

**PRINCIPLES AND PRACTICE OF REFLECTIVE  
TEACHING IN THE PRE-SERVICE TEACHER  
EDUCATION PROGRAMME OF MALAYSIAN  
TEACHER TRAINING COLLEGES**

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## Abstract

*The aim of this study is to investigate how the pre-service teacher education programme in Malaysian Teacher Training Colleges inculcates the skills of reflective teaching in prospective teachers. This aim is pursued by examining the perceptions of teacher educators, co-operating teachers, student teachers and newly qualified teachers from three Teacher Training Colleges in Peninsular Malaysia. A combination of qualitative and quantitative research methods was used. These are questionnaires, interviews and document analysis. Different sets of questionnaires and interviews were used with all the four groups of participants.*

*The thesis consists of three parts. Part One (Chapters 1 to 5), deals with the literature on reflective practice and highlights how the notion of reflective teaching has become popular in pre-service teacher education programmes in English speaking countries and elsewhere. Part Two (Chapters 6 to 10), describes the research methodology of the study and examines the research data in order to answer some specific questions concerning the way in which pre-service teacher education in Malaysia inculcates the skills of reflective teaching and the way in which Malaysian student teachers develop reflective teaching skills during their initial training. In Part Three (Chapters 11-12), several impediments to nurturing reflective teaching skills in student teachers are identified and some recommendations for improving the pre-service teacher programme so as to successfully nurture reflective teaching skills in student teachers are made. Briefly, these are to: (i) develop a programme to stimulate an attitude of inquiry and reflection in student teachers; (ii) ensure that present methods (micro teaching, 'Kerja Kursus Secara Projek' (KKSP), journal writing and clinical supervision) are geared more explicitly to inculcating reflective teaching skills; (iii) encourage teacher educators as well as co-operating teachers to be reflective practitioners; (iv) strengthen the triadic relationship (student teachers - teacher educators - co-operating teachers) in order to promote reflective teaching effectively; (v) introduce action research as a formal way of developing reflection, (vi) promote and sustain critical reflection among teachers and educators.*

*In general terms, the research indicates that the Malaysian pre-service teacher education programme would more effectively foster reflective teaching if various agencies work in a more integrated way. These agencies are: the Teacher Education Division of the Ministry of Education (which acts as a source of directives); the school (which provides a place for teaching practice); the teacher educators and co-operating teachers (who mediate the reflective teaching processes); the initial training institutions (which provide the source of inculcating action research, and fostering reflective attitudes amongst student teachers). It is necessary for all of these agencies to complement and supplement each other if the aim of nurturing reflective teaching skills in Malaysian student teachers is to be successfully achieved.*

## **PART ONE: INTRODUCTION AND LITERATURE REVIEW**

### **Summary**

This part covers Chapter 1 to Chapter 5. Chapter 1 is the introduction to this study; it describes the aims of this study and how it was carried out. Chapter 2 explains how the notion of reflective teaching has become a world-wide trend in pre-service teacher education programmes. Chapter 3 discusses the concept of reflective teaching. It also describes several approaches to reflective teaching, and some of its perceived advantages. In general, this chapter highlights how the notions of 'reflection' and 'reflective teaching' have become the most popular issues in teacher education programmes.

Chapter 4 locates the issues of teaching practice (or practicum) as the major component in initial teacher training and as the best way of cultivating the reflective capabilities of student teachers. It reveals the importance of a triadic relationship (teacher educator - co-operating teacher - student teacher), and the co-operating teachers' role in nurturing reflective teaching during teaching practice. Basically this chapter argues that there is a need to prepare reflective teachers from the beginning of their initial teacher training programme. Chapter 5 explains the background of the pre-service teacher education programme in Malaysian Teacher Training Colleges. It starts with the development of the pre-service programme from the British Colony until 1995 (the year this study was carried out); the content and philosophy of the programme and eventually stresses reflective teaching as being evident in the Malaysian, pre-service teacher education programme.

## **CHAPTER 1**

### **INTRODUCTION TO THE STUDY**

#### **1.1 Introduction**

Before commencing this research, let me reveal the experiences which led to me become interested in studying the issue of reflective teaching. Up to 1994, at least two significant developments had occurred in the area of teacher education in my country, Malaysia. Firstly, the introduction of the New Primary School Curriculum (NPSC) in 1983 brought changes to primary teachers' enrolment. More teachers were required to teach primary classes as the teacher ratio per class had been increased from 1 to 1.5 under this NPSC. However, because of the heavy workload, many experienced primary teachers opted for early retirement. Due to this unexpected event, the Teacher Training Division increased their annual student teacher intake and more teacher training colleges were opened, from 29 colleges in 1985 to 31 colleges in 1994. Secondly, the importance of teacher education was shown by the allocations for recurrent and development expenditure. In 1990, it was almost RM188,000,000 (£47,000,000 approx.) but in 1992 it had increased to about RM258,000,000 (£67,000,000 approx.) for teacher education, including pre-service teacher education (EPRD, 1994). This expenditure pattern demonstrates the priority given to teacher education. As a result there is now an increased emphasis on obtaining value for the expenditure of public money in pre-service teacher education in Malaysia.

For all the above mentioned reasons, I assumed that the area of pre-service teacher education programme or initial teacher education (ITE) was worth studying. Because I had no idea of which particular area I should concentrate on, I spent a few months during my first year as a research student, (which started in October 1994), collecting and reading literature about pre-service teacher education programmes and I found that the area of reflective teaching was being

extensively discussed. My conclusion was that the concept of reflective teaching was important throughout teacher education communities. Indeed, there did not seem to be a single teacher educator who would say that he/she is not concerned about preparing teachers to be reflective. On the other hand, based on my observation, teachers in primary schools in Malaysia were unfamiliar with this research literature and, in particular, with terms such as 'action research', 'reflective teaching', 'reflection-in-action' and 'teacher as researcher'. As it happened, I was one of those who worked in the Educational Planning and Research Division (EPRD), Ministry of Education, Malaysia, and who was actively involved in a programme for helping teachers to be able to conduct action research in schools as their formal method of reflection, hoping that they would eventually understand the notions of 'teacher empowerment' and 'reflective practitioner'. At the same time, I realised that the pre-service teacher education programme was a starting point for prospective teachers to gain and develop reflective skills as part of their professional teacher development and, second, that in order to achieve this, the continuing, long-term professional development of teachers was needed. The main focus of this study is on the former point: the need to assist prospective teachers in the development of reflective skills.

## **1.2 Statement of the Research Problem**

The concept of reflective teaching has been extensively discussed in the research literature (see Chapter 3: 3.2). It is a complex concept and can be interpreted in many ways. However for the present purposes, I adapted Silcock's (1992) definition. What is meant by reflective teaching is that skilled teachers think carefully through the implications of what they are doing and what they are trying to achieve for their pupils and for themselves. They test out, mentally, contrasting ways of teaching and organising classrooms in order to judge between options and arrived at reasoned conclusions.

The underlying assumption in the statement above is that the model of teachers' professional development is a 'reflective teacher' model. Hence, the problem which this study seeks to investigate is: **How does the pre-service teacher education programme in Malaysia Teacher Training Colleges inculcate the skills of reflective teaching?** This problem is to be investigated by looking at the perceptions of teacher educators, present and previous trainees, and co-operating teachers at school. Since this problem is related to the existing initial teacher training, there is also a need to investigate how Malaysian student teachers, teacher educators and co-operating teachers as well as newly qualified teachers who have undergone pre-service teacher education at college level, perceive the pre-service teacher education programme, particularly in preparing reflective teachers. In pursuing the research problem, three major objectives of this study were developed. These are:

1. To identify the methods which have been employed in inculcating reflective teaching skills.
2. To examine and describe the strengths and weaknesses of the existing programmes from the perceptions of the co-operating teachers, newly qualified teachers and student teachers.
3. To identify and determine the issues emerging from this study which could impede the effectiveness of the programmes in nurturing reflective teaching skills to student teachers.

In order to achieve these objectives, this study seeks to answer the following four research questions:

1. **How do pre-service teacher education programmes in Malaysia cultivate reflective teaching in their student teachers?** Here, the main concern is to identify the different methods used in the college in order to inculcate reflective teaching skills in student teachers as well as the methods which the co-operating teachers at school use to guide student teachers to be more reflective (Chapter 7).
2. **What is the role of the co-operating teachers in nurturing reflective teaching in student teachers?** Here, the concern is to identify the aspects of the mentors' work which help student teachers during their teaching practice, and the obstacles in nurturing the process of reflection which are perceived by co-operating teachers as well as student teachers in the promotion of reflective teaching (Chapter 8).
3. **What reflective teaching 'skills' did student teachers learn and develop during the initial course?** Here, the concern is to identify the characteristics and the levels of reflective teaching that student teachers had learned and developed during the pre-service teacher education programme (Chapter 9).
4. **How do newly qualified teachers respond to and apply the emphasis on reflective teaching skills in their teaching practice?** Here, the concern is to determine the degree to which newly qualified teachers were encouraged to use reflective teaching skills during their teaching practice and the extent to which the processes of the reflective practitioner were implemented in their actual teaching (Chapter 10).

### 1.3 Rationale of the Study

There are several reasons why this study is important. First, in Malaysia today, teachers are expected to make autonomous pedagogical decisions, to be accountable for the education and academic achievements of their students, and to be socially involved in the school community. Reflective teachers are not those who have been programmed with theory-based answers to many discrete teaching situations but instead are those who are able to conceive of their teaching in purposeful terms, can size up a particular teaching situation, choose a teaching approach that seems appropriate to that situation, attempt the approach, judge the results in relation to the original purposes and reconsider the original purposes (Popkewitz, 1987). The purpose of this study is to provide some insight into the extent to which the existing pre-service teacher programmes in Malaysia inculcate reflective teaching skills in prospective teachers.

Second, teaching practice as part of the training programmes must reflect student learning needs and provide the opportunity to adapt to the role of reflective teacher. Accordingly, the work of co-operating teachers in the role of mentor is essential during teaching practice. The training of student teachers to be 'reflective practitioners' will be most successful when the co-operating teachers are well chosen and suitably trained. This raises many issues related to the skills, abilities or personal qualities needed by the co-operating teachers. Thus, I believe that it is essential to have reflective mentors in pre-service teacher education in order to produce reflective teachers as the starting point of the teachers' professional development.

Another reason for this study is that the notion of the 'reflective practitioner' has emerged as the new paradigm of teacher education in many countries. One consequence of this is that terms such as 'action research', 'reflective teaching',



'reflection-in-action', 'teacher as researcher' and 'research-based' or 'inquiry-oriented teacher education' have now become fashionable throughout all segments of teacher education. In this environment, Malaysia must not be left behind. Reflection has to be promoted in order to reduce the diversity and imbalance between the theory, which is mainly accumulated from Western research, and good practice, which is embedded in the professional culture of Malaysian teacher education. Therefore, I also hope that the results of this study will create a favourable climate for research in teacher education, involving many people, greater dialogue, widespread dissemination of findings and a network for sharing accumulated wisdom.

There is no doubt that reflective practice offers a valuable approach to teacher education for lifelong, self-renewing learning. Accordingly, there is a need to investigate how Malaysian student teachers, teacher educators and co-operating teachers as well as newly qualified teachers who have undergone pre-service teacher education at college level, perceive the way in which the pre-service teacher education programme prepares reflective teachers. Otherwise, pre-service teacher education will continue to be invisible because it is not considered a critical issue. Moreover, there is a lack of Malaysian research in initial teacher education especially in reflective practice. According to Leavitt's (1992) analysis, Malaysia did not consider pre-service teacher education as a critical problem even though, according to Merryfield (1993), over the last decade there has been increasing interest in reflection as a tool for improving practice in teacher education programmes.

#### **1.4 Methods of the Study**

This study uses a combination of quantitative and qualitative research methods. Various methods of data collection, including questionnaires, interviews and

document analysis, were used. Interviews were undertaken with small samples while questionnaires were used with larger samples. Data was also obtained from documents to further extend the analysis.

Three Teacher Training Colleges (TTCs) in Peninsular Malaysia were selected, one each in the north, the south and the east of Peninsular Malaysia. They were the Institut Perguruan Darul Aman (IPDA), Kedah; the Maktab Perguruan Temenggong Ibrahim (MPTI), Johor, and the Maktab Perguruan Kota Bharu, (MPKB), Kelantan. Four groups participated in this research, namely: teacher educators; final semester student teachers from the primary school programme at the selected TTCs; co-operating teachers (mentors) at schools where the student teachers were doing their teaching practice; and newly qualified teachers who had graduated from the same programme at the selected TTCs.

Questionnaires and interviews were given to all four groups of participants (see Appendices 1 to 7). The student teachers were interviewed in two groups of three. The first was an exploratory interview, conducted during the middle weeks (Week 4 or 5) of ten weeks of their final teaching practice, and the second was a reflective interview, conducted during the last week (Week 10) of their teaching practice. There were the same number of interviewees in each group of teacher educators, co-operating teachers and newly qualified teachers. The interviews were conducted in a semi-structured style. For a more detailed description of the samples and research instruments, see Chapter 6 (p: 98).

All the interview processes applying to all groups of participants were recorded as well as transcribed, and were then classified into themes. The results were compared with the results of the same themes from questionnaire data which were compiled in a frequency table. The findings of both techniques were synthesised. For the sake of clarity, the results of this study were compiled

according to the perceptions of the four sample groups, providing an idea of which pre-service teacher education goals had been emphasised in nurturing the reflective teaching skills in prospective teachers. The aim of the data analysis was to identify significant issues for the particular improvement of the existing programmes.

Essentially, this study is descriptive in nature, and is based mainly on qualitative data. Quantitative data is used to highlight the relevant issues which emerge from the qualitative data. This demonstrates the triangulation (questionnaire, interview, and document ) used to incorporate the varieties of data, reflecting the rise of pluralism in research methodologies.

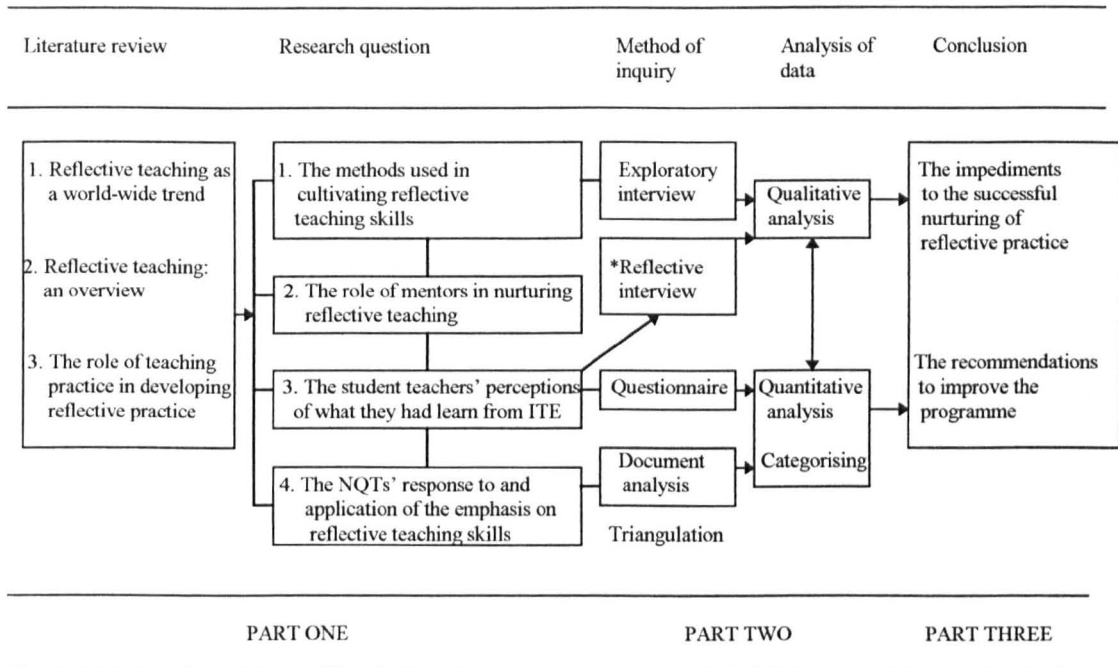
### **1.5 Organisation of the Study**

Basically this study can be divided into three parts. Part One (Chapters 1 - 5) is concerned with the introduction and literature review. Part Two (Chapters 6 - 10) describes the methodology and the main findings according to the four research questions. Part Three (Chapters 11 -12) incorporates the conclusion and suggestions arising from this study.

### **1.6 Framework of the Study**

The general framework of this study is illustrated in Figure 1. The idea is to try to give the readers as clear as possible a picture of the elements of the study and the connections between the different elements of the study.

Figure 1: The Framework of the Study



\* Reflective interview is only applied to research question no. 3

**CHAPTER 2**  
**REFLECTIVE TEACHING AS A WORLD-WIDE TREND IN**  
**PRE- SERVICE TEACHER EDUCATION**

**2.1 Introduction**

The aim of this chapter is to show how the concept of reflective teaching has become part of the language of pre-service teacher education in many countries of the world and it is now considered an important aim for teacher education. There will be three main parts to the chapter. The first highlights reflective teaching as part of the language of pre-service teacher education programmes (2.2). The second is to describe some of the reasons that have been advanced in the theoretical and research literature for introducing reflective teaching into pre-service teacher education (2.3). The third shows that action research as a formal way of promoting reflective practice is now common in many countries (2.4).

**2.2 Reflective Teaching as Part of the Language of Pre-Service Teacher Education**

It is clear that the quality of education that our children receive links directly to the knowledge, intelligence and professional skills of teachers. Teacher quality, in turn, relies on the selection of good candidates for teaching, their pre-service preparation, the support they receive in their first year of teaching, and the continued professional education of the teachers themselves through in-service training. So, we can assume, the best teacher is the one who is well educated and that pre-service teacher education is the foundation of a teaching career and the starting point for teachers' professional development.

