show that the participants value their roles as active learners and have more responsibility in their knowledge construction, in agreement with Islamic teaching philosophy. With this kind of belief, the participants seem to value the active learning elements, which are often said to be derived from Western thinking. They seem to acknowledge active learning as they could see the compatibility of the active learning approaches with their own Islamic religion beliefs.

7.8 Chapter summary

From both individual semi-structured interviews and the focus group interviews with the Malaysian students in this study, the findings reveal that students' reactions to learning are quite insightful. The data exemplify that Malaysian student participants relate their philosophy of active learning with their Islamic religion beliefs. They relate active learning strategies, such as; collaborative learning, classroom presentation, project-based learning and independent learning with the expected roles of students as active learners aligned with Islamic belief. Although it appears from the data that active learning approaches are recognized by most students who were active in their learning processes, the data further reveal their acknowledgment to traditional passive direct instruction. While the data suggest that most participants embrace their roles and responsibilities as active learners and constructors of learning, there are also data that illustrate students' preferences to be dependent learners waiting for details explanation and information from their lecturers. The data show several elements that are connected by participants with passive learning, which are, first, the importance of concentration and attention; second, the significance of explanation for understanding. The data from the students will be discussed and interpreted in the following chapter 8.

CHAPTER 8

DISCUSSION AND INTERPRETATION

8.1 Introduction

In this chapter, the research findings reported in Chapter 6 and 7 are interpreted and discussed based on the literature review presented in Chapter 2, 3 and 4. Chapter 6 described Malaysian teacher educators' perspectives of teaching, and Chapter 7 explained Malaysian education students' perspectives of learning. The findings provided a picture of participants' experiences in the Malaysian teacher education programme.

As described in Chapter 5, my study employed a qualitative case study research. A qualitative case study was employed as it uses a naturalistic inquiry approach that seeks to understand phenomena in context-specific settings. The case study provided an understanding about why and how the research participants (i.e., Malaysian teacher educators and education students) made choices related to their teaching/learning actions. The nature of qualitative case study research is holistic description (Creswell, 1994, 2007; Denzin & Lincoln, 2000). I therefore conducted the research in a natural setting to investigate a social issue through semi-structured interviews with targeted participants. My case study research produced findings (Chapter 6 and Chapter 7) which were not arrived at by statistical procedures or other means of quantification. Instead, my research produced findings that were arrived at from real-world settings where the "phenomenon of interest unfold naturally" (Patton, 2002, p. 39). Unlike quantitative researchers who seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations (Hoepfl, 1997).

In this chapter, the discussion of key findings from the case study will address the three research questions:

1. How do Malaysian teacher educators understand teaching in a university teacher education programme?
2. How do Malaysian education students understand learning in a university teacher education programme?

3. What are the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices?

In sections 8.2 and 8.3, the understandings about teaching and learning in a Malaysian teacher education programme, as revealed by the data in Chapter 6 and 7, are discussed. This discussion starts with teachers' understanding of teaching (section 8.2) which includes both teacher-centred and student-centred approaches. Then the discussion is followed by students' understanding of learning (section 8.3), which also involves both teacher-centred and student-centred approaches. These two sections discuss issues raised by participants in their experience with both teacher-centred and student-centred approaches in the teacher education programme.

Section 8.4 examines how the contextual factors of Islamic religious and cultural beliefs impact upon Malaysian teacher educator participants' thinking in regard to teaching and the Malaysian education student participants' perspectives on learning. The evidence provided in Chapter 6 and 7 indicated that Islamic teaching and learning philosophy significantly influenced both the teaching approaches of the teacher educators and the learning of the students. This suggests that Islam has a critical influence on the way in which Malaysian educators and students understand teaching and learning in their context.

Section 8.5 discusses the compatibility of Islamic teaching and learning philosophy with several elements of student-centred learning as found in the research findings. The data were consistent with previous research in Islamic countries (as presented in Chapter 4, section 4.4.4.2) that highlighted the acceptance of student-centred strategies in teaching and learning. This information suggests that there are certain synergies between Islamic learning philosophy and student-centred learning. This section also discusses the fundamental differences between the Western secular worldview and the Islamic worldview.

Finally, as a prelude to the concluding chapter, section 8.6 presents the implications of the research findings for the enhancement of teaching and learning in Malaysia.

8.2 Teachers' perspectives of teaching

This section discusses Malaysian teacher participants' understandings of teaching. From an analysis of data presented in Chapter 6, there are a number of significant conclusions

about teaching, based on the interviews and observations with the Malaysian teacher educators.

My analysis of the data suggested the integration of didactic teaching approaches with active teaching approaches among Malaysian teacher educator participants. I found that the teachers believed teaching should not be merely teacher-centred, but student-centred approaches should also be used. They also believed that the two approaches are complimentary and do not conflict. This exemplified that teaching beliefs and practices among Malaysian teacher educators are undergoing a transition. As Bailey (1992) argued, changes in teachers' practices are the results of changes in teachers' beliefs. According to Bandura (1986), an individual's decisions throughout his/her life are strongly influenced by his/her beliefs. Similarly, Pajares (1992) asserted that beliefs are "the best indicators of the decisions that individual make throughout their lives" (p. 307), and that the beliefs of teachers influence their perceptions, which in turn affect their behaviour in the classroom. This was reflected in the participants' understanding and practices.

There was evidence that the Malaysian teacher educator participants' understandings of teaching, as both knowledge transmission and knowledge facilitation, were reflected in their actual teaching practices. From the classroom observations, I noted that they adopted both transmissive and interactive teaching approaches. They started their classes by providing a lecture and continued after the lecture with active teaching strategies that required students to engage in the activities.

In the following subsection, the transition in teaching beliefs and practices among teacher educator participants from viewing teaching as being a transmission of knowledge (teacher-centred) to also believing teaching to be a facilitation of knowledge (student-centred) is discussed.

8.2.1 Using teacher-centred approaches

My study suggested that the Malaysian teacher educators used teacher-centred approaches that served as transmitters of knowledge. The teacher educators talked about their roles as transmitters of knowledge and their beliefs about applying teaching in a transmissive approach. From a transmissive approach perspective, teachers are regarded as transmitters of knowledge (Fink, 2003; Harden & Crosby, 2000; Pratt, 1998). According to this perspective, teachers (as transmitters of knowledge) have great

responsibility to deliver a given body of knowledge or a commitment to the content or subject matter. Teacher-centred approaches use traditional methods of teaching such as formal lectures, seminars and examinations, and designing assignments, tests, and grading, where students listen while taking notes (Felder & Brent, 1996; Nunan, 1989).

Their responses supported Fink (2003) and Mascolo (2009) who argued that in teacher-centred approaches, teachers are expected to be an “expert” and very knowledgeable in their subject disciplines. In other words, the outcome of teacher-centred approaches involves the dissemination of knowledge that is determined by the teacher. When a teacher believes that he or she is responsible for transmitting knowledge, the understanding affects his or her preference of teaching strategies. The data suggested that participants seemed to agree that the transmissive approaches such as direct instruction/lecturing and note giving are useful. Their responses supported Dollard and Christensen (1996, p. 3) that in teacher-centred classroom, “authority is transmitted hierarchically”, meaning the teachers should exert control over students. Similarly, Fink (2003) and Frieberg (1999) argued that in a teacher-centred classroom, compliance, rather than initiative, is valued and students, as passive learners, are valued over active learners. This was reflected in the data. This suggests that Malaysian teachers are still adopting teacher-centred approaches. Several teachers appeared to show greater control in their teaching process and preferred their students to follow and agree with their decisions regarding the modes of instruction. The Malaysian education system, which depends on traditional teaching methods (Ahmad, 1998; Hashim, 1994; Ismail & Alexander, 2005; Mustapha, 1998; Zakaria, 2000), may have influenced the teachers in regarding their students as passive learners who wait for knowledge to be instilled.

My analysis of the interview data proposed that there were three significant influences for the adoption of teacher-centred approaches among the participants. The first factor was that the teachers related their teaching with their previous learning experiences. The data suggested that the teacher participants’ own previous traditional learning experiences influenced their understanding that teaching is a process of knowledge transmission. The data supported a statement by Dunn and Dunn (1979, p. 241), who posited that “teachers teach the way they learned”. The findings supported Pajares (1992), who argued that teachers have been forming beliefs about teaching and learning for years, based on their experiences as students, and that their beliefs are well established by the time they attend college. My study suggested that the teacher participants’ teaching beliefs and practices were influenced by their previous learning

experiences (school education and university education training). This suggests that the same mechanisms occur in Malaysian environments.

The second influence on the Malaysian teacher educator participants adopting teacher-centred approaches suggested by the data was their belief about teaching being a process of knowledge transmission. My study suggested their acceptance of the belief that teachers were responsible for transmitting knowledge by direct means to students. Teacher-centred approaches are often described as a model of an active teacher and a passive student (Fink, 2003; Mathews, 2008), where teacher assumes primary responsibility for the communication of knowledge to students (Mascolo, 2009). My study supported other researchers' statements that teachers' teaching practices in the classroom are an expression of their beliefs and educational philosophies (Clark & Peterson, 1986; Dobson & Dobson, 1983), and that teacher's beliefs play an important role in their conceptualization of instructional tasks and activities (Fenstermacher, 1979; Nespor, 1987; Pajares, 1992). My research indicated that the Malaysian teacher educators employed traditional didactic teaching approaches as a reflection of their traditional teaching beliefs. This suggests that in order to achieve the Malaysian government goals for transforming education culture towards student-centred learning, it is very important for teacher educators' beliefs to be explored and understood.

The last influence on the active teaching methods used by Malaysian teacher educators was the examination-centred learning required by the system for students. Examination-centred learning means that students have to focus on getting good results in examinations. The teacher participants commented that they adopted teacher-centred approaches (i.e., adopting direct instruction and preparing teaching materials) as their students believed the strategies (e.g., lectures) would help them succeed in exams, at the end of a semester (i.e., summative assessments). According to the teachers, the end focus of learning among the students was the grades needed for examinations. As Fink (2003) argues, in a teacher-centred paradigm, students strive to achieve certification within a discipline rather than to focus on continual lifelong learning within a broader system. In a teacher-centred classroom, teachers use norm-references (that is, grading on the curve); typically employing multiple choice items (Fink, 2003). This was reflected in the data. The data suggested that Malaysian teacher educators employed multiple choice questions when the nature of examinations was fact-oriented. However, they also used essay based examinations when the nature of the examinations was problem-oriented, or a mixture of both (fact-oriented and problem-oriented).

The findings illustrated that the goal to perform well in the examinations and the achievement of excellent results have made students very conscious of their learning approaches and therefore, the teachers were responding to expectations from the students. Responses from teachers indicated that they believed that their students believed that examination scores and certificates represent learning ability. This is understandable, given that the Malaysian education system still emphasizes the importance of examination and is subject (fact) oriented (Lee, 2000; Ismail & Hassan, 2009; Joseph, 2006). The attitudes and expectation of Malaysian society in general, and of the family of the learners in particular, affect how learning is viewed and how teaching is organized. Therefore, it would seem that in order to accomplish the government's educational policy of outcome-based learning (i.e., student-centred learning); the national education system, the emphasis which is on fact-oriented examinations, should be revised. The use of examinations that emphasise problem solving through the application of 'soft skills' (i.e., student centred learning outcomes), should be introduced. Subjects that are content overload which restrict the use of interactive strategies should be identified. The Malaysian government could either change the existing assessment system or introduce a new assessment system with problem solving format and approach.

Despite the prevalence of teacher-centred teaching strategies, the data suggested several participants' attempts to change teaching understandings and practices. There was evidence that Malaysian teacher educators' beliefs about teaching as a transmissive approach were being modified. The next subsection will discuss the findings from the current study regarding the teacher educators' teaching transition.

8.2.2 Using student-centred approaches

My study suggested that Malaysian teacher educators were integrating traditional teaching strategies with active teaching approaches. Although the data indicated participants' understanding about teaching as knowledge transmission, the findings also showed that they were also adopting a constructivist perspective that teaching strategies should include active knowledge construction by students. Ramsden (2005) asserts that, just as students should give their best, teachers should give their best to the students whom they teach, as "good leadership helps create an environment for academics to learn continually, to make the best use of their knowledge, to solve problems in research and teaching collaboratively as well as individually" (p. 106).

My analysis of the data suggested that the Malaysian teacher educator participants adopted active teaching strategies as a complement to traditional strategies. This may possibly be because of their personal attitudes and perceptions of teaching, or because of the expectations from the government or because of the interaction of both. They may possibly were aware of the existence of a gap, or discrepancy, between their goals and ideals (for using student-centred approaches) and their existing practice (merely teacher-centred approaches). Prawat (1992) argued that there are three conditions for change,

First, individuals must be dissatisfied with their existing beliefs in some ways; second, they must find the alternatives both intelligible and useful in extending their understanding to new situations; third, they must figure out some way to connect the new beliefs with their earlier conceptions. (p. 357)

In student-centred learning, students are expected to take more responsibility for their own learning (Fink, 2003; Glasgow, 1997), and this was reflected in Malaysian teacher educators' responses when they provided opportunities for their students to actively engage in the learning process to construct their learning. Although they adopted a lecture-style of teaching, they also used active teaching strategies, such as; collaborative learning, classroom presentation, and project-based learning strategies (Chapter 6, section 6.6). Their practices suggested that teaching should employ traditional and active strategies that can enhance students' active acquisition of information and skills, suitable to the students' ability, level of experience, and educational needs. Responses from Malaysian teacher educators such as; "*different approaches may be suitable for different students...*" (Noor), "*... each student should be treated by their teachers in a different way... teachers cannot just employ a similar approach to all students...*" (Ilyas) (Chapter 6, section 6.7.1), suggested that they recognised student individual differences, and were responding to them with student-centred approaches. This supported Lambert and McCombs (1998) who claimed that student-centred learning recognizes student individual differences and unique learning styles. As Heacox (2001) argued, since "all students have individual learning preferences, backgrounds, and needs" (p.7), it is important for a teacher to select a teaching approach that gives all students the opportunity to learn.

Malaysian teacher educators' understanding of their own roles as facilitators in learning and students' roles as active learners (Chapter 6, section 6.6) reflected their philosophy

of teaching that students will gain more independence in learning through active engagement in learning. Student engagement is defined as a student's cognitive investment in, active participation in, and emotional commitment to their learning (Chapman, 2003). Some researchers have highlighted student motivation and effort as a key factor in engagement (Schuetz, 2008), and others have emphasized the way educators practice and relate to their students (Kuh, 2001; Umbach & Wawrzynski, 2005). In answering: 'What is student engagement?', Zepke and Leach (2010) used a conceptual organizer for student engagement that consisted of four perspectives: First, student motivation; second, transactional engagement between teachers and students; third, institutional support; and fourth, engagement for active citizen. The organiser was then used to identify actions that teachers and institutions can adopt to enhance student engagement to:

1. Enhance students' self belief
2. Enable students to work autonomously, enjoy learning relationship with others and feel they are competent to achieve their own objectives
3. Recognise that teaching and teachers are central to engagement
4. Create learning that is active, collaborative and fosters learning relationships
5. Create educational experiences for students that are challenging, enriching and extend their academic abilities
6. Ensure that institutional cultures are welcoming to students from diverse backgrounds
7. Invest in a variety of support service
8. Adapt to changing student expectations
9. Enable students to become active citizens
10. Enable students to develop their social and cultural capital (Zepke & Leach, 2010, p. 169).