Basically a pre-service teacher education programme is defined as a set of phenomena deliberately intended to help student teachers acquire the knowledge,

skills, dispositions, and norms of the occupation of teaching (Katz and Raths, 1990). Pre-service teacher education is a large activity in its own right. In Malaysia, for example, the total enrolment of teacher trainees in all teacher training colleges in 1992 was 25,293 for primary schools and 5,255 for secondary schools with an average annual intake of 17,464 (EPRD, 1994). From these figures, it is clear that initial teacher education has important long term consequences, and many countries are using it to bring about lasting reform of their educational systems.

However, there is a pessimistic picture of pre-service teacher education which shows a lack of balance between theory and practice (Mahony and Whitty, 1994); teacher educators do not always practice what they preach; the socialising effects of schools militate against what is done in college pre-service training courses; student teachers emerge from programmes with negative attitudes to pupils, co-operating teachers have no clear idea as to their role; and teaching practice is less effective than we generally believe (Tisher and Wideen, 1990). Some have argued that teacher preparation programmes should be improved and extended, that the teacher education curriculum should be more rigorous and the academic ability of teachers should be enhanced (Hawley, 1992).

In sum, many issues pertaining to pre-service teacher education are now receiving international attention. In many countries, major efforts have been made to improve the quality of teacher education. For example, in USA, the American Educational Research Association organised a conference in 1986 entitled 'The Reflective Teacher Programme' at which it was argued that pre-service preparation should include the preparation of reflective teachers as a major goal (Richardson, 1990). In Germany, because most student teachers criticised the lack of balance between theoretical studies and studies oriented to teaching practice, more praxis-relevant courses have been introduced (Klinzing, 1990). In

these courses, trainees are encouraged to become sophisticated thinkers, educated as professionals not technicians (Reid, 1994). In Singapore, it has been argued that it is the development of classroom skills which is a crucial component in any pre-service programme (Kam, 1990). In Australia, efforts have been made to adapt pre-service teacher education programmes to changing circumstances and priorities in schools and society in general (Traill, 1992) by requiring student teachers to reflect critically and constructively on previous actions, applying knowledge, expertise and personal theories of professional practice (O'Donoghue and Brooker, 1996). The same is true with the teacher education programme in other countries. For examples, in Malta, educators are constantly pressed to address the idea of the reflective practitioner (Sultana, 1995). In Poland, student teachers are expected not only to be aware of what they do, but also why they do it (Ellis, 1993) and, in Finland, supervisory post-observation conferences are essential in teacher training programmes (Krokfors, 1996).

In Britain, Calvert et al. (1995), in their case study found that many student teachers did not use their observations and experiences to draw generalisations and implications for teaching and learning, and made very little effort to refer to educational books and journal articles, the kind of activities which encourage students to obtain a critical perspective on their own experiences. Consequently, they recommend that both experience and reading are used by students as part of the reflection and formative assessing that leads to improved practice and deeper understanding of issues. They also recommend that assignments are framed deliberately to cultivate this process. This recommendation is in line with the comment made at the 1991 ISATT annual conference (International Study Association into Teacher Thinking) at University of Surrey, that practically all teacher education institutions advocate the 'reflective teacher' as their professional model. This suggests the importance which today's educationists place upon

considered and reasoned practice. Good teaching is seen as being more than blind rule following or pragmatism (Silcock, 1992).

So, what about Malaysia? Is there any interest in introducing the principles and practice of reflective teaching in pre-service teacher education in Malaysian Teacher Training Colleges? Basically Malaysia is now focusing on the notion of the reflective teacher. However, as mentioned earlier, there is a lack of Malaysian literature on reflective teaching (Chapter 1: 7) even though, currently, much is being spoken and written about the value of reflection in teacher education in the theoretical and research literature (see for example, Wan Zahid, 1993; Bajunid, 1996). In fact, some have argued that the notion of 'reflective teaching' ought to be a staple in teacher education (Sykes and Birds, 1992). Therefore, the training of teachers in Malaysia must now be more rigorous than ever before especially in inculcating reflective teaching skills in prospective teachers.

Educational researchers and reformers have challenged teacher education programmes to prepare teachers who are autonomous models of intellectual independence for their students, teachers who are able to reflect about their behaviour and surroundings and make valid decisions (Pultorak, 1993). As a result, it has become almost imperative to stress the importance of reflection in professional preparation programmes (Ducharme and Durcharme, 1996). Therefore, most current pre-service teacher education courses were designed on the basis of the reflective teaching approach. The arguments for taking this approach also derived from the professional artistry view of teaching, as follows:

'Professionals need to exercise and to continue to refine and develop not only simple skills, but their own dispositions, personality, professionalism, abilities, capacities and understandings. Many aspects of teaching a lesson cannot be pre-specified. Professionals need to be able to think on their feet, to improvise, to respond to the uncharted and unpredictable. Further,



teaching is a moral and social practice requiring the ability to exercise moral decision-making and professional judgement. What is needed is an approach to teaching and to learning to teach which enables teachers to work at their practice, modify it and keep it under control.' (Fish, 1995: 12)

Basically, the reflective teaching philosophy is contradictory to the competency-based teacher education which treats teaching as an occupation rather than a profession (Fish, 1995). Reflection has always been part of good teaching. This is because, despite the importance of good planning, teaching is always an uncertain enterprise in which teachers are called upon to respond pedagogically to unanticipated events (Carson, 1995). The good teacher, therefore, is a reflective teacher, one who inquires into his or her thinking and practices with an eye towards making improvements. Teachers also are encouraged to carefully consider the consequences of their action in the classroom and on other developments. Reflection involves more than getting new teachers to think hard about what they are doing and whether or not a particular practice is working or is consistent with a list of competencies. It involves giving careful attention to how problems are framed. Problem framing goes directly to the issue of what kinds of questions and issues new teachers should be reflective about (Bullough and Gitlin, 1994). In sum, a good teacher is a reflective practitioner, one who reflects inwardly to address issues related to classroom practices, including methodology, and outwardly, considering the interaction between what he/she does in the classroom and the social context in which that educational endeavour is framed. He/she is thus aware of the social and political implications of actions developed in the reflection of the classroom, and has the moral courage to be critical and develop alternatives to the forms of life generated within schools and outside of them (Sultana, 1995). Thus, reflection which refers to the problem-solving process, the ability to consider, evaluate, and change one's practice, should be given primary importance in the education of new teachers (Binkley and Brandes, 1995).

Accordingly, many pre-service teacher education courses claim to be based upon a reflective practitioner model. The enthusiasm for reflective practice may be partly accounted for in terms of the current attractiveness of many of the principles that have come to be associated with it: helping teachers to analyse, discuss, evaluate and change their own practice; heightening teachers' awareness of the contexts in which they work; enabling teachers to appreciate the moral and ethical issues implicit in their practice; and empowering teachers to take greater control over their own professional growth (Calderhead, 1994). Reflecting on practice is a vital dimension of training. As their confidence and expertise grow, student teachers need opportunities not only to plan and manage but also to evaluate their practices. They are able to think about their pupils' learning, to evaluate the effects of their teaching, and to discuss their evaluation with their tutor, their co-operating teachers and other student teachers. In short, student teachers have the opportunity to reflect on all the subjective and objective views as well as on their own personal view as new people in the school (Binkley and Brandes, 1995). Within this context, Reid (1994) referred to the logic of the so-called reform of teacher training. One way of bringing about such reform is through observing and reflecting on one's own teaching, and using observation and reflection as a way of bringing about change from the routine demands of teaching and benefiting teachers' professional growth (Richards, 1991). Clearly, the notion of reflective teaching is now prominent in global teacher education (Gilliom, 1993; Johnston and Ochoa, 1993) and is the hallmark of teacher education (OECD, 1994).

### **2.3 Reasons for Preparing Reflective Teachers During the Pre-Service Teacher Education Programme**

This study would argue that there is a need to prepare reflective teachers from the very beginning of their initial teacher training programme for the following reasons.

**(i). Traditional training needs must be challenged.** A continuing interest in pre-service teacher education has been the development of training methods and instructional strategies which facilitate the preparation of teachers who are reflective about their work. However, recent efforts to reform teacher education around the aim of developing reflective teachers are unlikely to make a significant difference unless they are tied to a larger project that challenges the training orientation that dominates our understanding, our teaching and our schooling. Therefore, the assumption about the nature of teaching and learning in the training tradition, as summarised by Bullough and Gitlin (1989), needs to be challenged.

‘(a) emphasis, first and foremost, on obtaining technical competence in mastering the skills of teaching; (b) it is the means of education, in a very narrow sense, and not the aims of education, that matter most for teachers, regardless of their subject matter expertise or intellectual ability; and (c) the training emphasis supports an extreme form of individualism consistent with job differentiation proposals where pre-service teachers view themselves in competition for grades, supervisor recognition, teaching resources and ideas, and eventually jobs. This competition leaves common interests unacknowledged and, importantly, masks the need for and potential of collective teacher action as a means for educational improvement.’ (Bullough and Gitlin, 1989: 286)

It is clear that pre-service teacher education provides a starting point to instil the norm of reflective teaching as well as to introduce the requisite knowledge and skills to approach teaching in a reflective way. As Richert (1990) has indicated reflective teachers are those who have the capability and orientation to make

informed and intelligent decisions about what to do, when to do it and why it should be done. Therefore, some form of reflectiveness needs to be engendered during pre-service training if we can reasonably expect newly qualified teachers to display the qualities of reflective teaching during their in-service years. This includes developing a reflective attitude (Korthagen, 1988; Korthagen and Wubbels, 1995). The idea behind this is that student teachers can be armed against the passive patterns of teachers' practice. The student teacher must first gain some idea of who he or she is, of what he or she wants, and above all, of the ways in which he or she take responsibility for his or her own learning.

**(ii). Student teachers can practise, experiment and share teaching experiences.** As a result of the criticisms of the teaching practice approach, reflective teaching has been regarded as viable and efficacious (Gore, 1987). Reflective teaching requires a relatively non-threatening environment in which student teachers can practise, experiment, and share teaching experiences. It is an opportunity to observe others teach, which may develop a more accurate concept of their own competence and which should help them develop the confidence to ease their transition to real classroom situations. Without this, they may develop serious insecurities about their ability, and therefore, a great reluctance to be observed. In addition, the sharing of experience has potentially two positive outcomes: first, student teachers learn to value their practical knowledge instead of viewing it as inferior to theoretical knowledge, and secondly, they develop a strong bond with their colleagues, developing trust and respect for each other as teachers and professionals.

**(iii). Student teachers should acquire the characteristics of progressive pedagogy.** In the process of learning, survival in a fast changing world may well depend upon the ability of pupils to develop the skills of adaptation, flexibility, co-operation and imagination. In order to achieve this, we need to focus less on

structure and curriculum and more on practice and process; students and teachers seeing each other as people not as roles; flexible structures, varied starting points, mixed learning experiences; use of the pupils' experience as contexts for learning; more concern for the learning environment, education as a lifelong process, learning from the pupils (McCullough and Mintz, 1992; Whitaker, 1995). As Anthanases (1993: 79) concluded that 'the teachers' ability to reflect on needs of adapting lessons may serve as a prediction of successful teacher performance'. From this perspective, it has been rightly argued that theory is not a set of generalisations, a product from which applications directly relevant to particular practices can be selected, but a continuing process of theorising self-critical reflection on practice from which a reshaping of subsequent practice may emerge (Whitty et al. 1992). To implement any relevant policy, reflective teachers should aim to develop clearly their own personal 'theories' as a guide to everyday action and practical policies. It is particularly important for reflective teachers to examine their current school and classroom practices for improvement to be reflected in their future practices. In order to avoid inconsistent commitment to implementing innovation, student teachers should to be trained in progressive pedagogy during their pre-service teacher education. By training student teachers as reflective teachers, they should eventually be able to acquire the progressive characteristics of pedagogy as opposed to the traditional ones, as in Figure 2.

Figure 2: Characteristics of Pedagogy

Progressive	Traditional
1. Teacher as guide to educational experiences (e.g. pupils participate in curriculum planning)	1. Teacher as distributor of knowledge (e.g. pupils have no say in curriculum planning)
2. Active pupil role (e.g. learning predominant by discover techniques)	2. Passive pupil role (e.g. accent on memory and practice and rote)
3. Intrinsic motivation (e.g. enjoyment and fulfilment emphasised, interests followed)	3. Extrinsic motivation (e.g. rewards and punishment used: point and penalties)
4. Integrated subject matter and flexible timetable	4. Separate subject matter and rigid timetable
5. Concerned with personal/social/ academic potential: accent on co-operative group work, and creative expression	5. Concerned with academic standards: accent on competition and correct expression
6. Continuous informal forms of monitoring	6. Periodic formal testing and assessments
7. Teaching not confined to classroom base	7. Teaching confined to classroom base

(Pollard and Tann, 1993: 64)

Galton (1989) argues that the progressive pedagogy enables teachers to use their own experiences as learners to reflect on their own classroom practice. Traditional pedagogy in contrast, concentrates on cognitive aspects of learning and does not encourage teachers to reflect critically. It is also believed that this progressive pedagogy will enable student teachers to put themselves in what Galton describes as 'our classroom' and not merely 'your' or 'my' classroom, so that teaching and learning become truly seen as a collaborative effort.

**(iv). Reflective practitioners need more time, energy, insight, commitment and support.** A further aim of reflective practice is to give student teachers as well as teacher educators both the skills and the confidence to collect and use appropriate information and to reflect thoughtfully on their work (King and Wahlstorm, 1993). As Lauriala and Syrjala (1995) point out, this idea can give prospective teachers a basis for renewing and critically assessing their work,

by engaging them in reflection on their own practice and on their own roles as teachers. However, the problem for student teachers is to be able to take advantage of 'craft knowledge' and, as a result it is difficult for them to keep reflective practice as the goal (Lucas, 1988). Therefore, student teachers need to be trained to be reflective practitioners but they need more time, more commitment, and more support. As Bullough and Gitlin (1989) point out, pre-service teachers should have ample time to engage in reflection and act on insights gained and should have extended periods of time together to engage in challenging and shared activities. At the same time, pre-service programmes should not aim primarily to replicate existing practices but should stimulate future change. In terms of support, it might best involve paying attention to the teacher, listening to and knowing the teacher's idea, joining the teacher in partnership to explore text alternatives and then, through reflection, supporting the continual building of practice (Doubler, 1991).

**(v). Information technology is part and parcel of reflective teaching skills.** Being reflective practitioners, student teachers are also supposed to be capable of using information technology (IT) in their daily practice. Studies conducted by Kagan and Pippins (1991), and Blackmore et al. (1992) show that most student teachers feel that it is important to use IT in their teaching and that their attitudes to IT were generally positive. With the aid of video film of lessons, student teachers were given practice in identifying and interpreting the non-verbal behaviours of their pupils. This practice has positive effects on student teachers' reflection. Therefore, it is believed that the use of video during pre-service teacher programmes can enhance students' reflectivity.

**(vi). Reflective practice provides a basis for professional development.** The idea of the reflective practitioner as a basis for professional development has become a commonplace in much teacher education (Bennett, 1995) and needs to

be unpacked (Day, 1995). According to Bennett (1995), reflective practice involves a deliberate attempt to analyse systematically the theories in use which inform individual practice, to identify the extent to which problems are created by the way the circumstances are interpreted in the light of those theories in use, and to develop new theories in use which can allow for new and imaginative solutions to problems. This process is one which continues throughout a teacher's career. However, the formal pre-service programme of teacher education is an initial, essential, and first phase in teacher development (Richards and Lockhart, 1994).

Although reflection is a personal endeavour, it can be actively acquired through collaboration, group deliberation and confrontation by self or others. During teaching practice, for example, critical friends may establish and sustain a responsive, mutually accepted dialogue through which situations will be created in which the student teachers are obliged to reflect systematically on practice. Such constant reflection and feedback are likely to deepen the knowledge acquired and meaning of their work, improve their teaching skills (Adalbjarnardottir, 1994) and eventually deepen teachers' reflective processes (Proefriedt, 1994). As Day (1995) points out, collegiality, contract making, entitlements and critical friendships are all elements within professional schemes which support teacher autonomy and reinforce a sense of responsibility by affirming confidence in teachers' professionalism.

Therefore, during the period of their teaching practice at school there must be numerous opportunities to involve student teachers. As emphasised by Graves (1990), pre-service teacher education must bring 'learning by doing' into the core of the curriculum. This means that teaching practice should be the central aspect of the course from which student teachers can learn by reflection-in-action, aided by competent practitioners, the co-operating teachers in schools and teacher educators in colleges. Essentially, we need to involve student teachers in practice



in a non-threatening way early in their training. To be more effective, teacher educators or mentors should allow student teachers to observe them teaching. This should then be followed by an analysis, with the student teachers, of what went on and what quick decisions were taken and why. They also should assist student teachers to acquire teaching know-how from direct experience in schools and from the findings of research which can be derived from work in schools, hence they should be familiar with both the world of practice and that of research. This is what Graves (1990) calls as an interactive system of teacher education which is particularly relevant in pre-service teacher education programmes to train student teachers to become reflective teachers.

Consequently, it is hoped that after student teachers have undergone the pre-service teacher education programme, they should be able to examine their practice, identify issues or problems to be worked on, think about the solution process, take action, analyse the action, consider whether further action is necessary and proceed with the action. To summarise Silcock (1994), student teachers gain increased understanding through research.

**(vii). The benefits of reflection.** If student teachers and newly qualified teachers wish to improve their practical professionalism they can do so by implementing reflective practice. In this way, reflective thinking is not just ivory-tower contemplation. It is linked directly to practice and enables the teachers to exercise discretionary judgement in situations of unavoidable uncertainty. Consequently, teachers will gain benefits from their reflection. For example, if teachers feel a sense of professionalism and are proud to be teachers they will gain enough self-confidence to have the courage to take risks, try new things and to be reflective (Berkey et al. 1990). In addition, as demonstrated by Wells (1994), there is a variety of compensations and rewards of reflection upon practice. These include:

1. Sustained motivation which is reflected in all that the student does, and generates energy and vital dynamism;
2. The ability to transcend the potentially demoralising situation facing all teachers when their pupils, regardless of age, ability and motivation, make use of only a relative amount of the teacher's input, effort and knowledge;
3. The overall preservation of the teacher's sanity, when, as a researcher and a student he or she enjoys a sense of fulfilment, maximises the effort put in and compensates for any disappointments encountered.

Clearly, teachers who reflect critically on their own teaching seem to have many benefits, such as a high level of confidence, excitement, and creativity, and these have a positive effect on pupils. Therefore, a pre-service teacher education programme should make an attempt to further teacher reflectivity. As Bullough and Gitlin (1989) suggested, pre-service teachers should have ample time to engage in reflection and act on insights gained, and should also have extended periods of time together to engage in challenging and shared activities.

#### **2.4 Action Research as a Method for Promoting Reflective Practice**

Reflection is promoted in a variety of ways such as seminars, dairies/log, book/journal and reflection grids, in which student teachers record data concerning their lessons. A very popular method for promoting reflective practice has been action research during pre-service teacher education. We need to encourage this more liberating inquiry, which creates a sense of reflectivity in teachers, so they do not take anything for granted. It involves self discovery in understanding beliefs and assumptions, describing and interpreting classroom practices, and generates means for analysing and improving practice. It informs planning and decision making for future action. So, action research conducted primarily by teachers is inherent in initial teacher training. Student teachers need to know how to implement education (curricula) rather than how to create it. The goals are decided, the systems are there: they need to know how to play their roles

when they enter the classroom alone, aided only by their knowledge, skills and resources. All of these are acquired by student teachers as a necessary part of their education (Carr and Kemmis, 1989). By implementing action research, student teachers are motivated to be critically reflective. They follow a spiral of action research cycles. Each of these cycles consists of moments of planning, action, observation and reflection (Carson, 1995; Kember and McKay, 1996).

Another reason why action research is on the agenda of the pre-service teacher education programme is the insight that teaching as a career is peculiarly subject to the deadening effects of routinisation that teachers tend to encounter. After a while, teachers see what they expect to see and constantly reconstruct the classroom in its own image. How can teachers move beyond the level of automatic or routinized responses to classroom situations and achieve a higher level of awareness of how they teach, of the kinds of decisions they make as they teach, and the value and consequences of particular instructional decisions? Richards (1991), suggested that, in this respect, reflective research is a way of helping student teachers to identify worthwhile problems to work on, and through their enquiry to extend their own understanding, insight and command of the situations in which they work. It helps student teachers to recognise contradictions of purpose and practice and to monitor the effect of strategies designed to achieve the educational purposes that they have in mind.

Another argument for action research, is that teaching is perceived as a sequence of problem-finding and problem-solving episodes in which teachers' capabilities continually grow as they define and solve practical problems. These capabilities are not automatically subject to growth in this way and the likelihood of teachers opting to learn from thoughtful and critical study of their own practice is greater if such activity has been legitimised during initial training. As Colton and Sparks-Langer (1993) pointed out, the teacher is also a 'reflective decision

maker'. The teachers of the future are expected to be thoughtful persons intrinsically motivated to analyse a situation, set goals, plan and monitor actions, evaluate results, and reflect on their own professional thinking. Thus, technical proficiency is not enough. Morals and democratic principles must also guide the reflective teachers' action. Student teachers need to be committed to more radical change where there is a clear educationally justifiable need for reform (Rudduck, 1989). If student teachers are not introduced to the excitement and power of reflective teaching through action research during their period of initial training they may not, given the demise of opportunities for sustained in-service study, turn voluntarily and readily to such a way of learning later in their career.

At the University of Wisconsin-Madison, USA, for example, the uses of action research in the pre-service teacher education programme are: (1) as a vehicle for facilitating reflective teaching by student teachers; (2) as a strategy for the improvement of student teaching supervision; and (3) as a means of structuring programme improvement. Through their participation in action research, student teachers learn valuable lessons about teaching and the value of the experience goes beyond the lessons students learn from a specific project: it broadens their specific understanding and action research provides the framework for developing sympathetic attitudes towards research and the methods of making 'common sense' judgements valid. It strengthens the skills of critical analysis which a professional teacher requires. The benefit of action research can be seen in the work of Liston and Zeichner (1990) who found that, some students, at the end of their student teaching, feel they have become more reflective about teaching. They think about what they did during the day, whereas before they did not.

Similarly, at the University of Newcastle, Australia, action research in pre-service teacher education has three components: (a) researching one's own practice and situation, (b) working collaboratively, (c) working with emancipator

or democratic intent. For example, to emphasise collaboration, they make the seminar itself the focus of action research and work collaboratively to improve that practice or situation. Student teachers can also emphasise the democratic intent by selecting their own seminar topics in advance (Gore and Zeichner, 1991). In New Zealand, to develop skills, beginning teachers are actively encouraged to integrate theory with practice (Tomlinson, 1994). By gathering data on classroom participation, the teachers are able to modify their own practice and come to understand how pupils can take responsibility for their own learning and success. Teachers and pupils together come to develop a shared sense of responsibility for maintaining a classroom climate conducive to learning and can work together to help pupils develop skills needed across the curriculum (Carr and Kemmis, 1989).

In Finland, according to Lauriala and Syrjala (1995), teacher education has been gradually shifting to the idea of 'teachers as researchers' which has set the following goals:

1. To instil in teacher trainees the skills of collaboration and partnership (for example, they do their research in pairs or teams with other students or experienced teachers).
2. To blend academic study with practical experiences: (a) by linking research and practice and by doing action research; (b) through seminar discussions in which the opinions of education professionals, teachers and prospective teachers are accepted as of equal value.
3. To give teachers and prospective teachers a basis for renewing and critically assessing their work: (a) by acquainting them with alternative, innovative ideas in education; (b) by giving them skills in investigation and experimentation in connection with their own work; (c) by engaging them in reflection on their own practice and on their own roles as teachers.

In the UK, at the University of Sheffield for example, there are three structural features that provide opportunities for all student teachers to experience the benefits of reflective dialogue and collaborative research. First, during the early

period of block teaching practice, a student is paired with another student teaching the same subject to allow them to observe each other, to identify and explore interesting issues and problems, and to learn the value of giving and receiving constructive peer criticism and support. Second, there is a three day 'analysis' workshop where students work intensively on a topic that interests them. Here the aim is to help students see their own experience, and the documented experience of others, which can deepen their understanding of the complexities of classroom and school life. Third, all students in the final weeks return to the school to present their work during teaching practice on problems which the group members find interesting and worthwhile (Rudduck, 1989).

There are some assumptions about action research for encouraging reflective teaching practice during the pre-service programme. Based on Stevenson (1991) and Kember and McKay (1996), the assumptions are :

1. Improved practice resulting in part from teachers reflecting critically on their own educational practices.
2. Critical reflection demands the articulation and reasoned justification of one's educational intention (i.e. providing educationally defensible reasons for actions), the examination of the relationship between these intentions and the consequences of classroom actions, and the consideration of ways to resolve any contradictions that are revealed.
3. Action research provides a means of facilitating teachers' systematic reflection on educational practices. It involves a process of trying out new ideas by making exploratory changes in strategic actions and then studying the effects.
4. Teachers do not have complete freedom of action in their classroom. Creating new practices, for example, may conflict with established practices and organisational arrangements. Furthermore, schools as presently organised do not provide conditions amenable to careful and systematic reflection on practice. Therefore, in engaging in action research, reflection on professional intentions and behaviours must be critical in both an internal and an external sense. That is, teachers must not only be self-critical, but also should examine the context in which they work by critically analysing the social and institutional structures that place constraints on their actions.

5. Reflection must be both an individual and collaborative endeavour. While individual concerns may be the reason for initiating an action research inquiry and the practical actions that arise from those concerns may be taken individually, reflection on the intentions and the consequences of one's actions should take place in a dialogue within a 'critical community' or 'critical friend' (i.e. peers or outside collaborators).

There also appears to be a number of specific and immediate benefits or impacts that some student teachers have gained from the action research project. As Gore and Zeichner (1991) reported, it helped them to be more thoughtful in general about their teaching, more aware of their own practices and the gaps between their beliefs and their practices, and of their pupils' thinking and learning. In addition, Lauriala and Syrjala (1995) addressed two main issues: student teachers understanding of the inter relationship between theory and practice, and their acquisition of investigative attitudes and skills. Both of these are important for teachers' professional development, especially their reflective skills.

Based on the findings of several pieces of research, McKay (1992) offered a summary of the benefits of action research in particular and other inquiry activities to all types of teachers including pre-service teachers. Among them are: (a) research is a step towards emancipation of teachers; (b) teachers become more flexible in their thinking, more open to new ideas, and more able to solve new problems; (c) positive changes occur in teachers' patterns of collegiality, communication, and networking with others in the school; (d) improvement in teachers' thinking skills, sense of efficacy, willingness to communicate with colleagues, and attitudes toward professional development and the process of change; (e) encouragement of reading, discussing, thinking, and assessing ideas from related research with expanded analytical skills; (f) the liberation of teachers' creative potential stimulates their ability to investigate their own situations, mobilises them to solve educational problems and encourages the process of research and staff development; and (g) they grow intellectually and

professionally, establish rewarding relationships with school and colleagues, increase their own self-esteem, and create new career opportunities.

Therefore it is clear that tomorrow's teachers' responsibilities include conducting action research for problem solving and decision making at the school level. According to Giroux and McLaren (1987), student teachers trained in this fashion will be superior teachers well versed in content and able to create instructional programmes that meet the needs of all age groups. They will also be able to use relevant and efficient problem solving strategies to adjust instruction and thus maximise the probability that learning will occur. These benefits could be gained by student teachers in Malaysia by the inclusion of action research in the pre-service teacher education programme.

Clearly, reflective practice entails research-based professionalism in education. Responses to such matter can have the form of an action research cycle in which one states what it is that one wishes to improve, imagines ways of improving it, constructs an action plan, evaluates and modifies one's questions, and plans in the light of the evaluation (Whitehead, 1990). Action research is therefore an intervention in practice to bring about improvement (Lomax, 1994). As described by Richards and Lockhart (1994), action research is an implementation of an action plan designed to bring about change in some aspect of the teacher's class with subsequent monitoring of the effects of the innovation. For Wallace (1991), action research can be attractive for two reasons. First, it has a specific and immediate outcome which can be directly related to practice in the teacher's own context, and second, the findings are for primarily specific application, not for general application and therefore the methods might be more free-ranging than those of conventional research.



Many academics, such as Carr, Elliott, Kemmis, Lucas and Rudduck, have shown that teachers should research their own practice. This idea will continue to build coherence around the idea of the reflective practitioner because it is believed that a capacity for reflection offers teachers a means of sustaining the excitement of teaching and allows them to continue to learn in co-operative but self-critical company (Whitehead, 1990). As King and Wahlstorm (1993) suggest, anyone who is a teacher has to be a researcher in the sense that he/she has a hunch, collects data, and analyses what is there in order to improve what he/she is doing. To some degree, then, reflective teachers are all researchers.

## **2.5 Conclusion**

The theme of teachers as reflective practitioners has become an important point in the international current efforts to reform teaching. As a result, the model of teaching as a technical process is being challenged. Nowadays, it is acknowledged that teachers need to be more reflective in order to be control of their own professional lives. They need to improve working conditions to be more conducive to collaborative and deliberation instead of conforming to rules and procedures, and hopefully not to consider leaving the profession prematurely. Therefore, the idea of using action research as a vehicle for encouraging reflective teaching practice during pre-service teacher education is not a new one. Currently, work in action research with student teachers is ongoing at several countries such as at the USA, the UK, Finland and Australia. The main criterion for action research is that it should be addressed to practical problems and should have practical outcomes.

Therefore, the theme of teachers as reflective practitioners should be pursued vigorously in Malaysian pre-service teacher training programme. This explains why this study is focused on the problem of introducing the principles and practice

of reflective teaching in the pre-service teacher education in Malaysia Teacher Training Colleges. Parallel with the world-wide trend, reflective teaching has become an important subject in Malaysian pre-service teacher education. This will be discussed in Chapter 5. Basically there are a number of advantages of reflective teaching. However, before they are reviewed, it is essential to understand the concept of reflective teaching. The next chapter will provide an overview of what reflective teaching is all about.

## **CHAPTER 3**

### **REFLECTIVE TEACHING: AN OVERVIEW**

#### **3.1 Introduction**

This chapter will provide an overview of what reflective teaching is all about and how it is described and explained in the literature of teacher education. The chapter is divided into three sections. The first explains the concept of reflective teaching (3.2). The second explains the methods of introducing reflective teaching into pre-service teacher education (3.3). The third outlines the advantages of being a reflective teacher (3.4).

#### **3.2 The Concept of Reflective Teaching**

For the sake of clarity, this section is divided into three parts. The first offers definitions of 'reflection' and 'reflective thinking'. The second provides a framework of teacher reflection, and the third identifies some characteristics of reflective teachers.

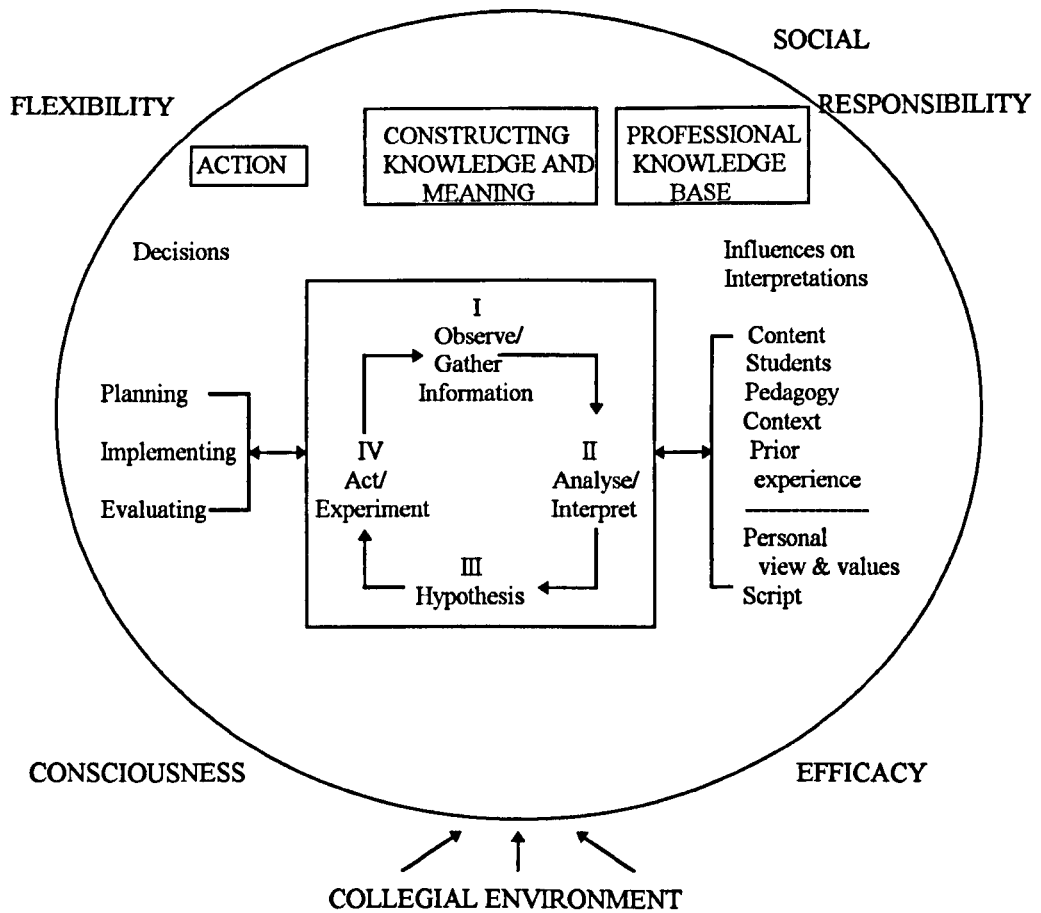
**Definition of Reflection and Reflective Thinking:** Etymologically, the word 'reflection' originates from the Latin verb 'reflectere' which means bend or turn ('flectere') backwards or back ('re') and was originally introduced in optics to describe the reflection of light against a smooth water surface, a mirror or such like (Bengtsson, 1995).

For Dewey, as cited by Van Manen (1995), 'reflective thinking' consists of several steps: (a). perplexity, confusion, doubt due to the nature of the situation in which one finds oneself; (b). conjectural anticipation and tentative interpretation of given elements or meanings of the situation and their possible consequences;

(c). examination, inspection exploration, analysis of all attainable consideration which may define and clarify a problem with which one is confronted; (d). elaboration of tentative hypothesis or suggestions, and (e). decision about a plan of action or doing something about a desired result. Basically, reflective thinking involves systematic critical and creative thinking about action with the intention of understanding its roots and processes and thus being in a position to refine, improve or change future actions (Fish, 1995). In sum, it can be said that reflection refers to an activity or a process in which an experience is recalled, considered, and evaluated, usually in relation to a broader purpose (Richards, 1991; Whitaker, 1995). On this view, reflective teaching can be interpreted as systematic enquiry into one's own practice to improve that practice and to deepen one's understanding of it (Lucas, 1991; Gilroy, 1996).

**Theoretical Framework for Teacher Reflection:** As shown in Figure 3, Colton and Sparks-Langer (1993) have integrated the cognitive, critical and personal characteristics into a theoretical framework for teacher reflection.