In my study, Malaysian teacher educators' adoption of various active teaching strategies (Chapter 6, section 6.6.2) suggested their attempts to increase student involvement in their learning, and that supported the proposal from Zepke and Leach (2010), above. The ten proposals seem suitable for adoption among Malaysian teachers as a way to improve student engagement in order to support Malaysian educational policy towards student-centred learning. Through teachers' collaborative learning strategies, students were encouraged to work with others. Working with others often increases involvement in learning and through sharing ideas and thoughts, and responding to others' reactions

sharpens thinking and deepens understanding. Chickering and Gamson (1999) contend that co-operation among students heightens learning and it is one of their factors for effective learning.

My analysis of the data suggested two challenges that were highlighted by the teachers in adopting student-centred learning; time constraints; and students' resistance in the implementation of student-centred approaches (Chapter 6, section 6.6). The Malaysian education context where the focus is on the teaching content, syllabus, and public examinations, seems to influence the issues raised by the teachers. The data showed that time constraints were one of the frequent issues stated by the teachers. The teachers said that it was difficult to employ active teaching strategies because of time constraints. This reflected the teachers' understanding about teaching as a delivery of a body of knowledge. Some teachers mentioned that teaching adopting active strategies, such as group work was very time consuming as they had only "one hour and 30 minutes" in the classroom. They expressed their worries at not being able to finish teaching according to the syllabus in time when they try to adopt a lot of active teaching strategies. This reflects their teaching philosophy, that teaching means the transmitting of knowledge from teachers to their students which requires a considerable amount of time. This illustrates a tension between these two approaches. While traditional teaching approaches emphasize the need to transfer structured knowledge by imparting information, providing and facilitating understanding (Fink, 2003; Mascolo, 2009; Mathews, 2008); active learning approaches, on the other hand, stress teaching as developing and encouraging knowledge creation, and the importance of student engagement and participation in learning (Gill & Holton, 2006; Griffiths et al., 2007; Lea et al., 2003; Quaintance, 2006; Sally et al., 2009; Wenglinisky, 2004).

The second challenge was that of students' resistance to active teaching. Several Malaysian teacher educators reported that some students were reluctant to participate well when teachers employed active teaching strategies. They reported that students showed their unwillingness to engage in the activities leading to their ineffectiveness in learning. It was revealed that students' participation is no panacea for all classroom problems. In fact, the more teachers base their classroom on students' participation, the more teachers must be prepared for the unpredictable. The teacher will, therefore, constantly be faced by Allwright's (1984) question: Why don't learners learn what teachers teach and accept participation in activities provided by teachers? Several researchers have attempted to answer that students are; possibly not yet ready

(Pienemann, 1989), there is an input-poor environment (Kouraogo, 1993), and an agenda and process mismatch (Nunan, 1995). Nunan (1995) argued that teachers may be busy trying to teach something while students are busy learning something else. Teachers may be busy trying to get learners to learn in a particular way, while learners are busy learning in their own preferred way. I would argue that, in this issue, the gaps can be bridged if Malaysian teacher educators make explicit their teaching agenda and its rationale, as well as taking into account learners' learning preferences.

My study suggested the emergence of 'push-pull concept' in the process of adopting student-centred learning approaches. In the Malaysian education context, teaching was characterized by pull mode learning (student-centred) rather than push mode teaching (teacher-centred), where students obtain knowledge in a form that is best suited to their learning approaches and abilities, rather than knowledge being provided according to what is convenient for the teacher (dall' Acqua, 2010). My analysis of the data suggested that although the teachers adopted a push interaction through teacher-directed approaches (e.g., direct instruction); they also employed a pull interaction through student-directed approaches (e.g., collaborative learning, project-based learning, and constructivist learning). The data suggested that despite facing challenges, the teachers were still motivated to employ student-centred learning approaches in the classroom. The data suggested that the challenges did not bother or distract from some of the teacher educators' efforts in adopting the student-centred learning, which signals their strong beliefs. This indicates that in the Malaysian education context, the student-centred learning environment can be well developed if teachers are motivated to employ the approaches (although encountering obstacles), and this is dependent on their teaching beliefs. Their teaching beliefs will influence their classroom teaching practices. As Kagan (1992) claimed, as a teacher's experience in the classrooms grows; this knowledge grows richer and more coherent and therefore forms a belief system that actually controls the teacher's perception, judgment and behaviour. Similarly, Pajares (1992) also suggested that beliefs are the main concept of formulating theories, since they are static and can exist beyond individual control or knowledge. In his view, beliefs are "far more influential than knowledge in determining how individuals organize and define tasks and problems and are stronger predictors of behaviour" (p. 311).

Summary of section and conclusion

My analysis of the data on teachers' teaching perspectives suggested that the teacher educators perceived teaching as both a transmissive and an interactive process, and this led them to adopt both teacher-centred and student-centred approaches in their teaching practices. Although several mentioned their roles as transmitters of knowledge, many have moved away from merely providing direct lectures as their teaching approach, to the integration of lectures with active teaching strategies. My study suggested the teachers' belief that students should take responsibility for their own learning, teachers should equip learners for the task of learning, and that teaching should meet learners' needs through positive relationships. In other words, their teaching beliefs have changed from perceived teaching as merely a transmission of knowledge to an understanding that teaching is a combination of knowledge transmission and knowledge facilitation. My study indicated that their beliefs affected their teaching practices when they combined their transmissive teaching approaches with interactive approaches. In short, they integrated their teaching approaches with the inclusion of both teacher-centred and student-centred approaches because it was a time of transition in teaching perception and practices. The participants' responses illustrated their transition in the beliefs that affected their teaching practices.

8.3 Students' perspectives of learning

This section discusses Malaysian student participants' understanding about learning. From my analysis of data presented in Chapter 7, a number of conclusions about learning have emerged from the individual and focus group interviews with the students. Findings from this study suggested that learning perspectives and practices among the Malaysian education student participants stem from both a traditional and a student-centred learning approach.

I found that the participants' learning approaches were a mixture of traditional learning and student-centred learning approaches. While several students reported their preference for learning using traditional learning approaches, the findings further suggested their use of student-centred learning approaches. It seems that their learning strategies were mixed. Several participants reported that they preferred to combine memorization with active learning strategies. This suggests that they mixed traditional learning strategies with student-centred learning strategies. Despite their preference for

direct lecturing and memorization, they also indicated that their knowledge increased through participation in classroom activities and other constructivist approaches. Their responses suggested their tendency to perceive that student-centred learning strategies could enhance their understanding of information, which could assist them later in memorizing the information. This exemplifies their acceptance of both approaches as being complementary rather than as conflicting. The next two sub-sections will discuss each of the approaches.

8.3.1 Adopting traditional learning approaches

My analysis of data from student participants suggested that the students used traditional learning approaches. Their responses suggested their perceptions that the traditional one-way direct instruction was an effective approach to promote content mastery among students. In a traditional learning approach, knowledge is defined as an entity that can be given or transmitted and absorbed by students (Garfield, 1995; Moore, 1997; Skinner, 1953). Some student participants reported that they preferred the traditional teaching approaches such as, direct instruction (lectures), because the lecturers know how to make them pay attention and concentrate. Some participants expressed an attitude that traditional learning would provide them with better understanding as the teachers would provide deeper explanation of the lesson taught. My study also suggested that the students regarded their teachers as experts to deliver knowledge through traditional direct lecturing and they reported their preferences for memorizing teaching notes for effective learning. This illustrates their understanding of the importance of experts in instilling information. Their responses supported Garfield (1995) and Moore (1997) who described learners in teacher-centred approaches as empty vessels to be filled with knowledge from an expert to fill them with information.

Memorization in learning

My analysis of the data suggested that the student participants used memorization as their learning strategy (Chapter 7, section 7.4). This indicates that my study proposed a cultural influence. I found that the Malaysian Muslim students used memorization for understanding, consistent with Islamic education traditions where Muslim learners used memorization as a methodology in understanding materials (Abdul Kadir, 1970; Alsagof, 1985; Hashim, 1994; Hassan, 1983; Omar, 1993). In contrast to the common perception by Western educators that memorization is synonymous with rote learning or

the surface approach to learning; my research suggested that understanding was often the goal of the Malaysian Muslim students and memorization was perceived by Malaysian students as a valid strategy for achieving understanding.

Some Malaysian Muslim students related their memorization with the need to understand beforehand, and others reported their memorization as a strategy for understanding the lessons in order to pass examinations. For examples, “*memorizing texts helps me later in my understanding of the lessons...*” (Rahman), “*through memorizing... I can understand what seemed difficult in class before...*” (Kamariah) and “*when I understand, it helps me in memorizing... I memorize all those significant and useful sentences in order to help me later in exams....*” (Siti). This suggests that the memorization strategy of Malaysian Muslim learners was a part of a development of understanding or a method toward understanding the content. I believe that memorization was perceived differently by Malaysian (particularly Muslim) students. Thus, the findings of my study add to the memorization debate by documenting the practices of Malaysian Muslim students.

Data from my study paralleled other studies that have found that Asian students (mostly Chinese) used memorization to gain understanding. The student participants revealed that they used memorization in order to better understand lecturers’ teaching materials. This suggests that their traditional learning approaches (i.e., memorization) cannot be categorized as rote learning, as it also led them to a deep approach to learning, i.e., better understanding. The data supported Marton et al. (1996) who argued that the repetition and memorization that are usually associated with rote learning are very much part of meaningful learning. Similarly, the findings from my study were consistent with findings from quantitative studies amongst students studying in Malaysia (Watkins & Ismail, 1994), Hong Kong (Kember & Gow, 1990, 1991), Nepal and the Philippines (Watkins et al., 1991) that found that Asian students incorporated both memorization and understanding as their learning approaches. Watkins and Biggs (1996) and Pillay et al. (2000) also found Asian learners to be flexible and to be strategic learners who would adopt multiple skills which could include memorization skills, in order to survive in a rather competitive learning environment.

The findings from my study are also supported by Biggs (1994) who argued that for Asian students memorization was not rote learning, but memorization can be conceptualised as repetitive learning, where repetition was used to assist accurate recall

and as a tool for a deep approach to learning. Thus, I believe, the findings of my study could challenge the misconception of Malaysian learners as passive rote learners (e.g., Burns, 1991; Hammond & Gao, 2002; Ho et al., 2004; Samuelowicz, 1987) and could support earlier literature with the similar findings which indicate the significance of considering cultural issues when investigating learners from different cultures (e.g., Biggs, 1994; Kember & Gow, 1990, 1991; Marton et al., 1996; Pratt et al., 1999; Pillay et al., 2000; Watkins & Biggs, 1996, 2001; Watkins & Ismail, 1994).

My study suggested that students' memorization learning strategy was also aimed at reproducing material for examinations; some students reported that memorizing was significant for their exams. They mentioned that they could answer all the questions better in the examinations when they memorized important parts of their lessons. This exemplifies the fact that the students learned in the way that they perceived to be the learning context. If the learning environment requires them to use surface approaches, e.g., recall in examinations, then they would memorize. As Ramsden (1992, 2003) pointed out, the effect of students' learning depends on the context of learning.

However, the findings from my study further suggested that the participants' memorization was not entirely learning by rote as they also memorized for understanding and not merely to pass examinations. My analysis of the data suggested that their memorization learning strategy was not surface learning or merely preparation to success in exams, but can be considered as deep learning which assisted them for good understanding (Chapter 7, section 7.4.4). This suggests that they were using deep approaches to learning, as Ramsden (1992, 2003) argued, deep approaches to learning focus on understanding material by linking different topics together, and processing information using higher order skills, compared to surface learning that focuses on reproducing materials. Ramsden (1992, 2003) asserted that students' choice of surface or a deep approach of learning is dependent on their learning context. Malaysian students' responses in my study indicated that the educational context or environment in which they learned profoundly affected their thoughts and actions. This supports Ramsden (1992, 2003) who argued that the quality of learning is dependent on the approach taken because what students learn is closely associated with how they perceive their learning context.

More than challenging misconceptions of Malaysian learners as passive, my research identified additional principles for learning in the Malaysian context. While most

student participants described that they only memorized information after they understand the information, findings from other studies asserted that memorization was used as a tool incorporated into students' learning strategy in order to gain understanding (Biggs, 1994; Kember & Gow, 1990, 1991; Lee, 1996; Marton et al., 1996; Pratt et al., 1999). This suggests that, while the previous research findings have described understanding as a learning goal of Asian students and memorization as their learning strategy, the finding from my study suggested that Islamic Malaysian education students perceived both understanding and memorizing as learning strategies. This suggests that memorization as a tool for learning may work differently in different cultures.

The differences in the approaches to learning are likely to be influenced by the educational and cultural background of the students. I assume that a teaching and learning paradigm would reflect, partially or wholly, cultural values. Students exhibit different approaches to learning, and there is evidence that these vary systematically from one culture to another (Biggs, 1996; Holmes, 2000; Kember & Gow, 1990; Liu, 1998; Richardson, 1994). Each culture has its own context that influences perspectives and philosophies, as well as the broader learning context for students (Ramsden, 2003). Thus, as per other countries, Malaysia represents a context that is influential for developing and shaping skills and attitudes.

The Malaysian students' perceptions of traditional learning strategy had been shown to have been influenced by their previous school education background. As Prosser and Trigwell (1999) argued, students' perceptions are typically a function of their previous experiences of both teaching and learning (prior knowledge and understanding, previous successful approaches to study, etc.). The student participants in my study explained that since they had succeeded in their school education by adopting memorization as one of the learning approach, they continued to adopt the strategy in their tertiary teaching training. While the students mentioned that they used memorization to understand materials, they also expressed that they felt secure, safe and comfortable with the strategy as they could answer most examination questions well as a result of their memorization. They tended to believe that memorization should be retained as one learning strategy because of its effectiveness for passing examinations as shown by their past success. My study suggested that in the Malaysian context, memorization was accepted as a useful learning strategy because of the examination-

oriented system and their culturally influenced dependence on teachers as providers of required information. As Ramsden (1992) argued,

The educational context affects students' learning, although an approach is an 'intentional' phenomenon, it is directed outside of the individual to the world outside them; while simultaneously being defined by the world. It is not something inside a student's head; it is how a student experiences education. (p. 231)

Ramsden (1992, 2003) proposed that students adapt to the task requirements they perceive instructors to make of them as students try to please their instructors and they do what they think will bring rewards in the systems in which they work. In short, students' perception of task requirements determines what types of learning approach they take. Therefore, as Ramsden (1992, 2003) asserted, change of learning context/environment such as curriculum, teaching methods and assessment procedures will change the approach that students use to learn.

This creates challenges for teachers to adopt student-centred approaches in their teaching practice. My study exemplified that, although the education students experienced constructivist learning approaches in their university teacher training, the students still extended their school learning experiences such as the adoption of memorization in learning because they believe in its effectiveness. This reflects their philosophy of learning. As Malaysian Muslim students, they may be more likely to adopt a culturally familiar approach to enhance learning. One possible explanation for memorizing being a significant approach used by Malaysian Muslim students for understanding is that it has been a deeply rooted strategy practiced by Islamic learners. This will be discussed in the following section (section 8.4).

8.3.2 Adopting student-centred approaches

Despite Malaysian students' acceptance of teacher-centred learning approaches, my study illustrated that the students also had a complementary view in which they acknowledged the usefulness of student-centred learning approaches. Participants in my study reported that their learning was facilitated when they were involved in small groups in order to solve problems. Collaborative learning is sometimes called; peer-assisted learning, group learning, peer tutoring, and other terms. Johnson and Johnson (1990) described cooperative learning as a special form of collaborative learning that is

generally defined in opposition to competitive or individualistic learning. Competitive learning occurs when individuals or groups must work in opposition to each other; individual learning simply consists of learning by one's self, often in a competitive context. My study suggested that the students preferred to learn in project-based learning and take more responsibility in collaborative, rather than in competitive, learning. Problem-based learning or inquiry learning occurs when groups of students collaborate in an attempt to solve problems. Mascolo (2009) argued that, through problem solving, students acquire a variety of different knowledge and sub-skills that are important for their learning.