Figure 3 : Theoretical Framework for Teacher Reflection  
(The Reflective Teacher)



(Colton and Sparks-Langer, 1993: 48)

Colton and Sparks-Langer (1993), emphasised that, first, the reflective teacher must possess a deep understanding of the subject matter and curriculum (**content**) being taught. Next, he/she must consider the **student** being taught - their cultural backgrounds, development, interests and learning styles, among other things. Without this understanding, the teacher will not be able to decide on which **pedagogical** approach to use. Reflective teachers must also consider the **context** in which the event is happening, which includes time of day, social and school background, because what works in one situation may not work in another. Reflective teachers must also be aware of and value **prior experiences**. Reflective teachers must explore how to link the present situation to their own prior

experiences - what they know about the student, and the context, before taking the best course of action. **Personal and social values** are also important because these value systems have a profound influence on teachers' day to day teaching decisions.

In order to construct knowledge and meaning, reflective teachers **collect empirical information** from many possible areas including curriculum, students, school policies, and community interests. They begin to **analyse** the information gathered to develop mental representations or theories that help them **interpret** the situation at hand. Once they have clearly defined the situation, reflective teachers develop possible hypotheses to explain the events and guide further actions. They mentally test each **hypothesis** for its short-term effects and for its long-term social, moral and intellectual consequences. After considering the consequences of each action, reflective teachers **implement** an action plan. The cycle begins again when the consequences of the action are observed and analysed.

Colton and Sparks-Langer concluded that there are four attributes which drive the reflective teacher to engage in the decision making process: **efficacy** (belief that they can have an impact on children and schools); **flexibility** (looking at the world through other eyes to find new meanings and interpretations); **social responsibility** (participate actively in their school, district, local and global communities), and **consciousness** (can explain to other professionals their reasoning behind given actions). On top of that, collegial environments are also important where teachers feel safe and nurture thoughtful practice. In such settings, trusting relationships blossom and reflective dialogue begins.

**Characteristics of Reflective Teachers:** Being a reflective teacher involves moving beyond a primary concern with instructional techniques and 'how to'

questions and asking 'what' and 'why' questions that regard instructions and managerial techniques not as ends in themselves, but as part of broader educational purposes. Reflective teaching, therefore, is teaching which is capable of moving beyond the logic of common sense, to critical, professional thinking based upon 'a looking again', 'around' and 'about' phenomenon and, maybe, applying the 'researcher's eye', making the familiar strange, not taking for granted what is characteristically taken for granted (Hitchcock and Hughes, 1995). In addition, reflective teaching can be viewed as a means by which teachers can develop a greater level of self awareness about the nature and impact of their performance, an awareness that creates opportunities for professional growth and development (Osterman and Kottkamp, 1994). To gain a new level of insight into personal behaviour, reflective teachers assume a dual stance, being, on the one hand, the actor in a drama and, on the other hand, the critic who sits in the audience watching and analysing the entire performance. To achieve this perspective, individuals must come to an understanding of their own behaviour; they must develop a conscious awareness of their own actions and effects and the ideas or theories-in-use that shape their action strategies. As Jarvis (1992) mentioned, changes in professional awareness come if the awareness is situated in practice. The reflective teachers move from a real-life problem, to reframing the theory which accounts for the problem, to new action.

Based on the definition of reflective teachers, characteristics of reflective teachers can be seen from two dimensions, namely, teaching capabilities and self-development. In terms of teaching capabilities, there are at least six characteristics which are essential to reflective teaching: (1) analysing current pupils' progress in relation to general course goals; (2) positing some change or range of possible changes sought in the works (e.g. writing) of pupils; (3) selecting or devising a teaching strategy or set of strategies to implement the desired change; (4) devising a plan for implementing the teaching strategies; (5) assessing the impact of the

teaching strategy in order to discover the consequences and implication of the chosen frames; and, perhaps most importantly, (6) confirming or changing of the strategies used (Hillocks, 1995). Basically, reflective teachers observe the effects of their teaching. They regularly set goals for themselves which they measure by the degree of understanding displayed by their pupils. They regard pupils' responses and learning as daily assessments of teaching, considering them to be the definitive gauge of their success.

Reflective teachers have also some concern about their self-development. Based on Paris and Ayres (1994), the characteristics of reflective teachers can be summarised as follow. They engage in **self-evaluation** (such as through journal writing) to pose questions to themselves. Journal writing then becomes a tool to explore all the issues, to record and clarify thoughts. Reflective teachers revise their concepts as they make adjustments to new learning. They read professional journals, attend conferences and participate in professional organisation, so that they are aware of changes occurring in the field. They appreciate the dynamic nature of learning in themselves as well as in their pupils, and therefore, expect to make frequent changes in their teaching practice. As they consider certain aspects of their teaching, decisions are not made quickly, but by observation and careful questioning, before conclusion are finally formed. Eventually, with these characteristics, reflective teachers generate the excitement of their job when they consider their past and future growth.

Reflective teachers are not easily satisfied. They are typically pleased with the progress they have made as teachers and they expect to continue to grow in understanding as the years evolve. They are concerned about both *reflection-in-action and reflection-on-action*. The first of these is reflection on one's spontaneous ways of thinking and acting undertaken in the midst of action to



guide further action. What distinguishes reflection-in-action from other kinds of reflection is its immediate significance of action.

‘In reflection-in-action, the rethinking of some part of our knowing-in-action leads to on-the-spot experiment and further thinking that affects what we do-in the situation at hand and perhaps also in others we shall see as similar to it.’ (Schon, 1987: 29)

Teaching is complex and unpredictable. Student teachers in particular cannot rely entirely on routine ways of coping with situations. Teaching therefore involves a process of acting, reflecting on the effects of one's actions, and constantly adapting one's behaviour to the situation and purposes at hand (Calderhead, 1994). However, it is competency based, individual and isolationist rather than dialogical and, pragmatically, concerned with replacing a set of routines, strategies or practices with another set of routines, strategies or practices (Morrison, 1996). Therefore, reflective teachers also emphasise ‘after the event’ evaluation.

‘reflection after the event includes a kind of metacognition, or thinking about the thoughts and reflections you were having during the action. A teacher who reflects on action after a lesson is over might consider: What kind of decisions did I make during the lesson? What responses and reaction from the students affected those decisions? What was I thinking about and feeling during the lesson?’ (Hobson, 1996: 3)

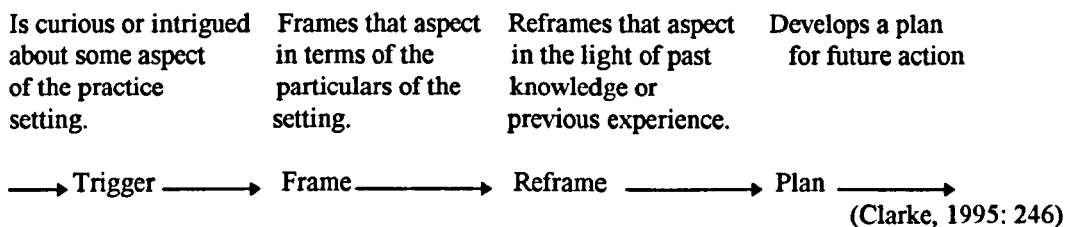
Teachers after a lesson or after the day is over, may reflect back on particular events, analysing where difficulties arose, considering how they might be surmounted and deciding on the future directions their teaching might take. Clearly, this type of reflection can clarify, understand and interpret meanings, intentions and actions through engaging with the theoretical underpinnings of practice and personal development (Pollard and Tann, 1993; Morrison, 1996). The concepts of reflection-in-action and reflection-on-action can be recapitulated

as the definition of reflective teaching as taken from Hitchcock and Hughes (1995: 11) who define it as:

‘teaching which is capable of moving beyond the logic of common sense, often expressed in anecdotal terms, and practical reasoning, to action which stems from critical, professional thinking based upon ‘a looking again’, ‘around and about phenomenon and, maybe, applying the ‘research eyes’, making the familiar strange, not taking for granted what is characteristically taken for granted and so on.’

Reflective teachers actually question their own practices by rendering problematic or questionable those aspects of teaching generally taken for granted. Inquiry, and hence reflective practice, does not accept single ideas without question; it seeks alternatives as well. Further, the inquiry process needs some degree of structure (common-sense inquiry, disciplined inquiry) to improve its efficacy (Roth, 1989). This corresponds to Schon’s (1987, 1991) definition of reflective practice as shown in Figure 4. A practitioner is reflective when he or she:

Figure 4: Schon’s Definition of Reflective Practice



Reflective practitioners are no longer expected to function as isolates but are required to talk to one another in depth about their practice and to debate issues of common concern (Corrie, 1996). The genre of work in reflective practice is illustrated when teachers contemplate their practice and begin to see their work in a new way. This contemplation leads to insights, new possibilities for understanding complex events, and new ideas for future practice (Grimmett and Mackinnon, 1992). According to Colton and Sparks-Langer (1993), reflective

teachers monitor processes employed in decision making, using 'critical reflection' which includes considering multiple perspectives or viewpoints and weighing the long-term social and moral consequences of decisions. Reflective teachers are also motivated to grow. They can make a difference in the lives of their students, in their schools and in their communities.

The ability to reflect critically upon practice is a major criterion of teachers' reflectivity and therefore central to teacher development, without which no teacher can be truly professional (Best and Lang, 1994). As Goddard (1993) summarised, critical reflection is the energising and dynamic element that enables the teacher to bring together the theory and practice. It also enables the teacher to understand teaching problem from various perspectives. Critical reflection is also a conscious process concerned with identifying and working with the gap between practice and aspiration. The process is essentially one of evaluation that underpins learning by operating upon the ideas, actions and feelings of the individual. It is believed that, at its most effective, critical reflection involves collaboration and involvement with other individuals and group in both informal and formal systems.

Based on several characteristics discussed above, what, then, are the major characteristics of the reflective teacher? The following is a summary of characteristics identified by Roth (1989: 32). A reflective teacher is one who is able to:

1. Question what, why, and how one does things; ask what, why, and how others do things.
2. Emphasise inquiry as a tool of learning.
3. Suspend judgement, wait for sufficient data, or self-validate.
4. Seek alternatives.
5. Keep an open mind.

6. Compare and contrast.
7. Seek the framework, theoretical basis, underlying rationale (of behaviours, method, techniques, programmes).
8. View from various perspectives.
9. Identify and test assumptions (theirs and others), seek conflicting evidence.
10. Put into different/varied contexts.
11. Ask 'what if ...?'
12. Ask for others' ideas and viewpoints.
13. Adapt and adjust to instability and change.
14. Function within uncertainty, complexity, and variety.
15. Hypothesise.
16. Consider consequences.
17. Validate what is given or believed.
18. Synthesise and test.
19. Seek, identify, and resolve problems ('problem setting', 'problem solving').
20. Initiate after thinking through (alternatives, consequences) or putting into context.
21. Analyse - what makes it work; in what context would it not
22. Evaluate - what worked, what didn't, and why
23. Use prescriptive models (behavioural models, protocols) only when adapted to the situation.
24. Make decisions in practice of the profession (knowledge created in use).

Based on the above characteristics, it can be argued that reflective practitioners have the inclination to practice the following elements of the reflective processes as highlighted by Ross (1989: 22).

1. Recognising an educational dilemma;
2. Responding to dilemmas by recognising both the similarities to other situations and the unique qualities of the particular situation;

3. Framing and reframing the dilemma;
4. Experimenting with the dilemma to discover the consequences and implications of various solutions;
5. Examining the intended and unintended consequences of the implemented solution and evaluating the solution by determining whether the consequences are desirable or not.

In short, the implication of the notion of reflective practitioners when developed and applied to teaching can be identified as the following six characteristics as summarised by Pollard and Tann (1993: 9).

1. Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency.
2. Reflective teaching is applied in a cyclical or spiralling process, in which teachers monitor, evaluate and revise their own practice continuously.
3. Reflective teaching requires competence in methods of classroom enquiry, to support the development of teaching competence.
4. Reflective teaching requires attitudes of open-mindedness, responsibility and wholeheartedness.
5. Reflective teaching is based on teacher judgement, which is informed partly by self-reflection and partly by insights from educational disciplines.
6. Reflective teaching, professional learning and personal fulfilment are enhanced through collaboration and dialogue with colleagues.

It is not suggested that reflection is the only way teachers can learn about him- or herself and his or her professional activities. As Bengtsson (1995) concluded, with the achievements of self-reflection the teacher can tell in what sense he or she is competent, the teacher could perhaps ameliorate his or her competence, the teacher could decide about his or her way of teaching, and the teacher could teach other people about teaching. However, knowledge of reflective methods alone is not sufficient. There must be a union of skilled methods with attitudes such as open-mindedness or sincerity, wholehearted or absorbed interest, responsibility, as

well as the need for a habit of thinking in a reflective way (Van Manen, 1995). In fact, one of the essential characteristics of effective teachers is reflective attitude. As pointed out by Cullingford (1995), no teacher can be an effective teacher without a willingness to learn and to reflect on their own teaching.

Of course, reflective skills lead to better actions and that the reflective teacher is a more effective teacher. The point of all this is obvious: teachers' benefit from paying more careful attention both to what they say and do, and how these two elements work together. Eventually, we hope prospective teachers will be continuing to learn about their work. Richert, as cited by Tafel and Fischer (1996: 130), believes that:

'Good teaching does not rest on a set of static, prescribed rules and technical strategies. Rather, shifting circumstances suggest teachers be reflective in their approach to classroom practice. Reflective teachers approach teaching as problem solving; they see teaching circumstances and conditions as problematic rather than given, and they approach each situation with an openness to both the known and the unknown.'

### **3.3 Methods for Promoting Reflective Teaching in Pre-Service Teacher Education**

According to Zeichner and Liston, (1987), promoting reflective teaching should be the 'commonplace of teaching', which requires a certain view of the curriculum and the milieu or environment of teacher education.

The **curriculum** of the programme should reflect in its form and content a view of knowledge as socially constructed rather than as certain. This requires a curriculum which is reflective rather than received, which refers to the degree to which the curriculum of a programme is specified in advance. In terms of the epistemology of the curriculum, the programme seeks to draw upon the practical

knowledge of student teachers and experienced practitioners, as well as upon insights and concepts generated within the realm of theoretical knowledge. Student teachers are active. They will analyse, understand, and evaluate their practical situations. Although the curriculum of the programme is relatively broad, the student teachers are able to be innovative, gain inquiry skills and understand the content of their teaching.

The **milieu** of the programme should be: (a) inquiry-oriented rather than 'traditional' in relation to the authority relationships which exist between student teachers and teacher educators, and (b) intended to be self-renewing. Both students and teachers in the programme should continuously re-examine its curriculum, organisation, pedagogy, and authority relationships, and work towards ongoing improvement of the programme based on knowledge gained from experience and research or evaluation.

The research literature suggests at least four methods for enhancing the reflective capabilities of prospective teachers: Inquiry; Seminar; Journal Writing, and Supervisory Conferences.

**Inquiry:** As stated by Zeichner and Liston (1987), inquiry is intended to promote student teachers' understanding of

'the contemporary cultures of their classrooms and schools, of the relationships between these educational contexts and the surrounding social, economic and political milieus, and of the historical development of these settings. The goal of this component is to have the classroom and school serve as social laboratories for study rather than as merely models for practice. It seeks to reinforce the view that student teaching is a time for continued learning about teaching and schooling and for establishing pedagogical habits of self-directed growth, rather than a time merely for the application and demonstration of previously acquired knowledge and skills. It also seeks to reinforce the view

that student teachers can be creators as well as consumers of educational knowledge.' (Zeichner and Liston, 1987: 31).

There are several different elements in the inquiry component of a pre-service teacher education programme aimed at the development of reflective teaching. The first element is peer observation. It can provide opportunities for student teachers to view each others' teaching in order to expose them to different teaching styles and to provide opportunities for critical reflection on their own teaching (Richards and Lockhart, 1994).

The second element is ethnographic studies undertaken by students in their classrooms, schools, and school communities. The studies can include such topics as the allocation of resources among students of varying abilities and backgrounds, examination of the school from the pupils' perspective, examinations of types of questions asked in different classrooms, and examinations of the implications of the language used by school staff (Zeichner and Liston, 1987). There are several potential benefits which are likely to result from the use of ethnographic methods in teacher education. For example (a). a contribution towards the development of teachers who are 'wide awake', ethically sensitive, politically conscious and personally creative; (b). sensitisation of prospective teachers to the educational and political commitments embedded in even the most mundane of school activities, and will expansion of students' ideas about what it is possible to accomplish within schools; (c). illustration of how specific student teachers saw aspects of the hidden curriculum in a school that they were not aware of before or of how student teachers saw possibilities for change that they had not noticed or thought of prior to engagement in ethnography (Zeichner (1987).



The third element is curriculum studies. Analyses by student teachers of the process of curriculum development in the settings in which they work are important aspects of projects which examine the values and assumptions embedded in particular curriculum materials and programmes. One example may be assumptions about learners and teachers or resolutions of particular 'dilemmas' of schooling. Student teachers have conducted studies of the history and context of curriculum development in particular content areas in their own settings. Here students address such questions as who made particular decisions about the curriculum, why certain decisions were made, and how particular institutional factors affected the processes of curriculum development (Zeichner and Liston, 1987). There are several potential benefits which are hypothesised to occur as a result of involving in these 'teacher empowering' approaches to curriculum development and analysis. These include: (a). student teachers develop broadened conceptions of teaching and an enhanced sense of professional autonomy, which are expected to result, and (b). the student teachers beginning to look critically at the processes and underlying values of school knowledge, at realistic alternatives within schools and at their role as future curriculum developers (Zeichner, 1987).

The significance of inquiry-oriented teacher education has led to the implementation of the concept globally especially in the U. S and the U. K. As a result, there have been proposals for the development of 'teacher innovators', 'teacher scholars', 'teacher as inquirers', 'teacher as action researchers', 'teacher as participant observers', and 'self-monitoring teachers'. All these proposals represent attempts to prepare teachers who have the inclination and skill to analyse what they are doing in terms of its effects upon children, schools and society (Zeichner, 1983). In sum, the teacher is placed in the position of questioning that which is otherwise taken for granted (Adler, 1991; Gilroy, 1996).

**Seminars:** The content of each seminar is planned by the supervisor and student teachers in each group within a set of broad parameters, and most of the assignments that students complete are linked in some way to the students' current classroom experiences. Seminars are designed to help student teachers broaden their perspectives on teaching, consider the rationales underlying alternatives possibilities for classrooms and pedagogy, and assess their own developing perspectives towards teaching. The seminars may, for example, be concerned with a critical assessment of educational research. Students read and critique studies that present different points of view on selected topics, classroom management or ability grouping and then discuss the implications of the studies for their own development as teachers. Participants in all of the seminars attempt to establish a collaborative approach to problem solving and inquiry; students are frequently encouraged to conduct collaborative projects and to make joint presentations to their seminar groups (Zeichner and Liston, 1987). According to Goodman's research (1983, 1984) as cited by Loughran (1996), the seminar group discussion can serve three important functions: a *liberalising role* which encourages unique and creative approaches to teaching; a *utilitarian role* whereby student teachers can reflect on the relationship between educational principles and educational practice; and an *analytic role*, an opportunity to raise specific educational issues or problems.

**Journal Writing:** Journal writing has now been used quite widely in teacher training and it can be a useful tool for both classroom research and personal professional development (Richards, 1991; McDonough, 1994). Basically, the goals of journal writing are to: provide a record of the significant learning experiences that have taken place; help student teachers come into touch and keep in touch with the self-development process that is taking place for them; provide student teachers with an opportunity to express, in a personal and dynamic way, their self-development; and foster a creative interaction between student teachers

and the other students as well as the facilitator (Zeichner and Liston, 1987; Richards, 1991; Jarvis, 1992; Roberts, 1994).

In this way, journal writing puts writers in a position to learn at least four important things about themselves: (1) what they know, (2) what they feel, (3) what they do and how they do it and (4) why they do it (Zeichner, 1987). In addition, student teachers who take their working journals seriously can use them as a means of deepening and extending understanding of the many (sometimes confusing) experiences that bombard them in a week of workshops, tutorials and exposures to school experience (Harrison, 1994). Moreover, as Francis (1995) notes, journal writing can stimulate growth, increase self awareness and confidence and permit teacher educators to tap the sense which student teachers are making as learners, not as teachers.

Other useful ways of using written accounts of experiences which can promote reflective teaching skills are inventory (Richards, 1991); reflection grids, (Bolitho and Wright, 1993; Chadwick, 1994) and protocol (Cruickshank and Haeefe, 1987).

**Supervisory Conferences:** The supervisory conferences that follow the formal observations of student teachers are an important learning context for reflective teaching and an opportunity for supervisors to raise issues related to specific actions and settings which have been considered at a more general level in the seminars. These conferences focus on both the classroom lessons that have been observed and the more general development of student teacher perspectives over the course of the semester. Each visit by a supervisor, for example, includes a pre-conference, observations, analysis and strategy, and a post-conference. During the observation, supervisors compile detailed narrative notes which are used to document patterns and critical incidents in classroom instruction. In

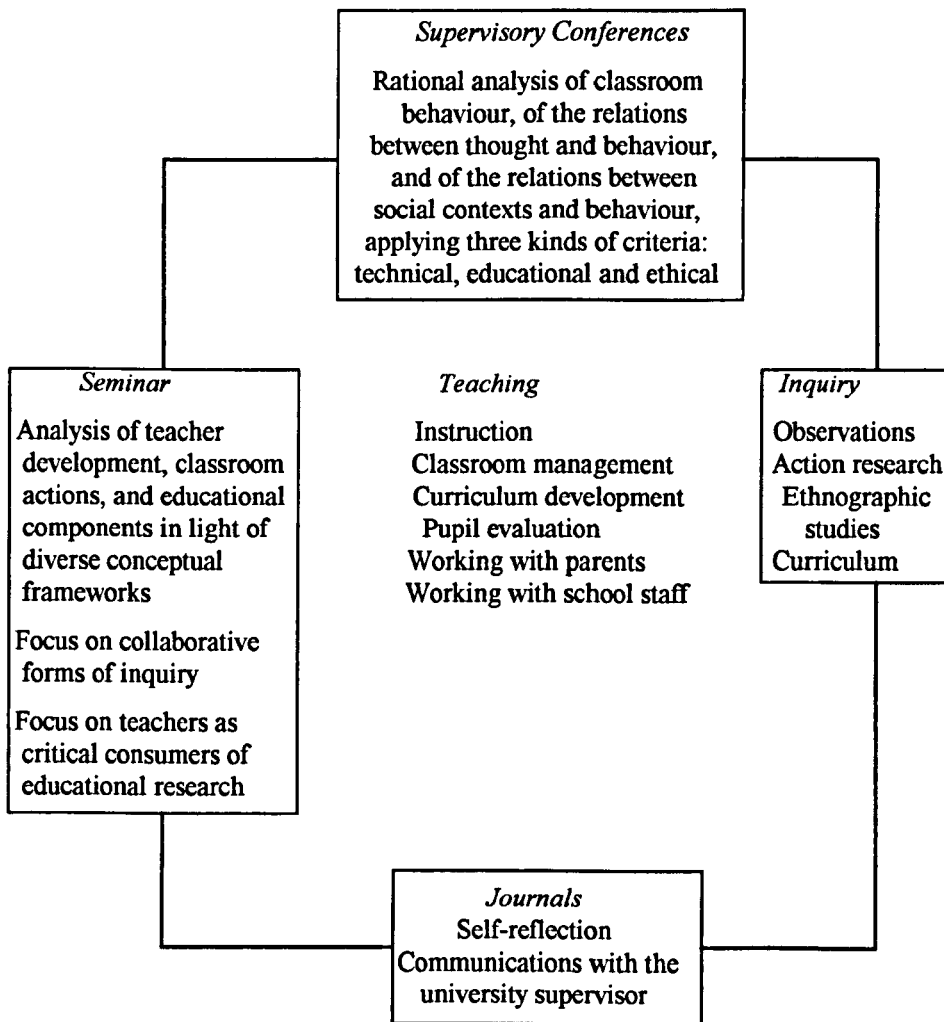
addition to focusing on observable behaviours, supervision includes an analysis and consideration of student teachers' intentions and beliefs. It also emphasises the analysis of relationships between intentions and the theoretical commitments which are embedded in classroom actions. In the process of supervision the institutional form and social context of teaching should be frequently viewed as problematic and as legitimate topics for analysis. The supervisor gives explicit attention to the content of what is taught in addition to analysing teaching processes such as direct and indirect behaviours. Questions related to the justification of particular content for specific groups of children are of primary concern; and the supervision should go beyond consideration of whether or not the student teachers' objectives have been achieved, it should place an emphasis on the analysis of unanticipated outcomes and the 'hidden curriculum' of the classroom. Here the concern is with understanding those dispositions and attitudes which are fostered (often as 'side effects') by particular forms of curriculum, classroom social relations, and instructional practices (Zeichner and Liston, 1987).

Video recording of lessons can also provide a basis for reflection. Students can capture the moment to moment processes of their own teaching. Many things happen simultaneously in a classroom, and some aspects of a lesson cannot be recalled. Many significant classroom events may not have been observed by teacher educators, hence the need of recording of actual lesson (Richards, 1991). Furthermore, this is in line with the development of information technology (IT) in the pre-service teacher education programme in order to enable each student teacher to use new technologies as everyday tools. Examples of the use of IT can be seen in various pre-service teacher education programmes such as in the U. K as demonstrated by Dunn and Ridgway (1994), and in France as illustrated by Baron and Bruillard (1994).

Micro teaching is also likely to have positive effects on both teacher educators and student teachers. For instance, in Nigeria, research has revealed that the student teachers who were exposed to micro teaching experiences demonstrated a higher quality of teaching behaviours during the teaching practice exercise. It is not difficult to see how, through micro teaching, students got the opportunity to try out some of the specific techniques with small groups and receive immediate feedback. This provides a conducive learning environment because the fear of failure, or doing things the wrong way, was minimised (Simbo, 1989).

Figure 5 (Zeichner and Liston, 1987) summarises the four main methods which make up the curricular substance of a reflective programme. However, all these four approaches can only be considered to be effective if teachers continue to be reflective outside of the training environment. Therefore, schools need to provide an organisational environment which is more supportive of reflective activity (Zeichner, 1987). The teacher training institutions must continue to build their coherence around the idea of the reflective practitioner because it is believed that a capacity for reflection offers teachers a means of sustaining the excitement of teaching and allows them to continue to learn in a co-operative but self-critical company (Rudduck, 1989). The ongoing support of the school and peer is essential. Without them, the teachers would not be as reflective, innovative or far-sighted (Johnston, 1994).

Figure 5: Methods for Promoting Reflective Teaching in Pre-service Programme



(Zeichner and Liston, 1985: 35)

### 3.4 The Advantages of Reflective Teachers

According to many educational researchers and teacher educators, there are several advantages to the teacher becoming reflective. First, according to Johnston (1994), teachers become **more complex in their thinking**. The more they recognise the complexity of the situations, the more they are assured that they are continuing to be reflective problem solvers. Teachers also reflect on changes they made or did not make. Changes come about as they try things bit by

bit in the classroom. These changes as well as their reflective skills gradually result in a shift in both their beliefs and teaching practice.

Second, according to Korthagen and Wubbels (1995), there are several critical attributes of reflective student teachers which make them different from their less reflective colleagues. The reflective student teachers are **capable of structuring situations and problems**, and consider it important to do so; use certain standard questions when structuring experiences, such as what happened, why did it happen, what did I do wrong, what could I have done differently, etc.; can easily answer the question of what he or she wants to learn; can adequately describe and analyse his or her own functioning in the interpersonal relationship with others; have better interpersonal relationships with pupils than other teachers; develop a high degree of job satisfaction; consider it important for their pupils to learn by investigating and structuring things themselves; have previously been encouraged to structure their experiences, problems, etc.; have strong feeling of personal security and self-efficacy; have a high degree of self-efficacy focus in their reflections about their teaching on the students. When they have a low sense of self-efficacy they focus on the self, and appear to talk or write relatively easily about their experiences.

Third, according to Woods (1993), reflective teachers cast a **critical eye over their work**. If it is not being productive they want to know why. They are able to confront normal processes and ask 'why' as well as 'how' questions. They bring a certain rigour to their self-appraisal. Their claims have to be supported and put to the test, just like the researcher's. They have already collected a considerable amount of evidence in the form of pupils' work; taped, photographed or filmed recordings of teaching episodes, letters, dairies, reviews and so forth: records of discussions with pupils and 'critical others'; and field notes that log the structure and processes of the event. As Kent (1993) suggests, by reflecting on

their teaching, student teachers can evaluate their impact on pupils, their priorities, their professional effectiveness, or their approaches to problems encountered with pupils. They also can explore ways of making teaching practice more meaningful and, thus, motivating.

Fourth, according to Wubbels and Korthagen (1990), student teachers who explore their own teaching through critical reflection, **develop changes in attitudes and awareness** which can benefit their professional growth as teachers. They can also improve the kind of support they provide their pupils (Richards, 1991). According to Woods (1993), Silcock (1994), and Korthagen and Wubbels (1995), being reflective practitioners, they may exploit personal knowledge which could be articulated - perhaps for personal development or study - through metaphor, story, analogy, autobiography, or co-operative discourse. They may have repertoires of reflective capabilities, or refine skills through analysis in the direction of craftsmanship, or more academically, reconcile practice in the light of traditional values, gaining increased understanding through research. Although forms of self-inquiry like journal writing, self reporting or recording lessons can be time consuming, it is a valuable tool for self-evaluation and professional growth. However, reflective teaching suggests that experience alone is insufficient for professional growth, but that experience coupled with reflection can be a powerful impetus for teacher development. Figure 6 presents a condensed summary of the various contrasting differences between the traditional and the reflective practice models of professional development.



Figure 6: Contrasting Approaches to Professional Development

	TRADITIONAL MODEL	REFLECTIVE PRACTICE MODEL
PURPOSE	Knowledge acquisition	Behavioural change
ASSUMPTIONS	Change via standardised knowledge Change: Rational	Change via self-awareness Change: Rational, emotional, social, cultural
CONTENT	Knowledge: Public Given Content Theory: Espoused theory  Theory/practice: Implicit/ discrete	Knowledge: Public and personal Given and problematic Content and process Theory and practice Behaviour: Espoused and theories-in-use, actions and outcomes Theory/practice: Explicit/ integral
PROCESS	Didactic/abstract Individual, molecular, cognitive Instructor as expert Learner as subordinate Practitioner as passive consumer	Dialectic/experimental Collaborative, holistic, personal Instructor as facilitator Learner as agent Practitioner as action researcher

(Osterman and Kottkamp, 1994: 56)

As summarised by The Centre of Educational Research and Innovation (OECD, 1994), other advantages of reflective teaching recognised by some member countries are as follows:

(i). Austria: reflective teachers' reflection will improve their communication. As communication spreads good ideas and shares understanding, it may contribute to an ongoing cycle of individual reflection, discussion, and continuous improvement (OECD, 1994).

(ii). Finland: reflective teachers use the curriculum as a starting point for their own planning, involve in self-assessment, talk about the possibility of doing things in a different way so as to attain even better results (OECD, 1994).

(iii). New Zealand: teachers reflect on their own actions and are ready to make them transparent to parents and pupils (OECD, 1994).

(iv). Sweden: reflective teachers talk about how they could utilise the fact that they teach the same subject to several different classes of pupils as an opportunity to try out a range of methods and find out what works best (OECD, 1994).

(v). USA: reflective teachers are open to changing their whole philosophy, and attend national workshops. They learn actively and carefully monitor the effects of their teaching (OECD, 1994).

The advantages of reflective teaching may be summarised as follows. Based on Paris and Ayres (1994), reflective teachers are those who enjoy collaborating on projects. Working with other teachers at the same grade level in planning teaching activities encourages teachers to appreciate each others' special talents, to draw upon each other as resources, and to provide support for their own teaching. Such collegial relationships will increase the sense of respect and support that they offer to each other, so they feel that the underlying philosophy of their teaching is strengthened by open discussion. They depend on each other as key influences in their personal and professional development. They also will have the ability to determine the focus of their teaching, which helps them to become comfortable with the challenge it poses. They are aware the strengths that will enable them to achieve the goals they set for themselves.

Reflective teachers are also aware of the areas in which they are not strong, and they address them directly. By consistently addressing issues and evaluating their progress, a sense of accomplishment is attained. These teachers display the kind of self-reflective behaviour that they are nurturing in their pupils. They also display characteristics of self-regulated learners. Reflective teachers have procedural knowledge pertaining to pedagogy so that they can successfully implement the teaching strategies they have learned. Although some of their procedural knowledge was learned in school, however, most of it is the result of experience and their own sensitivity to pupils' responses. Reflective teachers understand that there are differences between individuals and groups of children, as well as differences in the context of learning. Therefore, they adjust their teaching approach consistently as they guide their pupils towards understanding concepts and using the skills they learn in school. Finally, reflective teachers apply strategies for maintaining a focus towards their chosen goals. They are persistent, strategically minded, and directed in their efforts to provide the best possible learning environment for their pupils.

### **3.5 Conclusion**

This chapter has sought to clarify the meaning of reflective teaching, indicate the main methods used in teacher education to promote reflective practice, and identify what are seen as its main characteristics and advantages. Generally, reflective teaching is viewed as a means by which practitioners can develop a greater level of self-awareness about the nature and impact of their performance, an awareness that creates opportunities for professional growth and development. To be more precise, the notion of reflective teaching is referred to as 'reflective action' which is contrasted to 'routine action'. Routine action is guided by factors such as tradition, habit and authority and by institutional definitions and expectations. By implication, it is relatively static and is thus unresponsive to

changing priorities and circumstances. Reflective action, on the other hand, involves a willingness to engage in constant self-appraisal and development. The implications of reflective action in teaching can be identified in terms of six key characteristics. These characteristics will be used in this study in order to explore the extent to which student teachers have gained and inclined to practice the characteristics in their practice (Chapter 9, see 9.4).

There are several methods for enhancing reflective teaching skills of student teachers. Basically all the methods are helpful for teachers as they grapple with the challenge of their commitments which eventually will lead them to set personal goals that will enable them to develop in those areas. However, it seems that journal writing is the most commonly used method. Through writing, teachers examine the areas they feel are weakest. They pose questions to themselves that are not easily answered by the pupils or themselves. Journals, then, become a tool for teachers to record and clarify thoughts. In sum, a reflective teacher is one who knows his/her own weaknesses and strengths, and understands the differences among their pupils. It is also clear that teaching practice in teacher education programmes offers an important opportunity to promote reflective teaching skills. Therefore, the next chapter will discuss this matter.

## **CHAPTER 4**

### **THE ROLE OF TEACHING PRACTICE IN DEVELOPING REFLECTIVE TEACHERS**

#### **4.1 Introduction**

This chapter will discuss teaching practice as a major component in pre-service teacher education. It will offer an overview of the importance of teaching practice in enhancing the reflective capabilities of student teachers (4.2), and the importance of the triadic relationship between student teachers, teacher educators and co-operating teachers in nurturing reflective practice among student teachers (4.3). It will also discuss the role of co-operating teachers in nurturing reflective teaching skills (4.4).