The findings of my research are inconsistent with the findings of a study by Ahmad et al. (2005) who found that Malaysian students merely considered their teachers as experts and therefore they were culturally oriented to silence in class and having unconditional obedience to authority. In contrast, my study suggested that the students also regarded their teacher educators as facilitators of learning rather than, solely, as experts. This suggests that the students expected a teacher to play the role of an expert and also of a facilitator. This indicates that perhaps there is a developmental path where students hang onto what they feel comfortable with and then let some of that go as they develop more confidence with student-centred learning. This further exemplifies that the students hold a philosophy of learning that students should be the active constructors of knowledge as well as the recipients of knowledge. Liu (1998) mentioned that it is typical for Asian students to have a culture with a long tradition of unconditional obedience to authority, which regards teachers not as facilitators, but rather, as founts of knowledge. Liu tended to generalize all Asian with Confucian values and beliefs. In fact, the Malaysian students in my study were Muslim students who hold Islamic values and beliefs. Therefore, a culture with different beliefs might lead to different perspectives of learning, as cultural differences have a strong influence on educational practices (Richardson, 1994).

My study suggested that students adopted roles as being active, autonomous, and responsible learners in learning process. This supports other researchers who defined student-centred learning as students' autonomy role to actively seek out and construct meaning from information and previous experience (Gibbs, 1992; Harden & Crosby, 2000; Huba & Freed, 2000; Lea et al., 2003; Yuen & Hau, 2006). Rogers (1969) stresses students' freedom and responsibility of the individual learners to construct their own learning experiences. Rogers (1969) strongly believed in personal responsibility

and freedom to choose. My analysis of the data suggested that Malaysian students took responsibility for their own learning. Student-centred learning requires students to take on more responsibility for thinking what and how to learn so that they can play an active role in their learning (Yuen & Hau, 2006). In student-centred learning, students are no longer passive recipients of knowledge, but have more responsibility for their own learning (Gibbs, 1992; Harden & Crosby, 2000; Huba & Freed, 2000; Lea et al., 2003; Yuen & Hau, 2006).

My research findings illustrated that students' experiences of student-centred learning strategies had changed their attitudes towards learning. From the interviews, several students reported that they were motivated to study better when they learned in collaborative learning, independent learning and project-based learning environments. They also mentioned that their ability to seek new knowledge, to actively communicate and interact with other people, and to express ideas freely were developed better through those learning strategies. This suggests that Malaysian students' motivation enhanced through their participation in student-centred teaching strategies provided by teacher educators. The findings supported those of other previous studies in that students' motivation improved through their engagement in classroom student-centred strategies (Deci & Ryan, 1991; Gill & Holton, 2006; Lea et al., 2003). This suggests that the motivation of Malaysian students could be promoted through constructivist learning environments. Even though some of the previous literature tended to stereotype Asian students as rote learners and passive students (e.g., Biggs, 1996; Burns, 1991; Hammond & Gao, 2002; Pratt, 1992; Samuelowicz, 1987), the findings of my study, in contrast, indicated that these Islamic students were active in their learning by engaging in active strategies, which have improved their motivation to learn.

Summary of section and conclusion

My analysis of the data on Malaysian students' learning experiences suggested their adoption of both passive and active approaches, consistent with the data from the teacher participants. While the students perceived learning as knowledge acquisition, they also viewed learning as an active knowledge construction. Their understanding had led them to adopt both passive and active learning strategies. Although they preferred to be knowledge receivers, at the same time they had also acknowledged their roles as active knowledge constructors. My study also suggested that their preferred learning approaches were aligned to their Islamic religion beliefs. Thus, I would argue that the

student participants must be considered as Malaysian Muslim learners, instead of as just Asian learners. This is because most literature on Asian learners has referred to Chinese learners with Confucian values. The influence of Islamic values in Malaysian teaching and learning will be discussed in the following section.

8.4 The influence of Islamic perspective in Malaysian teaching and learning

My analysis of the data presented in the previous chapters (Chapter 6 and 7) suggested that the participants described their understanding and adoption of teaching and learning as a combination of traditional and active approaches. In this section, the influence of Islamic philosophy on the participants' views of teaching and learning will be discussed. It is relevant to mention here that all education student participants in this study were Muslim students, but two of the seven teacher educator participants were non-Muslims.

My study suggested the influence of Islamic philosophy on teaching and learning in Malaysian teacher education. The teacher educators and education students involved in this study connected their religious beliefs to their teaching and learning. This highlights learning as a process which is mediated within a cultural context. Although Malaysia is a fast developing modern country with the latest technological benefits, the culture of Malaysia is rooted in the tradition and heritage of deeply held Islamic beliefs. Among Malaysian Malays, Islam constitutes a central element in ethnic identity and has significant impact on the development of Malay culture (Mastor et al., 2000).

Although the underlying foundations of Malaysian educational system today are derived from both Islamic education perspectives and Western perspectives (Chapter 4), the Islamic perspectives in Malaysian education are more influential (Tamuri, 2001). In the late 1970s and early 1980s, the influence of Islam grew with the emergence of Islamic revivalism in Malaysia. Islamic revivalism [*al-tajdid al Islami*] has been defined by a twentieth-century Muslim scholar as “the cleansing of Islam as practiced of all un-Godly elements in an effort to return Islam to its original pure form” (Al-Ash’ari, 1999, p. 4). This phenomenon led to the rise of Islamic consciousness, particularly among the Malays, who attempted to cleanse their culture of non-Islamic elements (Abdul Hamid, 1999; Esposito, 2002; Larson, 1996). As a result, many local *da’wah* movements and Muslim students’ organisations emerged. These movements significantly contributed to the development of Islamic revivalism in Malaysia as well as to pressuring the

government to adopt more Islamic elements in its policies. Education was one of the areas which significantly contributed to this awareness. Hassan (1981) argued that, “As more and more Muslims became aware of the defects of an educational system based on a secular western prototype, the demand in the light of Islamic educational philosophy and value increased” (p. 45).

This can be seen from the National Education Philosophy which captures the spirit of the Islamic philosophy of education. The philosophy emphasizes the concepts of integration and holism when it refers to “developing the potentials of individuals in a holistic and integrated manner, so as produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious” (Ministry of Education, 1990c, p. 5). Moreover, Hashim (1994) described the national education system as no longer secular-based, that is, it does not divorce religion and morality from education, and is more inclined toward moral values that suit the Islamic system. The system agrees implicitly on the fundamental goals of servanthip (*'abd*) and vicegerency (*khalifah*) and that Muslims shoulder their *fard 'ain* (individual) and *fard kifayah* (societal) obligations. The system further advocates that education should be integrated and holistic, where a teacher not only imparts information but also guides students to distinguish between right and wrong behaviours and attitudes. The concept of a balanced development of the individual was introduced (Hashim. 1994). Moreover, the introduction of student-centred learning in the Malaysian education context (i.e., Islamic context), seems to suggest that the Malaysian government was aware of the suitability of the learning models to Malaysian teachers and students. Although student-centred learning models are derived from Western models, certain learning elements in the models are consistent with the Islamic learning principles.

This section consists of a discussion on Islamic learning and the role of knowledge and memorization, the Islamic perspective in adopting student-centred learning strategies, and Islamic perspective in promoting the role of teacher and student. Since student-centred learning is derived from constructivist learning theories, a sub-section regarding the constructivist learning theories and Islamic education philosophy will be discussed.

8.4.1 Islamic perspective on the role of knowledge and memorization

From the data collected in my study, both Malaysian teacher educators and Malaysian education student participants related their understanding of teaching and learning with

the philosophy of education in Islam. They seemed to attach the philosophy to their conceptualization of knowledge. The teacher participants' responses, such as; "*Islam encourages us to improve our students' potential... the teacher's roles include developing students' abilities as well as improving their intellectual...*" (Ilyas) and "*all knowledge comes from God... we're God's workers, we have God's trust to inculcate goodness in people*" (Safuan) indicated their acceptance to the concept of education from Islamic perspective. The findings suggested their understanding of the importance of knowledge (*'Ilm*) seeking, and that knowledge (*'Ilm*) plays a central role in the Muslim's attitude toward life, work, and being. Their responses supported Daud (1989) who stated that knowledge (*'Ilm*) forms the basis in the search for truth (*haqq*), proper action (*alim*), spirituality (*iman, nur and huda*), ethics (*ulama*), and wisdom (*hikma*, pp. 64-75). Similarly, Husain and Ashraf (1979) also described the importance of knowledge in Islam.

Knowledge divorced from faith is not only partial knowledge; it can even be described as a kind of new ignorance. The man who has lost his faith in God is not recognized by Islam as a man whose knowledge can be described as deep. Such a person, however extensive his acquaintance with books, has but acquired only a fragmentary view of the universe. (p. 38)

The participants' responses suggested their understanding of the two types of knowledge (*'Ilm*) in Islam. As Omar (1993) stated, the first knowledge is revealed knowledge, which comes from God, and the second knowledge is derived from reason, which comes from the physical universe, the human mind, and history or study of societies, both local and foreign. Revealed knowledge is held to be of a higher form than knowledge based on reason as it,

... comes directly from God, is unique in certitude, and has a fundamentally beneficial nature... all true knowledge or science should help us to understand and realize the meaning and the spirit of divine knowledge in its widest sense, for personal and social development. (Omar, 1993, p. 29)

Humans require knowledge derived from human thinking to understand and interpret revealed knowledge. Therefore, Muslims are encouraged to seek both types of knowledge, revealed knowledge and knowledge from human thinking. However, the importance of revealed knowledge in Islam points to the differences in how knowledge

is acquired among Muslims, which contrasts with Western educational systems. In the Islamic tradition (Qur'anic learning), children begin with recitation and memorization short chapters from the Qur'an (Abdul Kadir, 1970) and throughout the course of their studies, they increase their focus to include a broader range of topics. Conversely, in the West, children start with a wide variety of subjects to study, and specialize during their high school or university education (Boyle, 2006).

My analysis of data from Malaysian student participants suggested that the students used memorization as one of their approaches to learning and seeking knowledge. While some students related their memorization with the need to understand beforehand, others reported their memorization as a strategy for understanding the lessons and to pass examinations. Their responses highlighted the importance of memorization in promoting attention to learning, understanding and reasoning. The data supported literature that highlighted memorization as a methodology used extensively in Islamic education traditions (Abdul Kadir, 1970; Alsagof, 1985; Hashim, 1994; Hassan, 1983; Omar, 1993). In Islamic education, memorization of the Qur'an is generally considered the first step in understanding (not a substitute for it), as its general purpose was to ensure that sacred knowledge was passed on in proper form so that it could be understood later. Memorization was initially related to the preservation of the Qur'an in its exact form, as revealed to Prophet Muhammad (Omar, 1993). In other words, memorization of the Qur'an is synonymous with learning the Qur'an for many Muslims and, as such, is very important to Muslim communities worldwide.

Memorization and understanding are often considered to be polar opposites. Memorization without comprehension is mindless rote learning, and comprehension is not automatically associated with prior memorization. Hence, memorization of the Qur'an is meant to be the earlier step in a lifelong journey of seeking understanding and knowledge. From Western perspectives, Gunther (2006, p. 382) explains, "Al-Ghazali makes it very clear that, for him, true knowledge is not simply a memorized accumulation of facts but rather 'a light which floods the heart'". This seems that Al-Ghazali relates memorization with deep understanding. The idea that memorization does not restrain understanding or enlightenment but is a precursor to both is a crucial distinction, as much of the criticism of traditional Islamic education centres on its emphasis on memorization. If memorization leads to understanding, it is not surprising that the Malaysian Muslim students in this study preferred to adopt memorization as their learning approach. This indicates that for Muslim learners, the first objective of

memorization is improved understanding. This is followed by the purpose of recall that can assist later in examinations. This is consistent with the findings in my study that suggested that students used memorization for better understanding and also to pass examinations. In my view, Malaysian students' approaches to learning were influenced by their learning context. If their learning environments prepare them for an in depth understanding, then they will be likely to learn thoroughly how to create meaning and understanding, instead of merely use memorization for examinations. Therefore, I believe that it is important for teachers to provide a constructive and supportive learning context to enhance the effectiveness of student learning.

8.4.2 Islamic perspective on the role of teachers and students

My analysis of the data suggested that the Malaysian teacher educator participants viewed their teaching role as teacher as not only to provide knowledge to students, but also to encompass the responsibilities for the development of student potential and to the process of nurturing and guiding the student to the success in life. They reflected that they could develop these through student-centred learning strategies. Their perspectives reflected their belief of Islamic teaching perspectives that describe education as *tarbiyah* with the meaning of to grow and increase. During the interviews, the Malaysian teacher educators further revealed their understanding of teachers' roles as facilitators in teaching and learning as encouraged by Islamic education philosophy. Their responses regarding their roles led to their understandings of teaching as facilitating students' learning.

Their perspectives seemed to be consistent with one of the definitions of education, *ta'dib*. According to Al-Attas (1979, p.1), *ta'dib* means "encompassing the spiritual and material life [of a person] that instils the quality of goodness that is sought after". *Ta'dib* further described as a term that means to discipline and train the mind and soul (Hafstead, 2004) (Chapter 3, section 3.3). Several excerpts from participants, such as; "*teaching should include spiritual and intellectual aspects*", "*teachers should provide students with good ideas, thoughts, knowledge, and skills*", "*... harmony development between the material and the spiritual elements*" and "*Islam encourages us to improve our students' potential and knowledge*" all suggested the participants' acceptance of the Islamic teaching perspective that education is an integrated process of all aspects in life, and that the good qualities and attributes of the mind and soul are developed. They seemed to exhibit one of the Islamic definitions of education, i.e., *ta'dib*, that education

is a process of educating the person concerned in the most proper and appropriate behaviour, and in the preparation of a positive attitude for the sake of righteous living. Participants' responses illustrated that educating (*ta'dib*) students towards proper behaviour could be accomplished better when they also played roles as facilitators of learning, rather than merely as transmitters of knowledge.

A facilitator of learning emphasizes the individual differences of learners. Facilitators should take into account the differences in character and ability between students, and deal with each one of them appropriately. Being facilitators, means not to push the students beyond their capacity or to attempt to bring them to a level of knowledge that they cannot absorb. This was reflected in my study in the instance where the participants mentioned that their facilitative teaching approaches provided them with opportunities to acknowledge students' different learning styles and different personalities (Chapter 6, section 6.7). Their responses supported Al-Ghazali (1997a) who argued that the educational process should direct teaching and knowledge to correspond with the natural abilities of students. He describes, "to feed someone with the right food is to give life, to burden someone with what is not right can only cause ruin" (Al-Ghazali, 1997a, vol. 3, p. 62). This means teachers should have the professionalism and understanding to cope with the educational process to educate students, because student abilities and achievements vary from person to person.

The findings of my study are in agreement with al-Ghazali's (1997a) perspective of teaching and learning (Chapter 3, section 3.1). In al-Ghazali's eyes, education is not merely a process whereby the teacher imparts knowledge that the students may or may not absorb; rather, it is also an interaction affecting and benefiting teacher and students equally, the former gaining merit for providing instruction and guidance; and the latter cultivating themselves through the development of their knowledge. My study suggested that the participants have accepted al-Ghazali's (1997a) proposal that a teacher should be a model and an example, not only a purveyor or medium of knowledge. According to al-Ghazali, a teacher's work is not limited to the teaching of a particular subject; but rather, it should encompass all aspects of the personality and life of the pupil. Al-Ghazali mentions that "a teacher is like the sun which, being itself luminous, sheds light; or like the musk which, being itself fragrant, makes others fragrant" (Faris, 2003, p. 144).