#### **4.2 Teaching Practice as a Platform for Reflective Teaching**

Teaching practice as a major component of the pre-service teacher education course is one of a variety of terms applied to that part of a student teacher's professional training that involves the student in trying to teach pupils in school. Other terms used more or less synonymously are 'school experience', 'student teaching', 'field experience', and 'practicum' (Stones, 1987). According to Ellis (1986), teacher training practices can be divided into those that are experiential and those that are awareness raising. Experiential practices involve the trainee in actual teaching. This occurs when the student teachers are required to teach pupils in real classrooms, or in 'stimulated' practice, as for instance, when the student teachers engage in peer training. Awareness raising practices are intended to develop the student teachers' conscious understanding of the principles underlying the programme and/or the practical techniques that they can use in different kinds of lesson. These two purposes do not need to be separated. That

is, teaching practice can be used not only to develop the trainees' practical classroom know how, but also to develop understanding of particular issues through reflection and evaluation.

Several studies deal with teaching practice as an entity in itself. In general, many of these studies found that teaching practice can minimise barriers that exist between the world of school and the college, which hinder the development of a skilful and reflective professional practice. For example, in Canada, student teachers view practice teaching as an opportunity to adapt to the role of the teacher. They also place considerable importance on learning to interact with children, and see the main criterion of success as the demonstration of interest and enthusiasm (Wideen and Holborn, 1990). In Australia, student teachers claim that teaching practice is the most realistic aspect of their course, helping them to reduce their anxiety, to develop realistic perspectives about pupils and their own curriculum knowledge, to highlight their inability to adequately implement inquiry teaching, and to explore their own capabilities (Tisher 1990). A research from the USA by Rothenberg et al. (1993) supports this finding. In this research, the student teachers were found to be confident about their capabilities after they had experience in elementary classrooms with pupils. Furthermore, those student teachers with more experience were also more confident after their student teaching. Similarly in Singapore, it was found that the level of confidence of student teachers in terms of their ability to perform the difference classroom roles was high over the ten week period of teaching practice, which reflected the creditably of the courses (Kam, 1990).

The drive to increase the amount of time prospective teachers spend in school is motivated fundamentally by the belief that the best way to learn to teach is to learn from outstanding teachers in 'real world' situations. The student teachers' tasks and experiences are planned to complement and illuminate each other rather

than being two different and separately planned agendas (Benton, 1990). Furthermore, 'teachable moment' occurs when student teachers experience the complexities of teaching and are given direct feedback, which, in turn, they can test by making the suggested correction and by learning what happens as a result. On this view, teaching is basically an art that should be structured less by scientific principles than by intuition, common sense, and lessons derived from experience. It follows that current teachers have useful knowledge to share with those learning to teach (Hawley, 1992). Close involvement with a school equips each student teacher with the set of immediate skills and instrumental competencies they need to survive. It aims to develop in student teachers complementary attitudes, values, knowledge and understanding of the reflective practitioner which are seminal to their long term membership of a profession (Nichol, 1993). School-based time gives student teachers an 'in-depth' experience, and access to a broader perspective on practice (Hargreaves, 1990; Aspland and Brown, 1993; Newton, 1994). Student teachers are able to understand the nature of teaching only by actually doing it and during the practice term they can learn largely by their own effort. They also will be able to share experiences with other student teachers and tutors both about teaching and about learning to teach (Kyriacou and Lin, 1994).

Although some studies and descriptions of practical teaching situations report positive outcomes, the picture that emerges from the various research findings is quite dismal, especially when focusing on the co-operating teacher's or mentor's role in helping student teachers to practice reflective teaching skills. As mentioned by Stones (1987), much of the student teachers' time on teaching practice goes on without this guidance and in many schools, students are used as surrogate teachers who, after a brief induction into the school, operate without the direct supervision of the co-operating teachers. If any, it is rarely related to pedagogical principles but mostly consists of practical advice from a corpus of craft 'know-how' developed over time by teachers. For example, studies in Germany (Klinzing,

1990), India (Govinda and Buch, 1990) and Israel (Peretz, 1990) indicated that student teachers are given an unrealistic picture of teaching, and perceive pre-service education, especially practical aspects such as practice teaching, as inadequate. These findings were not surprising because the students teachers in pre-service programmes were less concerned about subject matter which may be the result of devoting a considerable amount of time to theory in the teacher colleges (Tamir, 1991). Additionally, they may learn utilitarian or short term goals, such as classroom order and control, but neglect long range concerns about such things as curriculum improvement or children understanding (Rothenberg et al. 1993).

A number of explanations for the above findings can be offered. According to Hawley (1992), the lessons prospective teachers are taught in the college are not reinforced and may indeed be contradicted by the lessons they learn explicitly and implicitly from classroom teachers. Sometimes the inconsistency comes from differences between teacher educators and co-operating teachers about what is worth knowing. Second, co-operating teachers who are to serve as role models often have no training in how to facilitate learning among student teachers. Third, co-operating teachers often lack the time and the motivation to play a major role in the education of teachers. Among the reasons for this are: the absence of economic or career advancement incentives for exerting the extra effort; the absence of release time from already heavy burdens of teaching; or the absence of support from principals or fellow teachers for teacher training activities. In addition, Koehler (1988) has identified another two barriers. First, co-operating teachers are not willing to allow their student teachers to observe them in classroom. As a result, the student teachers are not exposed in the schools to a model of learning to teach that relies on rigorous analysis of teaching. Second, co-operating teachers' lack of ability or unwillingness to engage in reflection on their student teachers' classroom practices contributes to the poor quality of



feedback received by the student teachers. It also leads to confusion and frustration.

Indeed, to promote reflection, teacher educators and co-operating teachers need to become more reflective themselves (Elliott, 1993; Carson, 1995). What student teachers want from educators is not only clear and consistent expectations, positive feedback, and careful evaluation, but also a professional relationship based on trust, support, understanding, and consideration. Student teachers also desire educators who offer constructive criticism, who share ideas and materials with them, and provide such opportunities and support that they can experiment, innovate and develop teaching strategies on their own initiative (Turney, 1987). Similarly, as stated by Lucas (1991), whilst having a basic coherence, a clear rationale should also be flexible enough to enable teacher educators or co-operating teachers to respond to the student teachers as individuals.

A number of programmes have been developed to deal with these expectations. For example, several pre-service teacher education programmes are designed to develop reflective habits in their students (see for example, Zeichner and Liston, 1987; Rudduck, 1989; Kyriacou, 1994). These programmes argue that effective supervision must take place within a context that rewards reflection and the critical analysis of teaching. To achieve this, co-operating teachers should be given training in the analysis of teaching and supervision or they may revert to the 'learn by experience' norms prevalent in most schools (Koehler, 1988). Clearly, reflective supervision may encourage student teachers to become more reflective, especially if a range of newer features is included such as requiring the student teachers to decide on the aspects of their teaching to be studied (to establish the agenda for lesson observation and post-lesson discussion) and the ground of discussion on the supervisors detailed descriptive record of the events

of the lesson. According to Calderhead (1989) and Lucas (1991), these newer practices are to be welcomed for the following reasons.

1. The importance of finding ways of encouraging appropriate habits from the start of teachers' careers is enhanced by the fact that policy on teacher education, in several countries has begun to acknowledge the role of teachers reflection, professional judgement, and self evaluation
2. The more reflection is explicitly encouraged, worked on, developed, and analysed, the more we are likely to learn it and understand what it might mean.
3. The incorporation of reflective practice into initial teacher education programmes tends to be piecemeal and patchy even within a single institution, and it now seems clear that all aspects of an institution's programme, including supervision of practical teaching, ought to be restructured to express reflective goals.

In short, teaching practice should provide student teachers with the opportunity to apply reflective teaching skills and allow them to develop further such skills. As a result, attention is increasingly being paid to student teaching practice in initial teacher training to encourage student teachers to become more reflective (Lucas, 1991; Lucas and True, 1993; Hedge and Whitney, 1996), in the belief that school experience is the best means of ensuring the acquisition and development of those classroom skills and competencies required by prospective teachers (Stark, 1994). With such experience, student teachers become more effective than those who have little or no formal training before they teach (Zimpher and Howey, 1990), and they become more concerned about themselves as teachers as well as about their pupils (Turney, 1987). Generally, the reflective student teachers are often restive, questioning and challenging, allowing the supervisor little opportunity for complacency (Bolin, 1988; Moore, 1996).

From these perspectives, the teaching practice programmes which incline towards traditional supervisory practices which do not encourage reflection seem totally unacceptable and constitute a serious obstacle. Boydell's (1986) review of

the literature on supervision indicates some weaknesses in the traditional supervisory practices. This suggests it is likely that the introduction and operationalisation of reflection in initial teacher education programme is being severely hindered by people who have the task of promoting reflection. For instance, if a teacher educator remains a hard-nosed judge zealously assessing competence, or remains merely a 'visitor' concerned crucially to preserve harmony between him or herself, the co-operating teacher, and the student teacher, then it will not be surprising that he or she does not facilitate post-lesson reflection in appropriate ways.

#### **4.3 The Importance of the Triadic Relationship in Nurturing Reflective Teaching During Teaching Practice**

The triadic relationship between teacher educator, student teacher and co-operating teacher is very important particularly as the main point of contact between the institutions and schools. For example, in the UK, closer liaison between training institutions and schools, and a more realistic appreciation of class teaching by tutors via regular refresher teaching are now required features of all teacher training courses (Hodgkinson, 1993). This is actually in line with the Circular 9/92 (England) and 35/92 (Wales) which emphasise that Teacher Training Institutions and schools should form 'partnerships' to ensure an effective school basis for initial teacher training.

The importance of the triadic relationship is also recognised in the recent changes in pre-service teacher education courses which emphasise the importance of reflective practitioners. In such model, it is argued that school experience should provide student teachers with a source of immediate practical experience on which to reflect, although the range of experiences is likely to be somewhat limited. Student teachers will test out and refine their skills and knowledge,

adding to the store of experiences which can be drawn upon. In addition, they will acquire experiences for reflection through observing the practices of the classroom teachers. Supplementing this experiential knowledge will be the theoretical knowledge gained from a variety of resources including personal reading and the teaching programmes of the training institutions.

Teacher educators from the training institution usually know the student teachers quite well on both personal and professional levels. They are able to offer a different perspective from that of the teachers in charge as a consequence of their knowledge of many schools and students. They are therefore important for ensuring a degree of 'quality control'. In a study by Harrison et al. (1989), student teachers and teacher educators identified four principal roles for teacher educators: (i) helper, encourager, counsellor as well as friend; (ii) constructive, critic, adviser and/or consultant; (iii) detached researcher as well as a neutral recorder, and (iv) assessor, judge or evaluator. In addition to these roles it was also felt that there is a responsibility for maintaining an overview of the professional development of the student teachers. Where the educators are also the personal tutors of the students concerned, this is of particular importance. On top of this, teacher educators should be approachable, open minded and aware of the particular circumstances of the placement. They should give feedback (both positive and critical) and advice, which should be constructive. Their expectations of the student teachers should be explicit, specific and clear and they should make efforts to communicate with the other teachers and help them to understand the students' position (Stark, 1994).

As far as the role of co-operating teachers at school is concerned, many studies show that good relationships with co-operating teachers are important during teaching practice. Among their findings were: student teachers wanted to be seen as a fully fledged professional teacher by the school and wanted support,

advice and constructive criticisms on basic points of classroom teaching (Harrison et al. 1991). Both co-operating teachers and student teachers need closer co-operation, openness and frankness in their dealing. The earlier this is achieved in the practice, the better (Hayes, 1991). Most research also conform Koehler's (1988) finding that the co-operating teacher is the most influential factor in the student teaching experience, not least because co-operating teachers are more oriented towards the practical and particular rather than towards theory and generalisations.

The triadic relationship also presents opportunities for student teachers to escape from being prisoners in their own classroom by combining action and reflection. One means of achieving less isolation is through the active encouragement of critical friendships. According to Day (1995), the advantages of critical friends are, they can: (i) lighten the energy and time loads for observation; (ii) be used to check against bias in self-reporting, and to assist in more lengthy processes of self-evaluation; (iii) offer, where appropriate, comparisons with classroom practice elsewhere; (iv) move freely and see the curriculum in action, and (v) focus on an agreed issue or area of concern, such as small group task work. Therefore, critical friendships as one of the elements within professional development schemes can help student teachers reinforce a sense of responsibility and confidence in teachers' professionalism. Clearly, the triadic partnership in initial teacher training should be strengthened, not weakened or even removed (Harrison et al. 1990; Bonnett, 1996). Even most of the training institutions in Europe continue to arrange teaching practice on a broadly triadic basis of partnership (Harrison et al. 1991).

#### **4.4. The Importance of Co-Operating Teachers' Role in the Nurturing of Reflective Teaching Skills.**

'Co-operating teacher' or 'mentor' refers to the subject specialist, responsible for the immediate welfare of a student teacher. The mentor's role is, moreover defined in terms of his/her place of work - the school and, in particular, the classroom. While his or her role may involve contributions to college sessions and assessment in a school setting, his or her main function is to do what a college tutor cannot adequately do (Monaghan and Lunt, 1992) especially day to day supervision of each student teacher.

The role of co-operating teachers in teaching practice is crucial to the development of student teachers because they see the students on a day to day basis, unlike college tutors who see their students in a few visits only (Miles et al. 1994; Hedge and Whitney, 1996). In addition to providing a supportive environment, co-operating teachers are also aware of the responsibilities which the role carries and confident in their ability to meet them. However, the assessment of the student teachers, seems to pose particular problems for co-operating teachers and many co-operating teachers are reluctant to review students' work critically and tend to avoid making negative remarks (Stark, 1994).

The concept of mentoring suggests an expert professional, guiding the apprentice teacher but with the addition of a more precise instructional dimension. The mentor's roles involve being an instructor, a teacher, a counsellor and an assessor rather more than simply a craft expert (Jacques, 1992). The importance of mentors' roles is endorsed by a research about the strengths of mentors or co-operating teachers by Williams (1993). These are both about specific skills such as communication or listening, and about the importance of wanting to work with student teachers. Mentoring is the most effective way of providing feedback

because the mentor is in the school full time. Moreover, the majority of mentors in this study felt competent to help student teachers with lesson preparation or with classroom management. Nevertheless, a number of mentors have identified a need for training in order to help student teachers. They need training, for example, in helping student teachers to set targets and in assessing their overall performance or providing written feedback on lessons.

As far as the co-operating teacher's role in nurturing reflective teaching is concerned, Wood (1991) has represented what he believes to be essential in forming an effective co-operating teacher-student teacher partnership.

1. Each student teacher has a unique background and enters within his or her own set of pedagogic experiences, expectations and values. Their levels of reflection range from concrete to abstract. While some are concerned with specific activities and projects, others are able to generate a variety of options for various situations and see each activity as a part of a whole curriculum. The co-operating teacher should assess this entering knowledge and experience base and begin working at the appropriate level.
2. It is important to establish a sense of partnership in which the student teacher and co-operating teacher can both share observations and feedback. Student teachers should realise the value of teaching as a collaborative activity rather than one of isolation.
3. The classroom environment must support the student teacher's growth and encourage the development of their own style. Although student teaching takes place in an existing classroom structure, the student teacher must be allowed to experiment. With this experimenting comes accountability as well as the challenge to take on more responsibilities as the practice progresses.
4. The co-operating teacher must be an active educator and should serve as a model as a reflective teacher. Among other qualities, reflective teachers are aware of and able to articulate their views about teaching; are in touch with their pupils' interests, thinking, and learning styles; are open to change; and value staff development as an integral part of teaching.

The importance of choosing reflective teachers as mentors is obvious in order to ensure that student teachers themselves become reflective. In particular,

according to Turner (1993), the pro-active and reflective mentor helps beginners: (a). to learn about teaching; (b). to feel good about teaching; (c). to manage their workloads; (d). to become part of the school community, and (e). to give personal support. Along the same line, Brooks et al. (1994) emphasise that positive mentoring should encourage student teachers to view their own professional development in terms of: (a). defining closely what they want to achieve; (b). describing what the end-product is going to look like; (c). stating clearly the criteria for success; (d). checking progress towards goals, and (e). revising goals. Mentors, therefore, should carry out the function of pointing out the way, offering support, and challenging beliefs and values (Pocklington and Weindling, 1996). Typically, they help trainees to understand how things get done and how to best use their own strengths (Daloz, 1986; Hamilton, 1994). In addition, it is suggested that the most appropriate mentor is an experienced colleague, not too distant in age from the probationer, who is teaching a class of roughly the same age group, the same kind of syllabus and within a similar philosophy (Olson and Carter, 1989; Turner, 1993). Therefore, co-operating teachers should be carefully selected and trained (Schuttenberg, 1983; HMI, 1989; Shaw, 1992) in nurturing reflective teaching skills in prospective teachers.

#### **4.5 Conclusion**

What this chapter shows is the need to prepare student teachers for reflective practice from the beginning of their training. The examination of the research literature suggests that teaching practice is an important platform for developing reflective teaching. In order to do this, teaching practice should challenge student teachers in a way which helps them to become more reflective about their teaching. What this chapter also shows is that all parties involved in initial teacher education - teacher educators and co-operating teachers have an important role to play in nurturing reflective teaching skills in student teachers and that the triadic



relationship should be strengthened and refined for this purpose. Therefore, a good triadic relationship (teacher educator - co-operating teacher - student teacher) is needed because it generates many advantages especially to student teachers during their school-based teaching practice. For example, student teachers are trained to reflect, have better teacher-pupil relationships, and can contribute to the effectiveness of pre-service programme particularly in the nurturing of reflective teaching in their professional development.

Essentially, this chapter indicates that the development of reflective student teachers requires the commitment and efforts of reflective educators, particularly co-operating teachers. For this to occur, co-operating teachers must be highly qualified, committed, skilful in reflective thinking and committed to pre-service's programme goals. Without this support, reflective teaching will never be more than a slogan in the Malaysian Teacher Training Colleges. The next chapter discusses the background of the pre-service teacher education in Malaysian Teacher Training Colleges.