The Malaysian teacher educators' responses to their role as facilitators in my study seemed to reflect such philosophy of teaching. I would argue that their perspectives seemed to have a significant relationship with their understanding of Islamic teaching and learning. Al-Ghazali (1997a) argued that a teacher also needs to be a *mursyid* (guide) to provide *irshad* (guidance) and advice to learners. Al-Ghazali noted that teachers assume many roles in their students' lives, including the advising or guiding of students outside the regular classroom experience. My analysis of data from the teachers that suggested their relationship with students inside and outside the classrooms supported this Islamic principle. Moreover, students need guidance in their learning process as they may encounter learning problems and challenges. Lubis (2011) noted that a teacher needs to be a *murshid* (a guide) because learning difficulty may be experienced by every student involving a low, normal and high levels of talent and intelligence quotient, or caused by both internal (talent, intelligence, affective factors) and external factors (environment, instructional design of learning). This raises the importance of students' getting guidance and support from a teacher's role as *mursyid* (guide). *Mursyid* can be said to be a mentor or facilitator who provides guidance, support and help to students so that they can be on the right path to achieve success and happiness.

The findings suggested that the Malaysian teacher educator participants considered their roles as not merely *mu'allim* (a transmitter of knowledge), but also as being involved in the role of teacher as facilitator in guiding and developing students' behaviour and skills through active learning. This supports what Nasr (1987) explained; that a teacher in Islam has an ethical duty as a *murabbi* (a trainer of souls and personalities), that not only concerns with transmission of skills and knowledge, but also the inculcation of *adab*, which is the discipline of mind, body and soul (Chapter 3, section 3.3).

The teachers in my study seemed to agree that all these terms are interrelated and perceived them as complementary rather than conflicting (Chapter 6, section 6.5 and 6.6). Therefore, they played both roles, as experts and facilitators who were responsible for imparting knowledge to students and at the same time, facilitating their students' learning. This reflects their teaching philosophy which is based on an Islamic underlying belief of a holistic role that incorporates both, expert and facilitator. These findings seemed to answer some previous studies (e.g., Long et al., 1999; Mahamood et al., 2009; Sidin, 1999) that revealed participants' views of teaching as a combination of the teacher-centred and student-centred approaches.

Student participants also perceived teachers as both experts and facilitators of learning. They seemed to believe that teachers are responsible for delivering knowledge and transmitting ideas, as well as facilitating and guiding student learning. The students' understanding of the role of the teacher has led them to perceive their roles as being knowledge receivers and also, sometimes as active learners. The interviews with students suggested how they were active learners in the classroom by engaging various learning strategies. They seemed to be active in giving and sharing ideas through collaborative learning, and by participating in classroom presentation. When asked the reason why they involved themselves in active learning strategies, most of them related them to their active participation in Islamic learning principles that ask them to be active, needing them to seek their own knowledge and to construct their own meaning. Their responses can also be interpreted as the desire to actively engage in the learning process, which is supported by the Islamic principle that a learner should learn by practicing (doing or '*amal*'). Islamic learning theories also greatly emphasize that learners be active in learning because "nobody can be learned unless he puts his learning into practice" (Al-Ghazali, 1997, p.71). Their philosophy of learning has brought them to play two roles (active and passive learners) and to combine student-centred strategies with teacher-centred strategies.

In my opinion, their perspectives are significant for understanding the influence of Islam on teaching and learning in Malaysia. The findings may contribute to the educational debate among Malaysian teachers regarding the posited passive nature of Malaysian student (Ahmad et al., 2005; Mustafa, 1998; Zubir, 1998). Participants in this study reported that they have been influenced by their Islamic religion perspectives. Although Islamic perspective encourage students to be active in learning and to have more responsibility, they are also taught to respect and be good to their teachers, as Al-Ghazali (1997a, p. 277) mentioned, students should "respect the rights of their teachers and behave in a civil manner towards them". Al-Ghazali had high expectations for his students in terms of respect and responsibility. He argued that "a person has three fathers: one who begot him, another who fostered him, and third who educated him, and the last is the best of all" (Al-Ghazali, in Shalabi, 1954, p. 175).

Despite these high expectations, Al-Ghazali (1997a) recommended that students should pursue knowledge as Islam places a strong emphasis upon the idea of seeking knowledge and devoting oneself to the process. My analysis of the data suggested that the participants believed in what Al-Ghazali (1997a) mentioned that "knowledge will

not give you of itself unless you give it yourself utterly” (p. 62). This provides the suggestion that a good education is acquired by a motivated and active pursuit of knowledge. The participants seemed to agree that the pursuit of knowledge should be one’s highest priority, as mentioned by Al-Ghazali (1997b). My study suggested that a Muslim’s search for knowledge should dominate all aspects of intellectual, spiritual and social life. The participants’ responses seemed to recognize that knowledge has two expressions: First, theory (knowing or *‘Ilm*); and second, practice (doing or *amal*). The students’ understanding in this study of their roles in learning seemed to agree with Al-Ghazali’s (1997b) clarification that these two dimensions are inseparable.

8.4.3 Islamic perspective in adopting student-centred learning strategies

Despite students’ adoption of memorization as one learning approach, my analysis of the data further suggested that the students often engaged in active learning as another learning strategy. The data suggested that students actively accepted active learning strategies, such as, collaborative learning, independent learning, project-based learning, and classroom presentation. The findings suggested that several of the teacher participants related their student-centred teaching strategies to the Islamic philosophy of education. This was supported by the responses from the education student participants regarding their student-centred learning strategies. They seemed to embrace the Islamic philosophy on the importance of active teaching and learning.

My study suggested that the teachers and the students engaged in collaborative strategies. When asked the reason why they preferred to be involved in collaborative strategies, some of them reported their reasons which they saw as coherent with an Islamic view in its potential for enhancing individual potential and ability, both in knowledge and skills. This supports the aims of Islamic teaching as explained by Al-Attas (1979) and Nasr (1978) that education should aim at the balanced growth of the total personality of individuals through the training of knowledge and skills. Teaching is meant to provide students with skills and knowledge which will enable them to serve the community (Al-Ghazali, 1982). Responses from the students and teachers indicated their understandings that the aim of teaching and learning is to enhance individual knowledge, potential and ability through an integrated and holistic way. For me, this reflects their belief in Islamic education philosophy, which emphasizes the significance of the integrated and balance development of individuals.

Throughout the years, many Islamic scholars have made use of dialogue and discussion, and established them further in their teachings. Al-Abrashi (cited in Abdullah, 1995, p. 213) affirms that:

No one could argue against this method [discussion] as it harnesses the mind, strengthens one's identity as well as provide a good training for expressing one's views and opinions, in instilling one's self-confidence, and enhances one's ability to speak and discuss without texts.

My study documented that discussions were held on the lessons assigned, where the teachers encouraged their students to play an active role in the discussion. My analysis of the data suggested the teachers and students' Islamic beliefs of teaching and learning that emphasize the importance of discussion among teacher and students. According to the Islamic perspective, students, although they are expected to respect the thoughts of their teachers, are often encouraged to engage in lively discussions with them (unlike Confucian learning traditions), and it is not unusual to have students expressing ideas which differ from those of their teachers (Hisham, 1989). Although the students preferred to be involved in active learning strategies such as discussion in class, they were still quiet and careful in stating their ideas, particularly to teachers. I would argue that this measured behaviour may lead to the characterisation of Malaysian students as passive learners, quiet and obedient to authority. However, this may arise because they may not have the skills to disagree politely due to respect for their teachers. This can be observed from the literature (e.g., Ahmad et al., 2005; Ismail & Alexander, 2005; Liu, 1998; Toh, 2003) which characterized Malaysian students with the learning attitudes (passive learners, quiet and obedient to authority). In my opinion, to address this issue, Malaysian educators should consider the nature of student attitudes and behaviours in curriculum development. There should be a curriculum design that supports the development of key learning skills. In this regard, I agree with the Malaysian Government's initiative to introduce soft skill elements for undergraduate students (Chapter 4, section 4.5.3). Undergraduate students' communication skills can be enhanced through the infusion of soft skills in their courses. The skills will assist them in their learning process for effective interaction with teachers and students, as well as with their future employers. In today's changing global environment, employers need graduates to be good communicators and to work in multidisciplinary teams of diverse cultural backgrounds. Many organisations have voiced the need for graduates to have a stronger soft-skill emphasis.

Some students also related their involvement in independent learning and project-based learning to the Islamic perspective. They connected their application of knowledge and skills in completing projects with the purpose of Islamic learning, which is to relate knowledge and skills to real contexts. My analysis of the data suggested that teaching should be linked to concrete situations, and therefore, teaching should emphasize the need for various types of knowledge and skills. Participants' responses supported al-Ghazali's (1997a) perspective of Islamic teaching which said:

Education is not limited to training the mind and filling it with information, but involves all aspects-intellectual, religious, moral and physical of the personality of the learner. It is not enough to impart theoretical learning, that learning must be put into practice. True learning is that which affects behaviour and whereby the learner makes practical use of his knowledge. (Al-Ghazali, 1997a, vol.3, pp. 61-62)

Ibn Al 'Arabi, one of Al-Ghazali's students, criticized teaching methods that only transmit knowledge without providing students with the tools needed to comprehend the text (in Gil'adi, 1992). Ibn Al 'Arabi suggested that simply giving information to students without teaching the students to find it, develop to further, or evaluate it, does not mean that the students comprehend the meaning of the information.

In the Islamic tradition, the method of application was also used in medieval times in which every student was assigned some lessons from the text, which he was supposed to go through at home, and to judge, examine, weigh and criticize almost every word (Mansoor, 1983). The students were also encouraged to find the weakness in the arguments of articles, raise doubts, and question the validity of the arguments in the texts (which seems very similar to the Western concept of critical thinking). This strategy was adopted by Imam Abu Hanifah for his mature students. He adopted the strategy to encourage his students towards independent thinking and not to blindly follow his teaching (Ghazali, 2001). He allowed his students to reject his personal arguments (not including texts from the Qur'an) provided that they must substantiate them with equally valid counter-arguments and evidences from the Holy Qur'an and/or Hadith (the Prophet Sayings).

My study further suggested that some Malaysian teachers related their implementation of student-centred teaching strategies with the purpose of teaching in Islam (Chapter 6,

section 6.4). This reflects their philosophy of Islamic teaching. Their responses supported Yaakub's (2009) opinion that the fundamental objective of education from Islamic perspective is to provide positive guidance to students in order to assist them to grow into good individuals. Others explained the reason they used interactive teaching strategies with an Islamic perspective, which is to provide students with more learning potential and ability through the activities. Their responses supported Yaakub (2009), who mentioned that through education, individuals achieve self-confidence and self-dependence, and also become strong physically and mentally. From a Western view, Halstead (2004) further suggests that the key aim of Islamic education is to guide learners, as learners are not able to gain their ability and potential automatically.

Similarly, the findings from the education student participants also suggested that they related the student-centred learning strategies adopted in the classroom with the Islamic philosophy of education. It was clear from the data that some student participants related their learning goals with Islamic learning philosophy that asked learners to improve and develop themselves through education. Their responses illustrated Yaakub's (2009) point of view that the goal of Islamic education is to build integrated and balance growth through learning, as well as self confidence. Likewise, Mujawer (1976) argued that education in Islam aims to provide the opportunity to discipline and educate the learners, thinking and character.

The findings supported earlier research in other countries such as in West Africa (Lubis et al., 2011), Iran (Salimi & Ghonoodi, 2011; Zarei & Esfandiari, 2008), and Pakistan (Asghar, 2003) that showed teachers and student participants' adoption of student-centred strategies and acknowledged their fit with the Islamic culture. The studies revealed that student-centred strategies such as work groups, problem solving, reflective thinking, discussion, projects, practical and presentation were well adopted in the classroom because of their values and advantages to students. Student-centred learning strategies could enhance students' engagement in classroom discussion and student responsibility for their learning. The teachers also agreed with their new roles to advise and motivate students in their learning, rather than to merely transmit knowledge.

Moreover, a survey of the Islamic educational traditions shows that these student-centred pedagogies are not new as they have been propagated by Muslim scholars and practiced in the Islamic context since the medieval times (Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1993). From the historical records of

teaching methodology employed in Islamic education, strategies consistent with student-centred can be identified. These student-centred strategies which are found to be consistent with the methods of teaching in Islamic education tradition, namely; observation and experimentation, reason and reflection, problem solving, dialogue, discussion, application, independent learning, and project based learning. These methods have been used by several Islamic scholars such as Al Biruni, Imam Abu Hanifah, Imam Malik, Abu Hasan al-Basri, and Wasil Ibn 'Ata' as teaching tools for their students (Abdullah, 1995; Ghazali, 2001; Hisham, 1989; Mansoor, 1983; Nasr, 1978).

Most importantly, a number of teaching and learning strategies that is recognizable as active techniques were used by the Prophet Muhammad (Chapter 3, section 3.3). Of those used by the Prophet, teachers in this study reported engaging in collaborative learning, classroom presentation, project-based learning and independent learning. Muslims are taught to live in accordance with the Holy Qur'an and Hadith (the Prophet Saying) requirements to love Allah (God) and follow his guidance. The Holy Qur'an reports that Allah (God) directed Muslims to follow the example set by the Prophet, citing the principles set forth in the Qur'an and the Hadith as the ultimate guidelines for personal conduct of all believers. Therefore, the teaching methods used by the Prophet have become a significant model for Muslims.

Yet, there are views that are discordant with the findings and interpretations of the current study. Previous research further suggested that the concepts of student-centred and active learning have not been well accepted in some Islamic countries, asserting instead that Muslim teachers and students preferred traditional and didactic approaches (Abdullah, 2007; Ahmad, 1990; Azhar, 2006; Hashim, 2007; Sikand, 2005; Talbani, 1996; Zakaria, 2008; Zia, 2006). The literature revealed that the dominant pedagogical mode in many Islamic institutions today is listening, memorization and regurgitation within a teacher-centred learning environment. A study by Sajjad (n.d.) suggested the reasons why undergraduate students rated the traditional didactic lecture method as the best teaching method. Students in my study commented that through lectures, teachers could better provide all knowledge related to lesson topic and it was time saving method. This reflects the students' learning philosophy that perceived learning as a transmissive process, where teachers play the role of experts, who can deliver knowledge to them. Their beliefs seemed to influence their learning behaviour. This suggests that the context of their learning tends to be more traditional and didactic,

rather than interactive and facilitative; this is a result of their traditional learning beliefs, indicating the importance of the beliefs and also the learning context.

8.4.4 Islamic education philosophy and constructivist learning theory

My analysis of the data suggested that Malaysian teacher educators endeavour to promote both student-centred learning and teacher-centred approaches. Although student-centred learning approaches derived from constructivist learning theories were imported from the West, the student-centred approaches were accepted among Malaysian teacher educators and education students in this study. This seems to suggest that the underlying values of the Western theories are acknowledged among Malaysian as they are consistent with fundamental Malaysian teaching and learning values originating in Islam.

The first principle of Islamic and constructivist learning that seems consistent is participants' understanding about learning as an active process. Participants' responses suggested that students' learning should be active rather than passive. This supports the constructivist learning theory that students' learning is active rather than passive in order to acquire a new knowledge, where students are active in making decisions for their own learning by constructing and creating new knowledge and skills from what they currently possess (Brooks & Brooks, 2002; Griffiths et al., 2007; Marlowe & Page, 1998). Similarly, Islamic values also emphasize the importance of students' active engagement in learning as a process in discovering knowledge. Moreover, the Islamic philosophy represents the high point of critical thinking and integration of various sources and methods in information making (Al-Attas, 1980; Nasr, 1987).

Responses from some student participants in this study supported these Islamic and constructivist values. It was evident from their active engagement in various learning strategies (Chapter 7, section 7.5). Their feedback was in agreement with what Al-Ghazali (1978) mentioned, that learning should be combined with practice. According to al-Ghazali, practice or *amal* (doing) includes not only the manifestation of the five senses, but the practices of the heart as well. This suggests that the student participants valued the Islamic perspective of education that maintains knowledge as the marriage of active virtue and knowledge, which requires both knowledge and practice.

The second notion that emerged from participants' responses and behaviour that supported the consistency between Islamic and constructivist learning theories is in

regard to the emphasis on the social aspect in the construction of knowledge. My analysis of the data suggested that most student participants accepted involvement in collaborative learning provided by their teacher educators. The students and teachers' practices seemed to indicate their belief of the importance of social interaction with others and that meanings and understanding grow out of social encounters. This supports both Islamic and constructivist learning philosophy that emphasizes the importance of socialization in learning process.

Al-Ghazali (1997a) argued that children acquire personality, characteristics and behaviour through living in society and interacting with the environment. He described that the children's families and teachers teach the children language, customs and religious traditions (Al-Ghazali, 1997a). Therefore, the families and the teachers are partners in developing education for the children (Al-Ghazali, 1997a). Similarly, Ibnu Khaldun (cited in Baali, 1988) also stressed the fact that socialization is important for individuals' learning and that the process begins after birth. He defined socialization as a process through which human beings obtain their knowledge and character qualities. Ibnu Khaldun's main ideas of the socialization process described in his book, *Muqaddimah* had been summarized by Baali (1988) as:

Man is a child of the customs and the things he has become used to. He is not the product of his natural disposition and temperament. The conditions to which he has become accustomed, until they have become for him a quality of character and matters of habit and customs have replaced his natural disposition. If one studies this in human beings, one will find much of it, and it will be found to be a correct observation. (p. 39)

The participants' response on the importance of significance experience for creating meaning also supported constructivist learning concepts. The data seemed to support the underlying notion of constructivism that human learning is socially constructed. The participants' acknowledgment of collaborative learning in this study indicated that learning is not just an individual matter, but that it develops within social environment. My analysis of the data suggested their understanding about the importance of student learning through interaction with teachers and other learners. This supports Vygotsky (1978) in his socio-constructivist learning theory which places the social environment at the very centre of learning. Vygotsky (1978) argued that learning is a socially mediated process. He claimed that cognitive development is not a direct result of activity, but it is

indirect; other people must interact with learner through mediating tools such as religion beliefs, activities, computer so that the cognitive development may occur. In this study, participants' utilization of cultural tools in learning, which is Islamic belief, seemed to support Vygotsky's idea. Vygotsky's (1978) theory places a great importance on the culture in which a child develops. He argued that interactions with surrounding culture and social agents, such as parents and more knowledgeable peers, contribute significantly to a child's intellectual development. These interactions allow students to hypothesize, experiment with new ideas and receive feedback (Darling-Hammond, 1997).

My analysis of the data identified that Malaysian teacher and student participants used Islamic cultural beliefs as their tools in understanding and practice their teaching and learning (chapters 6.4 and 7.7). This is consistent with what Vygotsky (1978) claimed, that learning happens in culturally appropriate social situations, that is, relationships among students and those between teachers and students are congruent with student culture. This suggests that as a religion, Islam is also a culture. Abdul Rauf (1983) argued that the Islamic tradition is all-encompassing; it regulates the economic and political practices as well as social aspects of its followers. He claims that:

Islam is at once a religion and a culture. As a religion, it covers three areas: doctrines, rituals and non-ritual activities. As a culture, it includes patterns of living its people may forge and assume in their efforts to meet the challenges of live within the framework of religious teachings. Its religious features are perpetual, but its peoples' cultural patterns may adjust to the challenging needs of time and place. (Abdul Rauf, 1983, p. 272)

In conclusion, data from my study suggested consistency between some precepts found in Islamic learning and Western educational philosophy such as are reflected in Vygotsky's (1978) socio-cultural theory of education, first, learning as an active process, and second, learning as socially mediated process.

Summary of section and conclusion

This section has discussed the influence of the Islamic perspective in Malaysian teaching and learning. Responses from teacher and student participants in this study suggested the effects of Islamic philosophy on their understanding about teaching and learning. The understandings that are based on their Islamic beliefs are also becoming

evident in their teaching and learning behaviour. Therefore, I would argue that the student participants in this study should be differentiated from Asian learners, and should be portrayed as Malaysian Islamic learners. The students have been steeped in an Islamic background, instead of a Confucian one. Most literature about Asian learners refers the learners to a Confucian background (Ballard & Clanchy, 1991; Biggs, 1996; Burns, 1991; Hammond & Gao, 2002; Pratt, 1992; Samuelowicz, 1987), and has not sufficiently considered the other religious or cultural backgrounds of the learners. Muslim learners with Islamic backgrounds are not necessarily compatible with Confucian values in all aspects of teaching and learning.

8.5 The compatibility of Islamic learning philosophy with student-centred learning

The previous sub-sections in this chapter suggested that most Malaysian teacher educator participants and education student participants in this study accepted and acknowledged several elements of student-centred learning as well as teacher-centred learning. My analysis of the data suggested that some of their understanding and experiences with student-centred learning are highly coherent with Islamic philosophy. This reflects their philosophy of teaching and learning from an Islamic perspective. However, several significant questions emerged in my reflection on the data.

1. Are there opportunities to combine Islamic and student-centred philosophies in Malaysian educational practices and curriculum?
2. What are the differences between Islamic philosophy and Western philosophy?

8.5.1 The compatibility of Islamic learning philosophy and student-centred learning

Islamic principles are broad enough to encompass both student-centred learning as well as teacher-centred learning. The concepts of education in Islam which are defined from three interrelated words namely *tarbiyah*, *ta'lim*, and *ta'dib* indicate the importance of knowledge construction, as well as knowledge acquisition. These concepts of education in Islam are compatible with the concept of student-centred learning, which is to facilitate and guide individual learner by providing more experiences, responsibility and autonomy in knowledge construction. The focus of Islamic education towards active learning process seems to corroborate student-centred approaches. Moreover, the expected roles of teachers in Islam (i.e., not merely as experts, but also as facilitators) is

compatible with student-centred learning that encourages teachers to provide guidance and experience to learners in order to gain more independence and confidence to create meaningful and coherent representations of knowledge over time.

I will summarize these elements of Islamic learning philosophy that seem to overlap theoretically with student-centred learning in Table 14 (p. 212).

Table 14: Compatibility of Islamic learning philosophy with student-centred learning

Teaching & learning principles	Islamic learning philosophy	Student-centred learning
Conceptions of education	The concepts of education in Islam, i.e., <i>tarbiyah</i> , <i>ta'lim</i> , and <i>ta'dib</i> are interrelated and support both transmissive teacher-centred and facilitative student-centred approaches. Islamic education is concerned not only with the instruction and training of the mind by transmitting of knowledge (<i>ta'lim</i>), but also with the education and refinement of the whole being of students (<i>tarbiyah and ta'dib</i>).	The concept of student-centred learning is to widen and deepen students' understanding of the world through the ability to link or connect new information and experiences with their existing knowledge base in meaningful ways.
Learning as an active process	From an Islamic perspective, knowledge is the marriage of active virtue and knowledge. Learning should be combined with practice or <i>amal</i> (doing) which includes not only the manifestations of the five senses, but also the practices of the heart as well (Al-Ghazali, 1978). The Islamic philosophy represents the importance of active learning, the high point of critical thinking, and the integration of various sources/methods in information making.	Student-centred learning views students learning as active rather than passively acquire a new knowledge. Students are active in making decision for their own learning by constructing and creating new knowledge and skills from what they are currently possessed.
The roles of teachers	While the term <i>mu'allim</i> (instructor or transmitter of knowledge) seems to support didactic teacher-centred approaches, the terms <i>murabbi</i> (educator), <i>muaddib</i> (a trainer of soul and personality) and <i>mursyid</i> (guide) seem to corroborate the student-centred learning principle that also emphasizes the importance of increasing, guiding and developing individuals' development.	Teachers are responsible to play roles as facilitators and guides in learning in order to encourage students' empowerment and develop a constructive and supportive learning environment.

8.5.2 Differences between Islamic philosophy and Western philosophy

Despite the compatibility of Islamic learning philosophy with student-centred learning, there are fundamental differences between the Western worldview and the Islamic worldview. Western rooted its philosophy in secular worldview, which neglects the spiritual aspects in studying humans (Haque, 2004). Western theories, therefore, were founded merely on the human mind and logic, while the philosophy of Islam was firmly grounded on the human mind and logic guided by the revelation (*wahy*) (Badri, 1979). In virtue of this fact, the nature of Islamic philosophy is established not by merely speculative thinking, but based on God's revelations, the Qur'an and the hadith, which essentially is the unity or perception of all things (*tawhid*). Participants' responses such as "*Islam encourages us to improve our students' potential... the teacher's roles include developing students' abilities... their intellectual, spiritual, and emotional...*" and "*all knowledge comes from God... we're God's workers, we have God's trust to inculcate goodness in people*" reflected their beliefs on the concept of spirituality from the Islamic perspective, that differs and is incompatible with a Western perspective.

From my review of literature and data from participants, I will summarize key principles that contribute to the tension/differences between Islamic philosophy and Western philosophy (Table 15, p. 214). The differences in worldview in conceptualizing human being, knowledge, religion and God have made Islam and Western philosophy fundamentally different. There are several works that compare Western worldviews with Muslim worldviews; however that is not the goal of this study.

Table 15: Differences between Islamic philosophy and Western philosophy

Principles	The Islamic Philosophy	The Western Philosophy
The nature of human/learner	<p>Islamic philosophy believes that human being is made up of a dual nature of spirit and body. The spiritual faculty is known as the <i>ruh</i> (soul), <i>'aql</i> (mind or intellect), <i>qalb</i> (emotion) or <i>nafs</i> (self). The body consists of several faculties corresponding to the physical senses (Hashim, 1994).</p> <p>Learning requires the souls of human to be at a certain level of <i>iman</i> (faith). In the Islamic worldview, knowledge (<i>'Ilm</i>) has been defined as the “arrival of the soul at the meaning of a thing or an object of knowledge” (Al-Attas, 1990, p. 17). Thus, the soul is not merely passive, but also active as <i>wahy</i> (revelation) is received by the soul.</p>	<p>Western philosophy is rooted from a secular worldview. The philosophy is devoid of religious values, or it is filled with values that are incompatible with the beliefs and values of the Islamic faith. Western secular worldview does not/less include soul as a subject matter of studies about human (Al-Attas, 1993).</p> <p>Although there is increasing discussion of spirituality in the Western literature, it is not specifically associated with religion.</p>
The nature of knowledge	<p>Islam believes that the source of learning for human being can be <i>Ilahi</i> (<i>wahy</i>/revelation) or <i>insani</i>, learning that occur from human experience through observations, cognitions, and others (Najati, 2001). However, Islam puts Qur'an or revelation (<i>wahy</i>) as the primary source of knowledge.</p>	<p>Western philosophy neglects revelation (<i>wahy</i>) and views meaning as actively created by human and mind (Badri, 1979).</p>
The aim of education	<p>The primary goal of education involves the whole aspects of learners, including spiritual, intellectual, emotional and physical development. The comprehensive and integrated approach to education in Islam is directed toward the “balanced growth of the total personality... through the training of Man’s spirit, intellect, rational self, feelings and bodily senses... such that faith is infused into the whole of his personality” (Al-Attas, 1979, p. 158).</p>	<p>Western education philosophy neglects the idea of a soul and spiritual nature within individuals, which arose out of a negation of religion or spiritual experience. Instead, within Western philosophy, a fragmented view of man is presented. Learning, therefore, focuses on individual’s self, such as intellectual, physical and emotional domains (Haque, 2004).</p>

8.6 Implications of the research findings

Based on my research findings, the following implications are discussed in relation to developing more effective teaching and learning in Malaysian higher education. My study suggested that the teacher educator participants' understanding about teaching and education student participants' understanding about learning were a reflection of their Islamic educational beliefs and philosophies, as well as being from a Western perspective. While they viewed teaching/learning as teacher-centred or/and student-centred learning (i.e., a Western perspective), the findings were also congruent with Islamic perspectives of teaching and learning. Cultural and religious beliefs play an important role in teacher and student conceptualization of instructional tasks and activities in the classroom (Clark & Peterson, 1986; Dobson & Dobson, 1983; Fenstermacher, 1979; Nespor, 1987; Pajares, 1992). Therefore, in order to enhance teachers' teaching and students' learning, it is important to understand the teachers' and students' beliefs with regard to education.

My study suggested that Malaysian student and teacher educator participants related their roles in teaching and learning processes with Islamic education philosophy. The teachers perceived that they should play their roles as experts in knowledge and be models to their students. At the same time, they also acknowledged their roles as guides and facilitators of learning. Their respective philosophies of teaching and learning, which were strongly found to be based on their beliefs, should be adequate to suggest the Ministry of Higher Education (MOHE) and the university acknowledge the importance of relating any teaching and learning methods to cultural or religion beliefs. Merely developing more teachers training and increasing the utilization of computers in classrooms may not be the answer. My study suggested that the university should develop educational training that can instil the spirit of Islamic philosophy of education that emphasizes the concepts of integration and holism through their teaching. This indicates that the MOHE or the university could make attempts to consider teaching and learning approaches that are related to the Malaysian culture and beliefs, and re-position student-centred learning as congruent with Islamic beliefs. The approaches should be free from secular and westernized elements that are alien to Islam, but replaced with the Islamic worldview of *tawhid*. More emphasis should be given to participants' Islamic beliefs as most participants prefer to adopt teaching and learning approaches that are in agreement with their belief systems.

Since teachers' beliefs about teaching and learning form the core of their behaviour, and behaviour reforms with any change in beliefs, teacher development courses which encourage participants to reflect on their beliefs and make those beliefs explicit will be the most likely to stimulate professional development (Pajares, 1992). Although the university (through its 'Teaching and Learning Development Centre') has developed a number of teaching courses and workshops for its lecturers throughout the years, the courses have not really integrated the teaching courses with teaching beliefs. Most courses related the teaching with pedagogical knowledge (e.g., problem-based learning workshops, teaching for adult learning) and the importance of ICT in learning (such as e-learning or blended learning). Therefore, my study suggested that the university and also the teacher education programme embark on major changes in identifying the sort of professional knowledge, skills and values that are important to ensure teacher educators being in agreement with their beliefs for them to perform well in student-centred teaching and learning contexts.

Another implication for the MOHE and the university is the development of a better definition of student-centred learning that reflects the Islamic values. My study has indicated that some Malaysian teacher educators and students perceived the student-centred learning approaches as useful and effective learning approaches. This exhibits their willingness to shift towards student-centred learning. However, the transformation may differ from one teacher to another teacher, as well as from one student to another. Therefore, in order to maximize the potential benefits of the student-centred approaches in Malaysian teacher education programmes, challenges that have surfaced within the Malaysian unique learning culture such as teacher and student attitudes towards student-centred learning, time constraints and large class size, need to first also be addressed. Due to this factor, the MOHE and the university (or perhaps other university teacher education programmes in Malaysia) should introduce more systematic education training for teacher educators that marries Islamic and contemporary student-centred learning models. This can be implemented by adopting an interpretation of student-centred learning according to Islamic philosophy that takes into account all the students and teachers situations. It is crucial that these issues be undertaken in order to promote effective learning. The findings generated critical insights for administrators of teacher education programmes in Malaysia, as well as to provide them with opportunities to design and develop appropriate models of teaching

and learning for teachers' training which are founded on Islamic principles whilst still being student-centred.