## **CHAPTER 5**

### **THE BACKGROUND TO PRE-SERVICE TEACHER EDUCATION IN MALAYSIAN TEACHER TRAINING COLLEGES**

#### **5.1 Introduction**

This chapter will explain the background of pre-service teacher education in Malaysian Teacher Training Colleges (TTCs). It consists of four sections. A brief description of the historical development of pre-service teacher education in Malaysia (5.2). An outline of the components of pre-service teacher education in Malaysia (5.3). Assumption of the National Philosophy of Education and the Philosophy of Teacher Education (5.4), and an outline of the extent to which reflective teaching is currently evident in Malaysian pre-service teacher education (5.5).

#### **5.2 The Development of Pre-Service Teacher Education Programme**

Malaysia was a British colony until independence in 1957. From 1816 to 1922, vernacular schools (English, Malay, Chinese and Tamil) sprang up in an *ad hoc* manner, as did teacher training programmes. A more systematic teacher education programme introduced by the Woolly Committee (1870) gave priority to the training of Malay medium teachers since the teachers for English, Chinese and Tamil medium Schools could be imported. The Straits Settlements Department of Education selected Singapore Malay High School to be the college for the training of Malay school teachers in 1878. In 1895 it was closed down. Later, Malay Training College was set up in Melaka (1900) and Matang, Perak (1913) which also closed with the establishment of Sultan Idris Training College in 1922. In 1935, Malay Women Training College was formed to take care of the education needs of young Malay women. The development of teacher education accelerated

after Independence (1957). To date 31 training institutes/colleges have been established (Figure 7). Two of these colleges produce teachers for Islamic education and teachers for vocational and technical education respectively. In addition, 6 local universities have each opened a Faculty of Education. Teacher education moved another step forward with the implementation of post graduate courses and twinning programmes with local and foreign universities (Teacher Education Division, 1992).

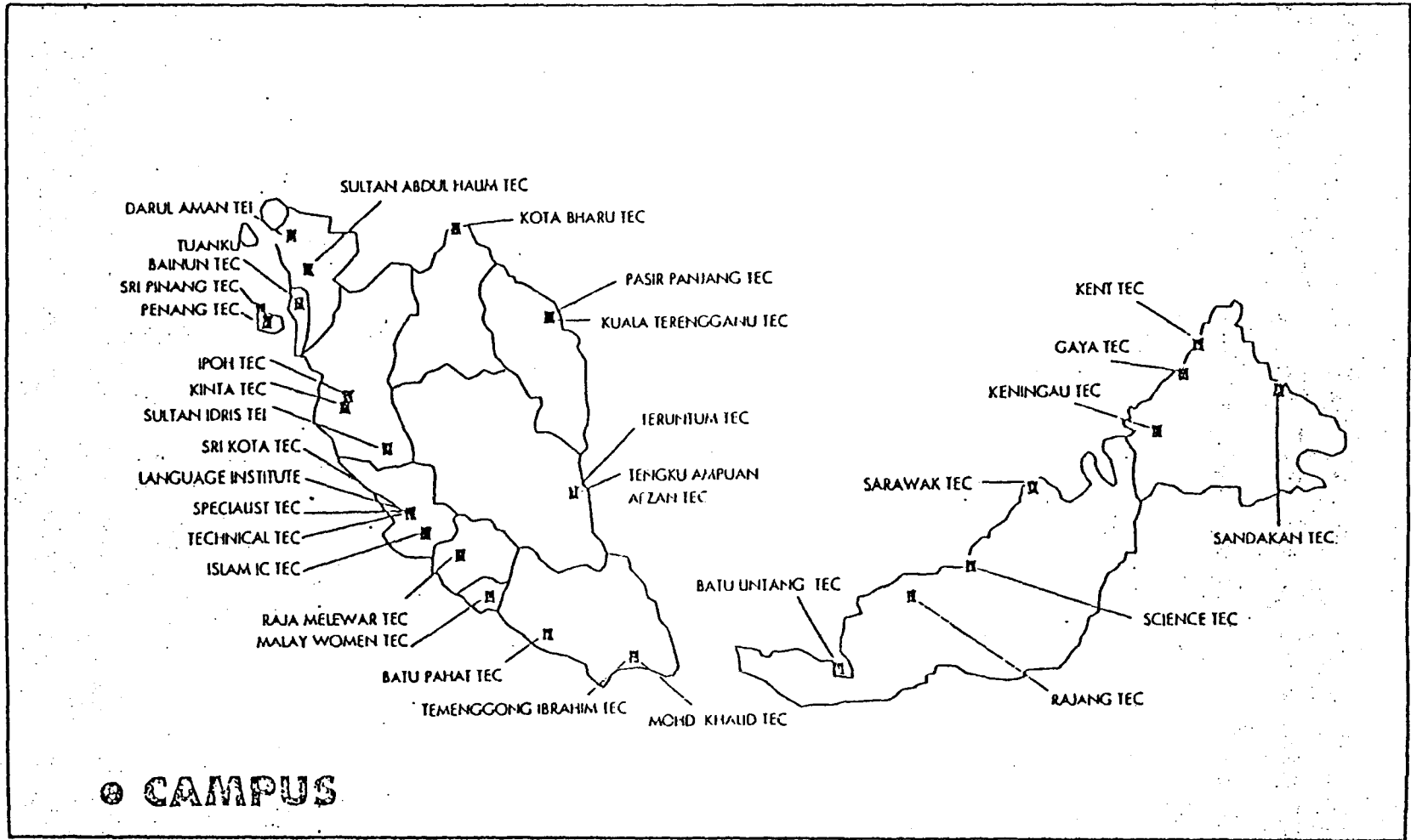
Due to a shortage of teachers, the task of teacher education and training is undertaken by both the universities and teacher colleges. In the past, primary school teachers were trained in teacher colleges and secondary school teachers by universities. However, the demand for more teachers changed this model of training. Lately, not only have most of the teacher colleges produced both primary and secondary school teachers, but they have also offered training courses for pre-school teachers, subject specialist teachers and teachers for the handicapped. In 1992, the total number of trained teachers in Malaysia was 189,696, of which 82.1% are college-trained teachers and 17.9% are university graduates. The total enrolment of student teachers in all teacher training colleges in 1992 was 25,293 for primary schools and 5,255 for secondary schools with an average intake of 17,464 yearly (EPRD, 1994).

The duration of courses offered at TTCs varies according to the type of courses offered: a Post-Graduate Diploma in Education open to university graduates who wish to venture into the field of education lasts for one year; a Certificate in Education lasts for five semester (2 1/2 years); a Certificate in Education for those specialising in technical and vocational education lasts for six-semester (3 years). In addition to these regular courses, some teacher training colleges also conduct a three-stage pre-service semester-break course, leading to a basic Certificate in Education.

The five semester (2 1/2 years) programme is the main programme of all TTCs. Teachers graduating from this programme are known as 'College Trained' or 'Non-graduate Teachers' and are usually placed in primary schools, although some are posted as lower forms teachers at secondary schools, vocational and technical schools.

Entry qualification for this course is the Sijil Pelajaran Malaysia (Malaysia Certificate of Education) or the Sijil Pelajaran Malaysia, Vokasional (Malaysian Vocational Certificate of Education). To qualify, the candidate must have a credit level pass in Bahasa Malaysia and four other credits in subjects relevant to the course applied (Teacher Education Division, 1992).

Figure 7: Teacher Education Institutes/Colleges in Malaysia



(Teacher Education Division, 1995)

### 5.3 The Components of Pre-Service Teacher Education Programme

The Teacher Education Division (1992) states that the objectives of the teacher education programme are as follows:

1. To produce trained teachers of high calibre in sufficient numbers to meet the requirements of all types of school within the education system - primary, secondary, vocational and technical. Teachers of high calibre are those who are highly motivated:
  - to be active agents in efforts to build a united Malaysian nation dedicated to a democratic way of life;
  - to inculcate in their pupils the spirits of Rukun Negara (National Ideology);
  - to be responsive to the challenge of meeting the country's manpower needs through the development of human potential among the youths of the country;
  - to foster aesthetic, moral, physical and spiritual development among their pupils so that they can lead full and meaningful lives.
2. To improve the skills and efficiency, and to update the knowledge, of trained teachers and lectures in academic and professional areas.

In order to achieve these objectives, the components of the Malaysian pre-service teacher education programme is divided into two: curriculum and extra curricular activities. In terms of **curriculum**, there are three basic components: the Core component, the School Subject component, and the Self-Enrichment component. The Core Subject component includes Educational Psychology, Pedagogy, Education in Malaysia, Malay Language, English Language, Educational Technology, Islamic Religious Education/Moral Education, Islamic Civilisation, Historical Development of Malaysia and General Education Service matters.

In the School Subject component, primary school student teachers are required to take a pedagogical course in Mathematics, Man and His Environment, Moral Education, Physical Education, Music and Art. Secondary school student teachers are required to take Moral Education, Physical Education, Health Education and a course in the New Primary School Curriculum.

The Self-Enrichment component enables student teachers for primary and secondary schools to take a course in Home Economics. In addition, student teachers for secondary schools also follow courses in Music and Art.

All the student teachers are also required to undergo 19 weeks of school attachment for teaching practice. 9 weeks in Semester III and 10 weeks in Semester V. The course structure and components are shown in Table 1 and Table 2.

Table 1: The Structure of Pre-Service Five Semester Teacher Education Programme

SEMESTER	I	II	III	IV	V	TOTAL
Interaction	17	21	10	22	7	77
Examination	-	1	-	-	1	2
Orientation Group Programme	1	-	-	-	-	1
Teaching Practice	-	-	9	-	10	19
Self Resilience Programme	1	-	-	-	-	1
Service Orientation	-	-	-	-	1	1
<b>TOTAL</b>	<b>19</b>	<b>22</b>	<b>19</b>	<b>22</b>	<b>19</b>	<b>101</b>

(Teacher Education Division, 1992)

Table 2: The Course Component of Pre-service Teacher Education

COMPONENT	COURSE	
	Primary Teacher Education	Secondary Teacher Education
A. Core Subjects	860 hrs	860 hrs
B. Specialisation	230 hrs	547 hrs
C. School Subjects	693 hrs	252 hrs
D. Self Enrichment	97 hrs	135 hrs
E. Teaching Practice (for both courses in the third and fifth semesters)	19 weeks	19 weeks
F. Extra curriculum (2 sessions x 1 1/2 hrs x 4 semesters)	210 hrs	210 hrs
<b>TOTAL</b>	<b>2090 hrs</b>	<b>2004 hrs</b>
G. Tutorials (Academic/ Guidance)	430 hrs	478 hrs
H. Resilience Programme	1 week	1 week
<b>GRAND TOTAL</b>	<b>2520 hrs</b>	<b>2483 hrs</b>

The actual time will differ according to area of specialisation when course adjustment is taken into account.

(Teacher Education Division, 1992)

**Extra curricular activities** constitute an important element in the teacher training programme. Student teachers are required to participate fully in college extra curricular activities so that they will be able to carry out their responsibilities in school in a systematic and effective way. Extra curricular activities in teacher training colleges emphasise the following skills: skills in management and organisation, skills in coaching and training, and skills in officiating and leadership. These extra curricular activities are categorised into three units: sports/games; clubs and societies and uniformed bodies. Table 3 shows the various extra curricular activities undertaken in teacher training colleges. (EPRD, 1994).

Table 3: Extra Curricular Activities in Teacher Training College

2 sessions per week	Semester I	Semester II	Semester III	Semester IV	Semester V
Session 1	Sport/ Games	Sport/ Games	Sport/ Games	Clubs & Societies	-
Session 2	Clubs & Societies	Uniformed Units	Uniformed Units	Uniformed Units	-

(EPRD, 1994: 45)



Apart from the objectives stated earlier, the teacher education programme aims to inculcate positive values and attitudes in the character building of the student teachers. Other programmes which aim to achieve this include morning exercises, mass prayers, citizenship and civics course, Islamic leadership courses, navigation experience, debate, test on reading and interpretation of Al-Quran, self resilience programme and group dynamics.

#### **5.4 The National Philosophy of Education and the Philosophy of Teacher Education**

The National Philosophy of Education in Malaysia is derived from the ideology of the nation which permeates the Rukun Negara (National Ideology), the New Economic Policy, the National Education Policy and 'Vision 2020'. This philosophy of education is reflected in the goals of education in terms of individual development and societal demands, viz.

1. At an **individual** level, education caters for the development of human resources in terms of the optimum development of individual potential (physical, intellectual, moral, emotional and aesthetic development) to ensure meaningful survival within the framework of societal needs and demands.
2. At a **societal** level, formal education in Malaysia is viewed as an instrument for achieving national unity and equipping the country with appropriate education and training for economic development.
3. Education is also responsible for the preservation, the development and transmission of national culture and heritage.

In Malaysia it is regarded important for student teachers to be taught the Malaysian educational philosophy so as to enable them to recognise the problematic, ambiguous, tentative and uncertain nature of human action and to understand areas as complex as those of educating, teaching and learning. The Philosophy of education in Malaysia is viewed as the means of clarifying the terms,

thoughts and principles that guide educational policies and practices. It proposes ends, or goals for education and suggests means to those ends. It unites and combines educational goals, policies and practices into a logical, consistent and coherent whole. With such understanding, Malaysian prospective teachers can justify current practices and/or guide future actions.

Today, all the teacher training institutes/colleges are under The Teacher Education Division of the Ministry of Education in Malaysia which plays a significant role in the implementation of the 'National Philosophy of Education'.

It states that:

'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. Such an effort is designed to produce Malaysian Citizens who are knowledgeable and competent, who possess high moral standard and who are responsible and capable of achieving a high level of personal well-being as well being able to contribute to the harmony and betterment of the family, the society and the nation at large.'

(EPRD, 1994: vii)

The Philosophy of Teacher Education is derived from this National Philosophy of Education. The goals and objectives of teacher education have been enumerated for the guidance of teacher training colleges and the faculties/departments of education in local universities. These are generally taken into consideration in developing the following:

1. To achieve national priorities and trusts as articulated through policy pronouncements on education;
2. To clarify the teacher's roles and tasks in school and the community in the context of change;

3. To identify the qualities and attributes the teacher must possess in relation to his personal, professional and social roles;
4. To develop a curriculum for leader education aimed at furnishing future teachers with appropriate attitudes, knowledge and skills in the context of continuing education.

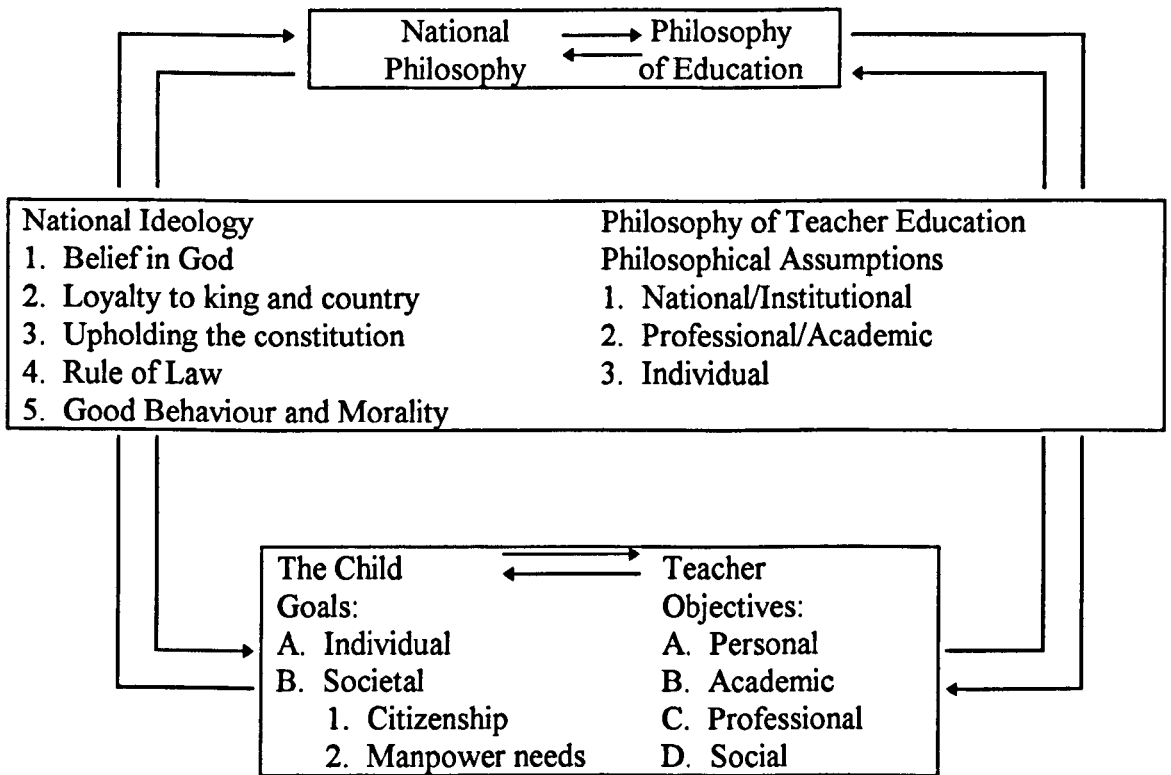
The end-product of the teacher education system, therefore is a teacher who has insight into and seeks to reflect and cultivate the goals and aspirations of the nation so as to ensure the development of the individual and the preservation of a united, democratic, progressive and disciplined society. Taking into consideration a social and cultural milieu in which national unity and social cohesiveness is of prime importance, the vision of the ideal Malaysian teacher is of one who:

‘... is noble in character; has deep moral and religious convictions; is human, yet progressive and scientific in outlook; upholds the aspirations of the nation; cherishes the national cultural heritage; has a positive attitude towards learning, the school and society, and, being endowed with these attributes; promotes the all-round development of the child; is loyal to his profession, and ensures the preservation of a united, democratic progressive and disciplined society.’