An implication of my study for Malaysian policy makers is to be more aware of the appropriateness of the Western models in the Malaysian education system. Some attempts should be considered to *Malaysianize or Islamize* the Western models instead of the full adoption of them. My study further suggested that in planning activities for teaching and learning approaches, Malaysian teacher educators should better realise that the culture, educational system and the individual students differ from those within Western education systems. The selection of instructional methods for the introduction of student-centred learning concepts which have been imported from the West should meet students' needs and beliefs. The findings suggested that Malaysian educators could encourage students to improve their adoption of student-centred learning by working with their Islamic beliefs. Thus, teacher educators can plan suitable and effective activities to assist students to develop their knowledge, skills and attitudes to be student-directed learners that are consistent with their Islamic learning beliefs. These might include the introduction of more learning discussion methods in line with Islamic principles, such as *halaqah* (semi-circle learning groups) and study circle method, in order to develop learners' personality traits and critical thinking skills. As collaborative learning methods, *halaqah* (semi-circle learning groups) and the study circle can provide guidelines, facilitation and effective leadership. The learning contents of the methods can be diversified and expanded not only to include spiritual imperatives, but also as applications in daily life.

The Islamic education philosophy stresses a balanced, integrated and meaningful life in producing individual lifestyles, and in my view, the emphasis in Western education philosophy is on the learning process at educational institutions in producing knowledgeable and competent students. If we agree with Vygotsky's idea that learning is a social activity which is mediated by the tools of the culture (Chaiklin, 2003; Duffy & Cunningham, 1996; Woolfolk, 2001), especially beliefs and language, then the Islamic approaches are the culture. Therefore, an implication for policy makers here is to investigate an Islamic Malaysian interpretation and develop it for Western ideas to be adapted according to the local conditions. This means that Islamic concepts cannot be artificially separated. In other words, the implication of my research is about adaptation of Western learning philosophies, which is student-centred learning into Islamic Malaysian contexts, in order to fit with the Malaysian aspiration.

I would argue that in the context of Malaysian education with a multi-cultural and multi-religion country, there is a need to view learning through many lenses, and this includes both Eastern and Western and religious perspectives. By analysing and comparing the Eastern and Western education philosophies, I am aware that both Eastern and Western education have several similarities that can be highlighted and adapted in Malaysian context in an attempt to promote contemporary Islamic approaches.

As discussed earlier, a Muslim's religious tradition tends to be essentially his or her ideological framework or world view, that comprising a set of practices, beliefs and values. Nevertheless, Muslims, despite their knowledge of their traditions, they also need contemporary knowledge to survive and thrive in a 'modern' world, which is characterised by the constant construction and exploitation of knowledge, technical and scientific advancements in a dynamically changing world. Muslim perceptions of contemporary or 'modern' knowledge generally depend on how the word 'modern' is understood and interpreted by them. Modernity in the sense of globalisation, progress and development is not necessarily incompatible with Islam (e.g., Ahmad, 1980; Alatas, 2005; Saeed, 1999; Sikand, 2005).

However, modernity's attributes such as achievement goals, supporting economic growth and scientific and technological advances are in alignment with most Islamic traditions. In fact, the acceptance of these kinds of attributes has contributed to an earlier Islamic renaissance between the ninth and fourteenth centuries which was marked by scientific, technological and philosophical achievements (Moten, 2005).

As mentioned earlier, the first category of knowledge in Islam focuses on knowledge that is obtained via revelation. The second category, on the other hand, stems from people's capacity for reason, sense perception and observation that includes 'modern' disciplines such as logic, physics, metaphysics, geometry, arithmetic, medicine, geography, chemistry, biology, music, astronomy and science of civilisation (Alatas, 2006). Most Muslims do not distinguish between 'religious' and 'secular' knowledge, but view them as integrated rather than as mutually exclusive (Douglass & Shaikh, 2004). In the Malaysian context, the prevailing dichotomy of traditional knowledge and 'modern' education only began in the British colonial period, because of the West's different worldview, that is the separation of secular and non secular matters, i.e., not holistic (Chapter 2, section 2.3). Some Muslim writers claim that the dichotomy was

due to the philosophy and policy of the imperial powers and the counter-responses of the Islamic scholars (Syed & Dayang, 2005; Zaman, 2002). In my view, the dichotomy between the religious and the non-religious happens due to the weakening of Muslims' intellectual. Therefore, it was possible for the West to inculcate the projection of its worldview in the Muslim mind and to dominate the Muslim intellectual perspective. Data from my study exemplified that Malaysian teacher participants seek to give their students the best of knowledge by adapting 'modern' philosophies (student-centred learning) through Islamic lens and this indicates that they do not distinguish between religious and secular knowledge, but have the potential to create new conceptions of student-centred learning.

In conclusion, the acceptance of student-centred pedagogies does not mean that only the student-centred approaches should be encouraged and traditional teacher-centred approaches eliminated. Rather, what is recommended is for teachers to enlarge their reservoir of teaching strategies to include more student-centred learning as to enhance their students' understanding of the lessons learnt. At the same time, they should also focus on an educational objective that is consistent with that advocated by Muslim scholars from the past to the present. More teacher-centred strategies such as lectures should also be adopted. Memorization techniques, as a way of encouraging memory, should be adopted as a bridge to better understanding. In fact, some religious subjects such the study of Holy Qur'an or Islamic studies require a careful memorization of the holy texts (Abdullah, 1994; Hashim, 1996). It is important to note that memorization in Islamic theory does not exclude understanding or enlightenment; on the other hand, it is meant to be a precursor to both (Boyle, 2006). My analysis of the data suggested that these teacher-centred strategies are also compatible in assisting students to personally understand what is taught. My study recommended that teachers have to understand all teaching strategies, both student-centred and teacher-centred, specifically those that are relevant with students' beliefs and philosophy.

8.7 Chapter summary and conclusion

This chapter has discussed the perspectives of Malaysian teacher educators of teaching and Malaysian students' of learning. My analysis of the data suggested the teacher educator participants' understanding of teaching as both knowledge transmission (i.e., teachers as experts to transmit knowledge) and knowledge facilitation (i.e., teachers as facilitators in learning process). My study suggested the integration of didactic teaching

approaches with active teaching approaches among Malaysian teacher educator participants. This exemplifies that the teachers perceived teaching as not merely teacher-centred, but also as student-centred, and they perceived both approaches as complimentary and not conflicting. This might be because of change in their teaching beliefs, as teachers' beliefs are precursors to their change in behaviour. The teaching beliefs and practices among teacher educators were likely in a time of transition. The combination of the two teaching approaches was supported by data from the students' learning experiences. There was also a combination of learning approaches among students between traditional teacher-centred and student-centred experienced by the students. While the student participants perceived learning as a knowledge acquisition, they also viewed learning as an active knowledge construction. This reflects their philosophy of learning that student-centred learning and teacher-centred learning approaches will both contribute to effective learning.

My study indicated that Malaysian student and teacher participants preferred teaching/learning approaches that were coherent with their Islamic religion beliefs. Although the Malaysian teacher educators tried hard to accomplish teaching expectations from the Ministry of Higher Education (MOHE), by employing student-centred teaching approaches in the classroom, their Islamic beliefs and philosophies of teaching still influenced them to include the traditional approaches. The Malaysian teacher educators and education students involved in this study connected their religious beliefs to their teaching and learning. This suggests the influence of Islamic philosophy on teaching and learning among Malaysian student and teacher participants. This highlights learning as a process which is mediated within a cultural context.

Some Islamic philosophies are quite influential. Islamic perspectives on the roles of teacher and student encouraged and motivated the teacher and student participants to adopt both teacher-centred and student-centred learning. Considering the Malaysia predominant Islamic religion, and other research findings which suggest the significant influence of culture on learning and teaching approaches (e.g., Biggs, 1996; Holmes, 2000; Kember & Gow, 1990; Liu, 1998; Richardson, 1994; Tweed & Lehman, 2000), it may be reasonable to consider that Malaysian Malay-Islamic teachers and students hold strong Islamic values and adopt culturally familiar teaching and learning approaches. Analysis of the learning process in different cultures highlighted that both a learner's previous experience and the context in which learning takes place significantly conditions the development of their preferred learning approaches (Tan, 2006; Tweed &

Lehman, 2002). Thus, I would conclude that the Malaysian student participants must be considered as Malaysian Muslim learners, and should be differentiated from Asian learners, as the students have been steeped in an Islamic background, rather than, a Confucian one.

In the context of Malaysian Islamic learning, I believe that teachers' beliefs are rooted in Islamic religion beliefs. Thus, to implement educational change, teachers' Islamic beliefs are a central factor to be explored. My study suggested that the Malaysian teacher educator participants held Islamic teaching beliefs that teaching should be active process in order to deliver knowledge and skills to students. The introduction of student-centred learning in Malaysian policies required changes among teachers which this study shows are commensurate with Islamic beliefs. Bailey (1992) and Jackson (1992) have pointed out that change involves many aspects including knowledge, beliefs, attitudes, understanding, self-awareness, and teaching practices. Changes in teachers' beliefs precede changes in their teaching practices (Golombek, 1998). Teachers' beliefs determine their approach of teaching (Hampton, 1994).

The chapter further discussed the compatibility of Islamic philosophy of teaching and learning with student-centred learning. Data from my study suggested that, despite Malaysian teacher and student participants' acknowledgment on teacher-centred approaches, they also valued student-centred learning. The Islamic conceptions of learning as an active process strengthen student-centred learning features in which, by facilitating learning will engage students actively in learning design that are consistent with their needs and abilities. Participants' acceptance of student-centred learning exemplifies that student-centred learning was theoretically compatible with their Islamic religious beliefs.

However, there are also fundamental differences between the Western worldview and the Islamic worldview. The differences in worldview in conceptualizing human beings, knowledge, religion and God have made Islam and Western education fundamentally different. I conclude that education from Islamic worldview is twofold: (1) acquiring intellectual knowledge (through the application of reason and logic), and (2) developing spiritual knowledge (derived from divine revelation and spiritual experience). Muslim teachers, therefore, are responsible to develop students intellectually, to provide nourishment for their souls and mould their personality as a way to stimulate a more elevated moral and spiritual consciousness. They (also Muslim learners) should identify

and clarify their worldview on knowledge in general and develop a deeper insight into the nature and purpose of knowledge. This would entail clarifying Muslim core beliefs and understanding the distinction between secularism and Islam. They need to redefine teaching and learning models from Islamic perspective using the *Tawhidic* paradigm, i.e., from a Muslim religious perspective.

An implication from my study for Malaysian policy makers, MOHE, university and teacher education programme is to be more aware of the appropriateness of the Western models, such as student-centred learning in Malaysian education system. My study suggested that the Ministry of Higher Education (MOHE) and the university consider teaching and learning approaches that are related to the Malaysian culture and beliefs. The MOHE or university should acknowledge the importance of relating any teaching and learning methods with cultural or religion beliefs, and reposition student-centred learning as congruent with Islamic beliefs. The development of educational policies should instil the spirit of Islamic philosophy of education that emphasizes the concepts of integration and holism through their teaching. The university and also the teacher education programme should embark on major changes in identifying the sort of professional knowledge, skills and values that could support teachers to employ teaching and learning models which are consistent with their Islamic beliefs.

CHAPTER 9

CONCLUSIONS AND CONTRIBUTIONS

9.1 Introduction

This chapter presents a summary of the aims of the research study, its methodology and the key findings under each of the three research questions. Following this, the significance of this research to teaching and learning practices in Malaysia is discussed. This chapter concludes with a discussion on the limitations of the study and suggestions for future research.

9.2 Aims and the research methodology

My study has been conducted to explore teaching and learning experiences among Malaysian teacher educators and education students in a Malaysian university teacher education programme. The focus of the study is to obtain the understanding of the participants of their perception of teaching/learning in general, which also includes their worldviews on teaching/learning approaches.

As presented in Chapter 5, the research design for my study is a qualitative case study of Malaysian teacher educators and education students in a teacher education programme. There were seven teacher educators and 12 education students involved in this study. The teacher educators were from different teaching experience backgrounds. The students were final year education students, between 23 and 24 years of age, of whom seven were male and five were female. Data for my study were collected through several methods: 1) Individual interviews; 2) Focus group interviews; 3) Classroom observations; 4) Stimulated recall interviews; and 5) Document analysis. In this study, I employed M & H's Interaction Model for Qualitative Data Analysis (Miles & Huberman, 1994) to analyse the data within each data source (individual interviews, focus group interviews, observation and stimulated recall, and documents), and across the data sources.

9.3 Summary of findings

In this section, a summary of the findings based on the three research questions of this study is presented.

1. How do Malaysian teacher educators understand teaching in a university teacher education programme?
2. How do Malaysian education students understand learning in a university teacher education programme?
3. What are the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices?

How do Malaysian teacher educators understand teaching in a university teacher education programme?

My analysis of the data has suggested that the Malaysian teacher educator participants perceived teaching as both transmissive and facilitative process. The participants' understanding that teaching is a transmissive process has led them to perceive themselves as having pedagogical authority over students, which means they have more knowledge of, and more informed perspectives on, education. The findings exemplified the participants' perception regarding the importance of directed flow of information from teacher, as sage, to student, as receptacle. The Malaysian education system, which has a lengthy history in traditional teaching methods (Ahmad, 1998; Hashim, 1997; Ismail & Alexander, 2005; Mustapha, 1998; Zakaria, 2000), seemed to influence Malaysian teachers to adopt teacher-centred approaches and regard their students as passive learners who will wait for knowledge to be transmitted.

Despite this conclusion, my study also suggested Malaysian teacher educators' beliefs about teaching as a facilitative process. Their understanding led them to view that teaching also requires teachers to facilitate student learning by encouraging students to be active in their own construction of meaning. My analysis of the data indicated that Malaysian teacher educators perceived that teachers are not exclusive interpreters and constructors of knowledge, but rather, that teaching and learning practices are shared between teachers and students. This reflects their belief that an effective teaching process should involve teachers and students exchanging and sharing their ideas, thoughts and perspectives. This transition from the historic pedagogy suggests that Malaysian teacher educators are enacting the Malaysian government's initiatives to shift the educational system towards a student-centred approach.

My study suggested that the teacher educators' educational philosophies and techniques were influenced by Islamic principals. This suggests that the participants' understanding

about teacher-centred and student-centred teaching was a reflection of their Islamic educational beliefs, experiences and philosophies. This indicates that the underlying values of student-centred learning appear to have similarities to the Malaysian Islamic context. Several Islamic education philosophies are compatible to student-centred learning, such as: (1) the concepts of education in Islam (i.e., *tarbiyah and ta'dib*) to guide, educate and refine the students' learning development, (2) the active learning process (learning by doing), and (3) the roles of teachers (as facilitators and guides).

This suggests that Islamic educational philosophies and techniques could be used more explicitly to promote philosophy, educational goals and techniques that are found in both the Islamic and student centred traditions. My study suggested that Islamic beliefs influenced the teacher educator participants' beliefs that a teacher should be a guide, a model and an example, not only a purveyor or medium of knowledge. According to an Islamic teaching philosophy, a teacher's work is not limited to the teaching of a particular subject; but rather, it should encompass all aspects of the personality and life of the pupil (al-Ghazali, 1997a).

How do Malaysian education students understand learning in a university teacher education programme?

My analysis of the data showed that Malaysian education student participants perceived learning not only as a knowledge acquisition, but also as a knowledge construction process. Responses from student participants suggested that both teacher-centred and student-centred learning could lead to effective learning. While they regarded their teachers as experts to deliver knowledge to them, they also actively constructed knowledge for themselves. The data suggested students' acceptance of their roles as both passive and active learners. While the students reported their viewpoint that the process of knowledge acquisition, such as direct lecturing and notes taking, would assist them to perform better in examinations that are content (fact) driven, my analysis of the data also indicated their understanding that students should be active learners by actively participating in classroom learning activities and relating new knowledge to their previous experiences.

My analysis of the data suggested students' approaches to learning, as knowledge acquisition, was influenced by their prior teacher-centred learning experiences in their previous primary and secondary education. However, their learning perspective had

changed from being knowledge acquisition to learning that was build upon knowledge construction after they had more exposure to active learning environment at university that was different from the secondary school environment. My study indicated their understanding that learning should be coupled with active practices, rather than merely as passive reception. As Malaysian students who have been accustomed to passive learning since their school education levels, their application of student-centred learning (as a complement to teacher-centred approaches) suggests that they were in a time of transition in learning, from merely traditional passive learning to active learning.

The participants' understanding of learning also includes active knowledge construction which encourages them to combine their interactive learning strategies with traditional learning modes, i.e., memorization in learning. However, memorization for the Malaysian education students is perceived differently by them than rote learning. They used memorization in their learning for two reasons, first, to understand learning materials provided by the teachers, and second, as a way to effectively answer questions in examinations. This exemplifies that the memorization strategy of Malaysian Muslim learners is a part of a development of understanding or a method toward understanding the content. This proposes a cultural influence. The findings were consistent with Islamic education traditions where Muslim learners used memorization as a methodology for understanding materials. In contrast to the common perception of Western educators that memorization is synonymous with rote learning or to a surface approach to learning; my research suggested that understanding was often the goal of the Malaysian Muslim students and that memorization was a valid strategy. My study adds knowledge to the memorization debate by documenting the practices of Malaysian Muslim students.

My study suggested the centrality of Islamic beliefs for influencing Malaysian Muslim learners. They related their perspective about learning and their roles as students with the purpose of Islamic learning, i.e., to enhance individuals' potential and ability, both in knowledge and skills. My analysis of the data suggested that they related their active participation in learning with Islamic learning principles that ask them to be active, needing to seek own knowledge and construct own meaning. This is not surprising as they learn in an Islamic context. As Malaysian Muslim students, they have been exposed to an Islamic perspective (through Islamic education subject) since primary school. Therefore, the student participants in this study should be differentiated from Asian learners (most literature assumed Asian learners to be Chinese learners with

Confucian values), and should be portrayed as Malaysian Islamic students. The students have been steeped in an Islamic background, rather than a Confucian one.

What are the relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices?

The findings from my study identified relationships between teacher educators and education students' perceptions of teaching/learning and their actual teaching/learning practices. The adoption of a combination of teacher-centred and student-centred approaches suggests that teachers' teaching practices and students' learning behaviours had been influenced by their teaching and learning beliefs, and the understanding supported Pajares (1992) who claimed the existence of a strong relationship between educational beliefs and classroom practices.

My research showed that the teachers' acceptance of active teaching approaches had led them to adopt the strategies in their teaching practices. My analysis of the data identified several challenges (such as time constraints and student resistance) faced by Malaysian teachers when attempting to implement active teaching approaches. Yet they were still motivated to employ student-centred learning approaches in the classroom, as a complement to their transmissive approaches. This illustrates their acknowledgement of student-centred teaching, which emphasizes teachers as facilitators in the development of skills, the outcomes of learning and the application of knowledge in their learners.

Likewise, the students in my study also viewed learning as both a knowledge acquisition and a knowledge construction process. The findings showed that what students believe influenced what they did in the process of their actual learning. Their perceptions led them to sometimes being passive in learning by listening to direct lectures and memorizing lecture notes; and also to be active learners by participating in classroom activities. While they mentioned their preferences for traditional direct lecturing, for reasons such as providing more explanation for better understanding and that they could give more concentration and attention during lectures; my analysis of the data also showed the participants' acceptance of active learning strategies, such as engaging in collaborative learning, project-based learning, classroom presentation and independent learning. The findings exemplified the fact that the students translated their

understanding about learning to their actual learning practices by adopting both teacher-centred and student-centred approaches.

My analysis further illustrated that the teacher and student participants' actual teaching/learning practices were also greatly influenced by their Islamic beliefs. The influences of beliefs about teacher-centred and student-centred approaches were considered alongside the teachers and students' Islamic beliefs about their roles and aims of education. They connected their Islamic beliefs in constructing teaching and learning philosophy. These beliefs had been found to be the determining factor in the teachers and students' decisions about classroom teaching and learning approaches. The emergence of Islamic beliefs in my study suggested the relationship between teaching/learning beliefs and teaching/learning practices with cultural influences. This suggests that the relationship between teachers' beliefs and their actual practices is complex and context dependent and, cannot be examined out of context.

Teachers' beliefs about teaching as a transmissive and facilitative process were influenced by their traditional Islamic beliefs. These beliefs had brought them to practice both traditional and active teaching processes. Teachers' beliefs of teaching as a transmissive mode were based on their Islamic tradition; these emphasize the importance of knowledge delivering and the role of teachers as experts in knowledge. The teachers' beliefs about teaching as a facilitative mode further supported Islamic beliefs that teaching should be linked to concrete situations, and therefore, teaching should emphasize the need for various types of knowledge and skills. Their adoption of active classroom strategies reflected their beliefs, i.e., the training of a person as a whole being should necessarily be aimed at his/her spiritual, intellectual, rational and physical aspects. This is in accordance with Islamic teaching philosophy. My study suggested that the teacher participants translated their understanding and beliefs into their actual teaching practices, by sometimes traditionally providing information and also by facilitating and providing guidance to students.

Similarly, my study also illustrated that the students' Islamic beliefs also influenced their learning approaches. They accepted to be both passive knowledge receivers and active knowledge constructors, which results from their Islamic perspectives on learners' roles. According to the Islamic perspective, learning involves both the training of mind by filling it with information, as well as putting into practice which affects behaviour (Al-Ghazali, 1997a). In my study, the students connected their application of

knowledge and skills in completing projects with the purpose of Islamic learning, which is to relate knowledge and skills with real contexts. This supports the Islamic beliefs that learning should be related to the students' potential and ability, both in knowledge and skills.

9.4 Significance of the study

My study makes a contribution to the development of educational theories about teaching and learning, particularly in Malaysian tertiary teaching research. First, my study introduces a fresh perspective (the compatibility of Islamic learning philosophy and student-centred learning) and contributes to the advancement and growth of Islamic knowledge that is rooted in the Islamic paradigm and the essence of *tawhid* (the Oneness of God). My study sheds light on related issues of teaching and learning in the Malaysian context from Islamic perspective. The study has the potential to increase Islamic knowledge as Malaysian Islamic communities are deprived of knowledge that is genuinely Islamic and at the same time, contemporary. This topic opens new avenues for Islamic researchers and scholars to look into teaching and learning in more depth and to relate Islamic philosophical concepts to teaching and learning approaches.

Second, my study offers teaching and learning perspectives from a different socio-cultural context. Thus, my research distinguishes teaching and learning theories for Malaysian Muslim learners and teachers from much of the existing 'Asian' literature (mainly concerned with Chinese learners). There is a need to critically review teaching and learning theories from Malaysian Muslim perspectives in order to address the differences and similarities between Muslims and other Western or Asian learner or teacher perspectives. The context in which individuals learn, work and live has an important influence on creating and modifying an individual's expectations, management strategies and styles of teaching and learning. In the Malaysian context, the Islamic religion, ideology and social patterns have to be considered for a successful understanding of different cultural configurations and raise the profile of an Islamic learner.

Third, my study has added a useful and different perspective of Asian teachers and students' teaching and learning approaches. The findings suggested evidence that Malaysian Muslim students, even though they preferred to adopt traditional learning strategies, could be encouraged to be active learners when provided with the ample

opportunity to actively engage in learning environment that adopts elements of active learning. My study demonstrated that student-centred learning models maybe successfully adopted in the Malaysian context when the appropriate environment is developed and are commensurate with Islamic beliefs. The findings may change the negative perceptions of Malaysian students, who are stereotyped as passive learners. Malaysian teachers and students hope for a transformation in the education system that can utilize learning theories that suit with their cultural and Islamic belief context. Although there may be criticism of using a Western educational concept such as constructivism in an Islamic context, the influences of Islamic education can be the bridge to draw the two traditions (Islamic and Western) together and to actually promote similar educational approaches and goals.

9.5 Limitations of the study

1. My case study research focuses on the experiences of Malaysian university teacher educators and education students to investigate teaching and learning approaches. Unlike most of the research to date, it sets out to explore what is experienced and perceived by teacher educators and education students. Case study data is time-consuming to collect, and even more time-consuming to analyse. Therefore, my case study was conducted at one teacher education programme in a Malaysian university, even though a similar environment exists at other Malaysian universities and institutions for training Malaysian secondary school teachers.
2. The learning context of the student participants in my study is reconstructed from their own accounts from individual interviews and focus group interviews. Therefore, the understanding of the students' perspective may be disadvantaged by the absence of observing their daily study life (Taylor & Bogdan, 1998). The student interviewees' verbal reports may be biased by their psychological or emotional conditions, or by memory failure. They may have told me something that they thought I wanted to hear. The biases may lead to incomplete reports, or to those possibly lacking in truth (Marshall & Rossman, 2006).
3. My study was conducted within a limited period of time, as required by the doctoral programme. My interviews with students (individuals and focus groups) and with teacher educators (individuals and stimulated recall interviews)

were a time-consuming activity, which discouraged prospective participants from participating, and thus caused difficulties in finding subjects. This in turn may have produced bias in the participants (Brenner, Brown & Canter, 1985).

4. The teaching contexts of the teacher educators' participants are reconstructed merely by observing one full period for each class of the teacher educators. Therefore, the understanding of teachers' teaching may be disadvantaged by observing an inadequate number of classroom periods. During classroom observations and interviews, primary attention was given to discovering why teachers teach in the way they do, and how they teach in practice; rather than what their teaching conceptions actually are.

9.6 Recommendations for further research

My thesis has reported on the particular issues regarding Malaysian teacher educators and education students' perspectives and experiences of teaching and learning in a Malaysian teacher education programme. Many further questions have arisen in my journey of this study. In this section, as the author, I make some recommendations for further research regarding the issues pertaining to teaching and learning approaches. In light of its limitations, my study provides the following proposal for future studies to look into:

1. The influence of Islamic philosophy on student-centred learning approaches of teacher educators and education students in several Islamic countries.
2. The role of Muslim teacher educators in strengthening Islamic teaching philosophy and integrating student-centred approaches into Malaysian education practices.
3. The development of a framework that focuses on helping teachers and students to adapt/develop the most useful and appropriate approaches which combine both Islamic principles and contemporary learning theory.
4. A comparative study of the relationships of religion beliefs with teaching and learning approaches of Muslim and non-Muslim teacher educators and education students.

5. A comparative study of the role of cultural belief in establishing student-centred learning approaches among education students in other university teacher education programmes.
6. The influence of culture and belief on learning theory, other than in socio-constructivist learning theories, regarding student-centred learning approaches among education students.

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GLOSSARY

‘Abd	Servantship
‘Amal	Doing
‘Aql	Mind or intellect
Al-tajdid al Islami	Islamic revivalism
Da’wah	Islamic propagation
Fard ‘ain	Refers to doctrinal and ritual obligations which must be testified to and practiced by every adult Muslim male and female in order to legitimize his/her Islamic faith
Fard kifayah	Refers to collective obligations that must be practiced by at least one unit of a group of believers.
Hadith	Tradition of the Prophet
Halaqah	Semi-circle
Kepala tala’ah	Perusal heads/tutors
Khalifah	Vicegerent
Kitab	Religious books
Madrasah	Religious/Arabic school
Mu’allim	An instructor or a transmitter of knowledge
Muaddib	A trainer of soul and personality
Murabbi	An educator
Ulama	Muslim scholars trained in Islam and Islamic law
Nafs	Self
Pondok	Institution consists of several small huts surrounding the teacher’s house
Alim	Proper action
Qalb	Emotion
Qur’an	The Muslim Holy book revealed to Prophet Muhammad
Ruh	Soul
Iman, nur and huda	Spirituality
Ta’dib	To discipline and trains
Ta’lim	To know, be informed, perceive
Tadah kitab or buka kitab	Opening the book
Tarbiyah	To grow, increase

Tawhid

Belief in the Oneness of Allah

Tok guru

The master

Haqq

Truth

Umumi

Unstructured

Hikmah

Wisdom

APPENDICES

Appendix 1(a) Participant Information Sheet (Teacher Educators)



Date Information Sheet Produced:

1st October 2009

Project Title

Exploring teaching and learning: A case study of a Malaysian university's teacher education programme

An Invitation

Hello, my name is Tengku Sarina Aini Tengku Kasim and I am currently studying for my doctorate programme at Auckland University of Technology (AUT). My research is about exploring teaching and learning: A case study of a Malaysian university's teacher education programme. As you are involved in teacher education programme within your university, I would like to invite you to participate in the research project. Your participation in this project is entirely voluntary. You may choose to withdraw at any time and this will not affect you in any way.

What is the purpose of this research?

The purpose of this study is to investigate Malaysian teacher educators and Malaysian education students' experiences regarding the teaching and learning approaches in a teacher preparation programme. This project will lead to the completion of my doctoral study at AUT. I also plan to employ the data for conference proceedings and other refereed publications.

How was I chosen for this invitation?

I am seeking to enlist 4-6 teacher educators who are teaching education students in semester 2, 2009/2010 in your university. Your colleagues, i.e. other teacher educators, had suggested that I talk to you about this project.

What will happen in this research?

If you agree to participate in this project, I will invite you to participate in an individual interview. The interview should not exceed 60 minutes and will be audio-recorded. It will be arranged at your preferred time in a place that is convenient to you and will be conducted either in Bahasa Malaysia or English.

Then, I will observe your class. During the class observation, I may ask your permission to collect, and analyse a copy of course documents (lesson plan, course outlines, etc.) that had helped you teaching your class. Later, in order to get further interpretations about what is really happening in classroom, I will conduct a stimulated recall interview. This stimulated recall interview should not exceed 60 minutes and will be audio-recorded.

What are the discomforts and risks?

There will be no intended discomforts or risks in this research. However, you may reluctant sharing your experience on teaching and learning approaches with me.

How will these discomforts and risks be alleviated?

The individual interviews and classroom observation will be conducted in ways that you are comfortable with. At any time during the interviews and observation you may choose not to be observed or answer any interview questions. Additionally, after our individual interview, I will return your transcript to you so you may clarify, edit or omit your statements before I use the data in this project. You may also withdraw yourself or any information that you have provided for this project at any time before the data is analysed. If you withdraw from the project, all relevant information including notes, audio-recording, and transcripts, or parts thereof, will be destroyed.

What are the benefits?

You will be assisting me in completing my PhD thesis. I will learn much more about the teaching and learning approaches in teacher education programme. You will also be contributing to information that could provide insights to teaching and learning approaches in Malaysian teacher education programme. I hope that you will benefit from the opportunities to reflect on and sharing your experience on teaching and learning approaches.

How will my privacy be protected?

Your anonymity, privacy and confidentiality will be protected in this research. I will not use any real names in my research report and delete any identifiable personal information to ensure your privacy and confidentiality. The only individual who will access my observation notes and audio recordings will be myself, and potentially someone who is asked to transcribe the data. My supervisors may see the transcripts of my observation notes and interviews, but will not know your identity. All data and consent forms will be stored separately in locked cabinets in the postgraduate programme administrator's office at the School of Education, AUT for six years. All original data will be destroyed after six years.

What are the costs of participating in this research?

There will be no financial costs for you in this project. However, I understand that you will give up some of your precious time in order to contribute to this project. There are no other anticipated costs or inconveniences related to this project.

What opportunity do I have to consider this invitation?

Your participation is voluntary. Please take one week to consider your possible involvement as a research participant. If you are willing to participate in this research or have questions about it, please email me at tgsarina@um.edu.my or call Malaysian mobile number XXXXX by dd/mm/yyyy.

How do I agree to participate in this research?

If you agree to participate in this research, please complete, sign and return your consent form to me any time before dd/mm/yyyy.

Will I receive feedback on the results of this research?

If you wish, I will send you an electronic version of the summary of my research findings at an email address you provide. If you are interested, I will also inform you any imminent publications concerning the findings of this project.

What do I do if I have concerns about this research?

Any concerns you have regarding this research should be notified to my research supervisors, Dr Dale Furbish and/or Dr Philippa Gerbic and/or Dr Andy Begg by sending an email to them at dale.furbish@aut.ac.nz, philippa.gerbic@aut.ac.nz and andy.begg@aut.ac.nz. Concerns regarding the conduct of this research, should be notified to the Executive Secretary, AUTEK, Madeline Banda by sending an email to her at madeline.banda@aut.ac.nz, or call her at 0064 921 9999 ext 8044.

Whom do I contact for further information about this research?

Researcher Contact Details:

Tengku Sarina Aini Tengku Kasim

(email: tgsarina@um.edu.my or mobile phone: XXX-XXXXXXX)

Project Supervisor Contact Details:

Dr Dale Furbish (email: dale.furbish@aut.ac.nz or telephone: 0064-9-9219999 ext XXX)

Dr Philippa Gerbic (email: philippa.gerbic@aut.ac.nz or telephone: 0064-9-9219999 ext XXX)

Dr Andy Begg (email: andy.begg@aut.ac.nz or telephone: 0064-9-9219999 ext XXX)

Approved by the Auckland University of Technology Ethics Committee on 30th November 2009, AUTEK Reference number 09/254

Appendix 1(b) Participant Information Sheet (Students)



Date Information Sheet Produced:

1st October 2009

Project Title

Exploring teaching and learning: A case study of a Malaysian university's teacher education programme

An Invitation

Hello, my name is Tengku Sarina Aini Tengku Kasim and I am currently studying for my doctorate programme at Auckland University of Technology (AUT). My research is about exploring teaching and learning: A case study of a Malaysian university's teacher education programme. As you are involved in teacher education programme within your university, I would like to invite you to participate in the research project. Your participation in this project is entirely voluntary. You may choose to withdraw at any time and this will not affect you in any way.

What is the purpose of this research?

The purpose of this study is to investigate Malaysian teacher educators and Malaysian education students' experiences regarding the teaching and learning approaches in a teacher preparation programme. This project will lead to the completion of my doctoral study at AUT. I also plan to employ the data for conference proceedings and other refereed publications.

How was I chosen for this invitation?

I am seeking to enlist 10-20 education students who are enrolling in semester 2, 2009/2010 in your university. Your teacher educators have suggested that I talk to you about this project.

What will happen in this research?

If you agree to participate in this project, I will invite you to participate in an individual interview and/or focus group interview. The individual interview should not exceed 60 minutes and will be audio-recorded, meanwhile for focus group interview should not exceed 90 minutes and will be audio-recorded. It will be arranged at your preferred time in a place that is convenient to you and will be conducted either in Bahasa Malaysia or English.

What are the discomforts and risks?

There will be no intended discomforts or risks in this research. However, you may reluctant sharing your experience on teaching and learning approaches with me.

How will these discomforts and risks be alleviated?

The individual and focus group interviews will be conducted in ways that you are comfortable with. At any time during the interviews you may choose not to be answered any interview questions. Additionally, after our individual interview, I will return your transcript to you so you may clarify, edit or omit your statements before I use the data in this project. You may also withdraw yourself or any information that you have provided for this project at any time before the data is analysed. If you withdraw from the project, all relevant information including notes, audio-recording, and transcripts, or parts thereof, will be destroyed.

What are the benefits?

You will be assisting me in completing my PhD thesis. I will learn much more about the teaching and learning approaches in teacher education programme. You will also be contributing to information that could provide insights to teaching and learning approaches in Malaysian teacher education programme. I hope that you will benefit

from the opportunities to reflect on and sharing your experience on teaching and learning approaches.

How will my privacy be protected?

Your anonymity, privacy and confidentiality will be protected in this research. I will not use any real names in my research report and delete any identifiable personal information to ensure your privacy and confidentiality. The only individual who will access my observation notes and audio recordings will be myself, and potentially someone who is asked to transcribe the data. My supervisors may see the transcripts of my observation notes and interviews, but will not know your identity. All data and consent forms will be stored separately in locked cabinets in the postgraduate programme administrator's office at the School of Education, AUT for six years. All original data will be destroyed after six years.

What are the costs of participating in this research?

There will be no financial costs for you in this project. However, I understand that you will give up some of your precious time in order to contribute to this project. There are no other anticipated costs or inconveniences related to this project.

What opportunity do I have to consider this invitation?

Your participation is voluntary. Please take one week to consider your possible involvement as a research participant. If you are willing to participate in this research or have questions about it, please email me at tgsarina@um.edu.my or call Malaysian mobile number XXX-XXXXXXX by dd/mm/yyyy.

How do I agree to participate in this research?

If you agree to participate in this research, please complete, sign and return your consent form to me any time before dd/mm/yyyy.

Will I receive feedback on the results of this research?

If you wish, I will send you an electronic version of the summary of my research findings at an email address you provide. If you are interested, I will also inform you any imminent publications concerning the findings of this project.

What do I do if I have concerns about this research?

Any concerns you have regarding this research should be notified to my research supervisors, Dr Dale Furbish and/or Dr Philippa Gerbic and/or Dr Andy Begg by sending an email to them at dale.furbish@aut.ac.nz, philippa.gerbic@aut.ac.nz and andy.begg@aut.ac.nz. Concerns regarding the conduct of this research, should be notified to the Executive Secretary, AUTEK, Madeline Banda by sending an email to her at madeline.banda@aut.ac.nz, or call her at 0064 921 9999 ext 8044.

Whom do I contact for further information about this research?

Researcher Contact Details:

Tengku Sarina Aini Tengku Kasim
(email: tgsarina@um.edu.my or mobile phone: XXX-XXXXXXX)

Project Supervisor Contact Details:

Dr Dale Furbish (email: dale.furbish@aut.ac.nz or telephone: 0064-9-9219999 extXXX)

Dr Philippa Gerbic (email: philippa.gerbic@aut.ac.nz or telephone: 0064-9-9219999 extXXX)

Dr Andy Begg (email: andy.begg@aut.ac.nz or telephone: 0064-9-9219999 extXXX)

Approved by the Auckland University of Technology Ethics Committee on on 30th November 2009, AUTEK Reference number 09/254

Appendix 2(a) Consent form (Teacher Educators)

Project title: Exploring teaching and learning: A case study of a Malaysian university's teacher education programme

Project Supervisor: Dr Dale Furbish

Researcher: Tengku Sarina Aini Tengku Kasim

Please tick whichever applicable:

- I have read and understood the information provided about this research project in the Information Sheet dated dd mmmm yyyy.
- I have had an opportunity to ask questions and to have them answered.
- I agree to participate in individual interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I agree to participate in focus group interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I agree to participate in classroom observation and understand that notes will be taken during the observations and that they will also be audio-taped and transcribed.
- I agree to participate in stimulated recall interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw from individual interview or stimulated recall interview, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- If I withdraw from focus group interview, I understand that while it may not be possible to destroy all the focus group discussion of which I was part, the relevant

information about myself including notes, audio recording and transcripts, or parts thereof, will not be used.

If I withdraw from observation, I understand that while it may not be possible to destroy all the observation notes of which I was part, the relevant information about myself including notes and transcripts, or parts thereof, will not be used.

I wish to receive a copy of the report from the research (please tick one):

Yes No

Participant's signature:

.....

Participant's name:

.....

Participant's contact details (if appropriate):

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 30th November 2009, AUTEK Reference number 09/254

Note: The Participant should retain a copy of this form

Appendix 2(b) Consent form (Student)

Project title: Exploring teaching and learning: A case study of a Malaysian university's teacher education programme

Project Supervisor: Dr Dale Furbish

Researcher: Tengku Sarina Aini Tengku Kasim

Please tick whichever applicable:

- I have read and understood the information provided about this research project in the Information Sheet dated dd mmmm yyyy.
- I have had an opportunity to ask questions and to have them answered.
- I agree to participate in individual interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I agree to participate in focus group interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I agree to participate in classroom observation and understand that notes will be taken during the observations and that they will also be audio-taped and transcribed.
- I agree to participate in stimulated recall interview and understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw from individual interview or stimulated recall interview, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- If I withdraw from focus group interview, I understand that while it may not be possible to destroy all the focus group discussion of which I was part, the relevant

information about myself including notes, audio recording and transcripts, or parts thereof, will not be used.

If I withdraw from observation, I understand that while it may not be possible to destroy all the observation notes of which I was part, the relevant information about myself including notes and transcripts, or parts thereof, will not be used.

I wish to receive a copy of the report from the research (please tick one):

Yes No

Participant's signature:

.....

Participant's name:

.....

Participant's contact details (if appropriate):

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 30th November 2009, AUTECH Reference number 09/254

Note: The Participant should retain a copy of this form

Appendix 3(a) Indicative interview questions for individual interviews

(Teacher Educators)

An individual interview with teacher educators is designed to allow the researcher to get to know and understand the following aspect of teacher educators' experiences. However, the wording and sequence of the questions will be piloted. It is anticipated that specific interview questions being asked will be based on interviewee's answer to the relative general questions. The nature of the questions will have an open character and the emphasis on accounts of 'lived experience' would be maintained.

1. Can you tell me about your teaching/course/class?
2. What do you teach in the teacher education programme?
3. What are the objectives of your teaching/ course /class/ teacher education programme?
4. What are the contents of the course?
5. Can you tell me about your teaching approaches?
6. What teaching approaches do you employ in your teaching practices? Can you tell me why?
7. How do you interact with your students in the class? Can you tell me why?
8. What do you think will facilitate your interaction with your students? Can you tell me how? Can you tell me why?
9. Can you tell me about the assessments of the course?
10. What kinds of assessments are conducted for the course?
11. How do you design the assessment?
12. Why do you choose or do not choose particular assessments?

Appendix 3(b) Indicative interview questions for individual interviews (Students)

An individual interview with education students is designed to allow the researcher to get to know and understand the following aspect of education students' experiences. However, the wording and sequence of the questions will be piloted. It is anticipated that specific interview questions being asked will be based on interviewee's answer to the relative general questions. The nature of the questions will have an open character and the emphasis on accounts of 'lived experience' would be maintained.

1. Can you tell me about your courses/classes?
2. Can you tell me what the objectives of learning in teacher education programme are?
3. Can you tell me which courses contain the models of teaching and learning approaches?
4. How stimulating do you find the courses? Can you tell me why?
5. Can you tell me about your learning approaches?
6. How do you best learn? Can you tell me why?
7. What sort of classroom experiences help you best learn? Can you tell me why?
8. What learning approaches do you adopt in your learning process? Can you tell me why?
9. Can you tell me things that facilitate your learning in the class?
10. Can you tell me things that hinder your learning in the class?
11. Can you tell me about teaching approaches?
12. What teaching methods are most effective for you? Can you tell me why?
13. What do you understand about teaching approaches? Can you tell me why?

Appendix 4 Indicative interview questions for focus group interview

(Education Students)

Three focus group interviews will be conducted for education students as to respect the culture and practices observed in the university teacher education programme as well as to protect the interest of the research participants. During each interview, I will present a summary of my research findings relating to teaching and learning approaches in teacher education programme.

Later I will ask the participants, as a group, how do they think and feel about these teaching and learning approaches. The real indicative questions may be changed in terms of sequence and wording based on the group dynamic and the emerging themes during the interviews.

Indicative questions to focus groups:

1. What do you think about the learning experiences? (learning experiences gathered from individual interviews)
2. What do you feel about the learning approaches? (learning approaches gathered from individual interviews)
3. Do you share these views? (Views regarding learning experiences and learning approaches discussed earlier) Why yes? Why not?
4. Do you think there is anything else that I have not discussed?

Appendix 5 Classroom Observation sheet

Aspects of teaching			Comments
Teaching/learning outcomes	Having a say in the teaching/learning outcomes, acquiring knowledge and skills, especially skills relevant and applicable to the real world	Having little or no say in the teaching/learning outcomes, acquiring knowledge and some skills	
Mode of teaching	Interactive: Lectures more interactive, group work, flexibility in terms of choice of modules.	Transmission- Lectured at, little group work, little or no flexibility in terms of choice of modules	
Teaching approaches	Active- Lectures more interactive, various classroom activities, group works, getting students to be active and creative, freedom and constructor of knowledge.	Passive- Lectured at, little group work, ask student to memorize and replicate what they have been told in class.	
Instructor's role	As a facilitator, coach, guide, actively providing ample support for learning and motivation.	Expert, teacher has more power.	
Teacher-student relationship	Respect for students, treated as adults, prior knowledge/ experience acknowledged, co-constructing knowledge, sometimes teacher learns from student.	Teacher as expert, student ignorant regarding process and content of learning	
Student involvement and participation in class	Teacher caters to heterogeneous student population and individual student needs.	Teacher caters to homogeneous student population	
Feedback	Continuous, qualitative, teacher and student give each other feedback.	Limited, quantitative, teacher gives student feedback.	

Appendix 6 Observation Protocol (Teacher Educators)

Background Information

Teacher Name _____

Date of Observation _____

Start Time _____

End Time _____

Class/Topic _____

Hello, my name is Tengku Sarina Aini Tengku Kasim and I am currently studying for my doctorate programme at Auckland University of Technology (AUT). My research is about exploring teaching and learning: A case study of a Malaysian university's teacher education programme.

What is the purpose of the observation?

The purpose of the observation is to observe and take notes the teaching approaches that teacher educators appear to use in the classroom.

What will happen in this observation?

1. I will introduce myself to your class and will explain about my research to your students.
2. Your students will be informed that I will only observe your teaching activities and not their learning activities.
3. I will sit at the back of your classroom and will observe your instructional approaches.
4. I will focus on your teaching activities in the classroom and will not look into your students' activities.
5. I will take notes on your teaching and will not do it on your students' learning.
6. I will not audio/video-record the session.

7. You may conduct your class as usual.

Among others, the observation might include, but not limited to, the following aspects:

1. Purpose of the lesson;
2. Instructional approaches and stated purposes;
3. Instructional approaches and activities;
4. Questioning/assessment strategies; and
5. Classroom management style/strategies.

Appendix 7 Confidentiality Agreement



Project title: Exploring teaching and learning: A case study of a Malaysian university's teacher education programme

Project Supervisor: Dr Dale Furbish

Researcher: Tengku Sarina Aini Tengku Kasim

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature:

Transcriber's name:

Transcriber's Contact Details (if appropriate):

.....

Date:

Project Supervisor's Contact Details (if appropriate):

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Approved by the Auckland University of Technology Ethics Committee on 30th November 2009, AUTEK Reference number 09/254

Appendix 8 Ethics Approval



MEMORANDUM

Auckland University of Technology Ethics Committee (AUTEC)

To: Dale Furbish
From: **Madeline Banda** Executive Secretary, AUTEC
Date: 30 November 2009
Subject: Ethics Application Number 09/254 **Exploring teaching and learning: A case study of a Malaysian University's Teacher Education Programme.**

Dear Dale

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 9 November 2009 and that I have approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement at AUTEC's meeting on 14 December 2009.

Your ethics application is approved for a period of three years until 30 November 2012.

I advise that as part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/research/research-ethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 30 November 2012;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/research/research-ethics>. This report is to be submitted either when the approval expires on 30 November 2012 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

Please note that AUTEK grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this. Also, if your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply within that jurisdiction.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at ethics@aut.ac.nz or by telephone on 921 9999 at extension 8860.

On behalf of the AUTEK and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely



Madeline Banda
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Tengku Sarina Aini Binti Tengku Kasim dtc7350@aut.ac.nz, tgсарina@um.edy.my, Philippa Gerbic