(Teacher Education Division, 1982: 1)

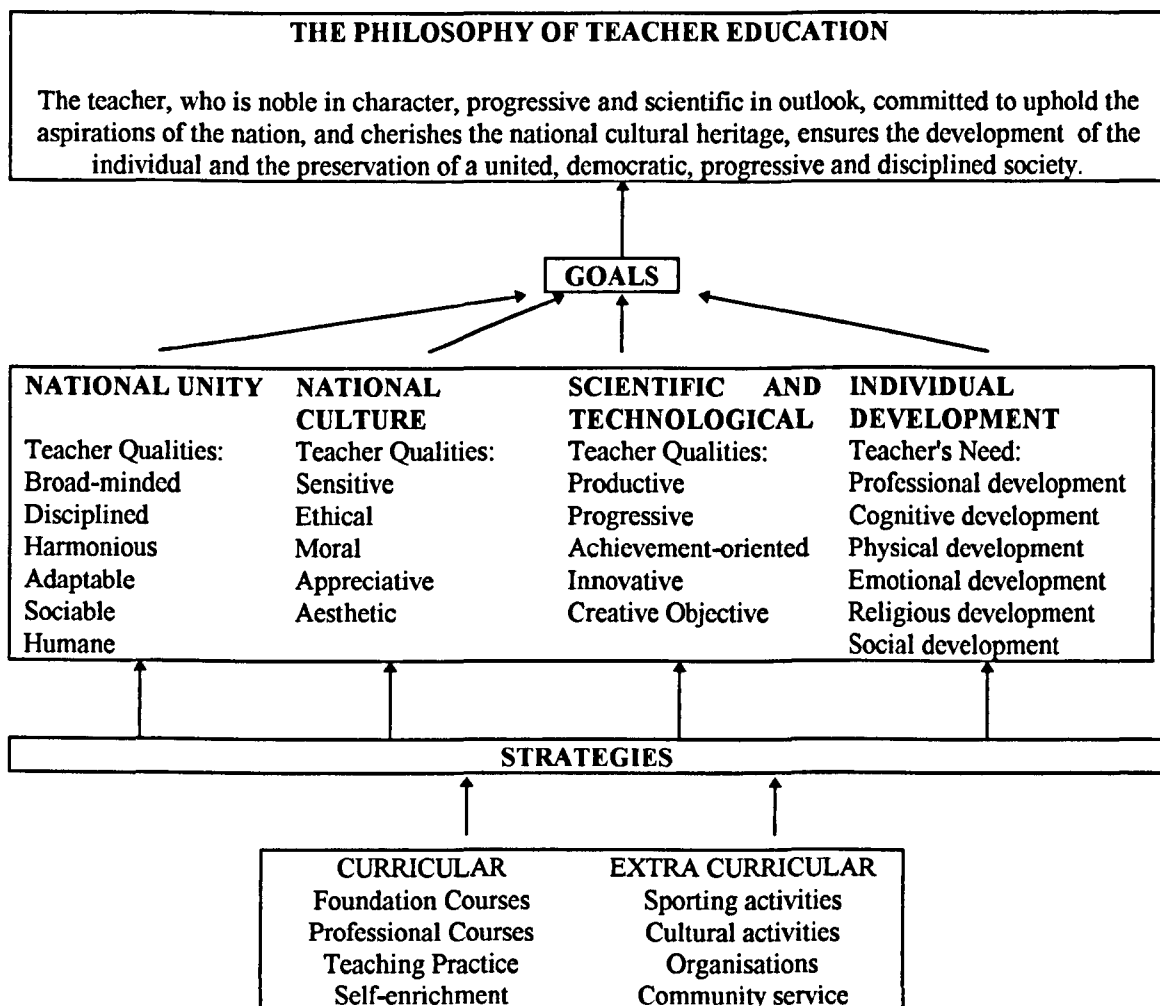
The interdependence and inter-relatedness of the Philosophy of Teacher Education with the National Philosophy of Education are represented diagrammatically in Figure 8. Figure 9 shows a model representing the relationship between the philosophy of teacher education; the teacher education goals, and the strategies in the teacher education curriculum. The philosophical goals and objectives of the teacher education programme in Malaysia are summarised in Figure 10.

Figure 8 : Diagrammatic Representation of the Relationship Between Teacher Education Philosophy and Educational Philosophy in the Process of Nation Building in Malaysia



(Teacher Education Division, 1982: 13)

Figure 9 : The Relationship Between Philosophy of Teacher Education, The Goals of Teacher Education, and The Strategies in the Teacher Education Curriculum



(Teacher Education Division, 1982: 14)

Figure 10: Philosophical Assumptions, Goals and Objectives of Teacher Education Programme in Malaysia

NATIONAL AND EDUCATION GOALS	FOCUS	Philosophical Assumptions Pertaining to Teacher Education	TEACHER EDUCATION GOAL	TEACHER EDUCATION OBJECTIVES			
				Knowledge	Skills	Attitudes	
CITIZENSHIP -common purpose -common value -belongingness -disciplined -resilience -national integration -just society -learning society united, integrated society -progressive democratic	NATIONAL ASPIRATIONS AND TEACHER EDUCATION INSTITUTIONS	That of responsibility of teachers ultimately to the Creator, to the nation in the long-term, and directly to his pupils.  That the goal of teacher education is the training of a professional group of people entrusted with the responsibility of educating children to achieve the political, economical, socio-cultural aspirations of the nation.  That colleges of Education exist to improve the educative process in schools in order to achieve the multivarious goals of education.  That teachers have a vital role to play in nation building	To strive towards national unity through teacher education.	P R O	Philosophical Psychological	Questioning Reflecting Evaluating	Democratic Liberal Loyal Responsible
			To develop national pride and identity through teacher education	F E	Sociological	Diagnosing Learning Advising	Tolerant Flexible Positive
			To uphold democratic ideas and ideals in teacher education.	S I O	Pedagogical	Guiding Counselling Facilitating	Innovative Resourceful
			To foster social conscience in teacher education.	N A L		Managing Organising	
			To cultivate competencies in effective communication				
			To promote international understanding regarding politics, ecology, cultures and mankind.				
				A C A D E M I C	School Subjects Supplementary/ Specialised Subjects Area of interest Detailing of: a. Self b. Environment c. Society d. Culture-history e. Professional f. World g. Other areas	Knowledge acquisition Thinking (Reflective rational, critical comprehensive)	Warm Civic Conscious Achievement-oriented Dedicated Committed Firm Adaptable Positive Exact

NATIONAL AND EDUCATION GOALS	AND FOCUS	Philosophical Assumptions Pertaining to Teacher Education	TEACHER EDUCATION GOAL	TEACHER EDUCATION OBJECTIVES			
				Knowledge	Skills	Attitudes	
MANPOWER Skill for: modernisation industrialisation diversification of economy	PROFESSIONAL CURRICULAR	That trainees do emulate their lecturers just as pupils do regard their teachers as models to emulate.	To foster the continued growth of professionalism in teaching.				
		That teachers learn as they teach.	To foster the belief and commitment to the process of lifelong education.				
		That the pursuit of knowledge is crucial to civilised existence, survival and advancement.	To foster the acceptance of the nation of dynamism in curriculum development and innovation in teacher education.				
		That teaching skill can be acquired and improved.					
		That effective and efficient human learning can be improved.					
		That interaction in the context of the serious educative processes must be studied and understood.					
INDIVIDUAL Individual worth Individual dignity Ethical, moral, spiritual, aesthetic value Self-fulfilment Self-actualisation	INDIVIDUAL	That the individual is trained and provided with the opportunity to develop as an all-rounded person to achieve self actualisation.	To promote and foster the all round development of the individual (intellectual, physical, emotional, moral, aesthetic).	P E R S O N A L	Public Speaking The Arts (including Performing Arts) The Science (including Social Sciences) Etiquette Other Areas (e.g. Business)	Communication Games/Athletics As Producer As Consumer Social graces	Creative Inventive Ethical Moral Religious Disciplined Sensitive Patient Fair Flexible
		That the individual is trained and provided with the opportunity to develop as a professional educator.	To educate teachers to be committed towards their own continuous personal development.				
		That the individual is committed to the noble goals of the teaching profession and will strive to contribute maximally to the profession.	To cultivate the commitment to strive for excellence in thoughts, action, work, or play.				
		That besides developing academically and professionally the individual will be provided the opportunity to develop personally, as a social being.					
		That the individual is committed to lifelong education and will strive for maximum development of his potentialities.					

Based on Figure 8 and Figure 9, it is clear that the national aims and objectives of the National Philosophy of Education underscore the theory and practice of the Philosophy of Teacher Education. In this regard, the teacher training institutions are educating the student teachers for wholesome all round development and, at the same time, training them for professional competencies in order to meet national needs. In short, the main purpose of the philosophy of teacher education is geared towards developing knowledge and skills in four areas: civic quality; professional dedication, intellectual quality, and emotional quality. However, being an Islamic country the curriculum for teacher education seems to be based on Islamic ideology. As Sharpes (1986) points out, the purposes and policies for teacher education of Islamic countries have the aim of producing a good teacher whose excellence is also measured in terms of faith and belief.

It is clear that national unity has always been stressed as the over-riding goal for national development (Figure 9). The school is seen as the major institution for inculcation of the ideas of national unity. It is not sufficient merely to inject the Rukun Negara (National Ideology) into the curriculum in schools and teacher training colleges. It must be born in mind that the school or college does not exist in isolation. What goes on in the school or the college, including the knowledge and ideas that the child gleans from his teachers and his textbooks, is constantly being tested through his parents, the community and the media. Therefore, prospective teachers should be able to manage the educative process in order to achieve the over-riding goal of national unity, educate pupils not only to 'know' but also to 'live' the National Ideology. At the same time, pre-service teacher training programmes must educate student teachers for wholesome all-round development and train them for professional competencies in order to meet national manpower needs (Figure 10).



At the same time, Malaysia is striving towards the creation of a 'learning society'. In this society, the concept of continuing education pervades all levels of education, both formal and non-formal. On the other hand, there is a tendency in the pre-service education of teachers to compress all manner of knowledge and skills into the training programme in order to yield a 'finished product' for the schools. There is clearly a need for pre-service education to be viewed once again as basic preparation, leaving refinements, reinforcements and reiteration of basic knowledge and competencies to the level of in-service teacher education. With a clearly articulated relationship between pre-service and in-service teacher education, it may be possible to see a continuum in the professional development of the teacher, from basic preparation through mid-career to the stages when s/he begins to exude professional authority. Therefore, the idea of 'reflection' is an important objective in Malaysian pre-service teacher education (Figure 10). It is one of the prerequisites for teachers' professional development.

### **5.5 Reflective Teaching as an Evidence in Pre-Service Teacher Education Programme in Malaysia**

As well as its importance and significance to the Malaysian Philosophy of Teacher Education, reflective practice has also taken on a greater significance in Malaysia because of its relevance to teachers' involvement in processes of educational reform. In this matter, teacher education should make use of facilities and intellectual resources outside the system, in order to establish a new direction for teacher education to meet Malaysia's ambition for social, economic and technological change. Teacher education should face modernisation in the world and the future. In relation to this, the Ministry of Education has emphasised that all teachers should have broader and deeper perception of the education culture and the education mission. As Wan Zahid (1993) stressed, to acquire this perception, teachers must engage in reflective inquiry. They should develop

thinking skills. The pupils should not only be taught to answer questions but also to question answers and to question questions. Pupils' intellectual ability and thought processes must be challenged. To inquire is to question, to probe and to extend one's understanding of a situation. To reflect is to speculate, assess, and consider relevant factors with respect to desired goals.

More specifically, Malaysian teachers are now expected to help pupils learn as well as to act as a guide and mentor, community leader, and even administrator. These roles are not static but dynamic. The changing roles of the teachers are: from a transmitter of knowledge to a facilitator of learning, from an autocrat to a democrat, from a dogmatist to an innovator, from accepting to questioning/enquiring, from a local outlook to international outlook, from directed to empowered and from intuition to reasons. These roles are essential to the implementation of KBSR (New Curriculum for Primary School). If the implementation is to be successfully achieved, reflection has to be promoted. It is believed that teachers are effective at some aspects of KBSR practice. If this is the case, their skills might be described, analysed and used to inform pre-service teacher education programme, and might be used to set priorities for the further development of programmes of teacher education. On top of that, as one of the chief purveyors of the nation's political and cultural heritage, a teacher must display not only knowledge, but also a sense of conviction of what he teaches and this must be reflected in the way he lives. He/she must acquire knowledge of relevant theories of learning and acquisition of the relevant subject matter and he also must have mastery of the required communicational and pedagogical skills.

Consequently, the concept of teacher empowerment is now beginning to spread into the discourse of Malaysian teacher educators in order to promote reflective practice (see for example, Konting, 1994; Bajunid, 1996). In this matter it seems to be in line with Carson (1995), where reflective practice tries to

reposition the teacher as having an active voice in educational decision-making. It suggests that, rather than just being the conduit for change (the person who delivers someone else's mail), the teacher, as a reflective and acting subject, can and will bring about what is educationally appropriate through their thoughtful, reflective practice. Therefore, it is now being assumed that Malaysian teachers including prospective teachers in pre-service teacher education programme should be inculcated with the concept of teacher empowerment. It is also widely believed that a reflective programme of teacher education can empower student teachers.

Reflective teaching, therefore, is now increasingly seen an important aim in pre-service teacher education in Malaysia. As reflective teachers, Malaysian teachers are supposed not only to be concerned about their competencies and classroom practices but also with examining their values, aims, commitments and classroom relationships as well as with considering how children learn; reviewing curriculum, classroom management, communication skills and assessment, becoming less directive and more critical of what they do. For example, a project jointly sponsored by the Ministry of Education Malaysia and the Overseas Development Administration, United Kingdom has been launched to enable participants especially the primary English teachers to understand better the uses and purposes of reflective practice. Participants will then be in a position to enable student teachers to develop reflective thinking (Teacher Education Division, 1995). Clearly, if this is to be achieved, reflective teaching practice should be introduced at the beginning of teachers' professional development.

Moreover, in multi-racial Malaysia, student teachers will also need to have a more reflective understanding of the type of society in which their pupils are growing up, with its cultural and racial mix, and of the relationship between the adult world and what is taught in schools, in particular, the ways in which pupils can be helped to acquire an understanding of the value of their society (Whitty et

al. 1987). Tomlinson (1989) also emphasises the need for student teachers who are prepared by their subject method work and educational studies to teach the full range of pupils whom they are likely to encounter in an ordinary school, with their diversity of ability, behaviour, social background and ethnic and cultural origins. They will need to learn how to respond flexibly to such diversity and guard against pre-conceptions based on the race or sex of their pupils. Such reflection allows them to search for coherent patterns of value and belief which may inform and justify their understanding and action (McCann and Yaxley, 1992).

## **5.6 Conclusion**

This chapter has shown that reflective practice is now an important objective in Malaysian pre-service teacher education. Basically the objectives of this initial programme are to produce student teachers who believe that their teacher training programme addresses significant questions about their professional accountability as well as competency, future career needs and professional status. They may have an easier transition into the classroom; may find their course work more relevant and beneficial; may be able to transfer more of their training into the real world of the classroom; and, more easily gain public respect and high morale, thus avoiding some of the 'reality-shock' experienced by many newly qualified teachers. According to Ralph (1995), new teachers are expected to internalise the knowledge, skills, and values of effective teaching as presented to them in their pre-service education as well as to apply this knowledge, reflectively and contextually, to their daily teaching practice.

This chapter has also shown that the emphasis on reflection in the Malaysian pre-service teacher programme requires student teachers to understand the philosophy of teacher education. This is to acquaint student teachers with how, educational issues have been articulated, examined and accommodated in various

societies and systems over the years. The students will also gain an understanding from the examples provided of how to participate and contribute to philosophical discussion. With some well selected body of references, students can develop constructive and critical reflections. Through such reflection and their practical experiences with pupils, the student teachers can come to consider what they have to become in order to be successful in teaching. Therefore, reflection has recently become a popular term in the context of Malaysian teachers' professional development. However, in the context of pre-service teacher education, reflective teacher educators and reflective co-operating teachers are a prerequisite to developing reflective teachers. Therefore, it is important to determine whether the pre-service teacher education programme in Malaysia needs to give more emphasis to reflective teaching methods in order to produce reflective teachers who are self-motivated, self-directed, self-propelling and self-reliant. If the job of teacher educators in colleges and co-operating teachers during school-based teaching practice is to support student teachers' development through critical reflection, the question that arises is to what extent does the programme promote such reflective practice in student teachers. This is the major question to be investigated in the second part of this thesis. The first chapter of Part Two will describe the methodology of the study in order to answer the research questions to which they are addressed.

## PART TWO: THE STUDY AND THE RESULT

### Summary

Part Two covers Chapters 6 to 10. **Chapter 6** gives an account of the methods used in this study. It explains the research methods, particularly the methods of data collection, the participants, and the data analysis. The following four chapters report the results of the study.

**Chapter 7** presents the findings about the methods which are being employed in inculcating reflective teaching skills, both in college and school by both teacher educators and co-operating teachers. The purpose of **Chapter 8** is to report the results of the co-operating teachers' role in nurturing reflective teaching to prospective teachers during their teaching practice. **Chapter 9** presents the results of the development of student teachers' reflective teaching skills during the pre-service teacher education programme. In order to explore the extent to which student teachers have gained and are inclined to practice reflective teaching skills, the six characteristics of reflective teaching skills described by Pollard and Tann (1993), and types and concerns of reflection (Tabachnich and Zeichner, 1991) were applied as the framework of analysis. **Chapter 10** describes the results of the newly qualified teachers' views about the emphasis on reflective teaching skills during their teaching practice. The framework of analysis is based on Stouts' (1989) reflective teaching concepts.

## CHAPTER 6 THE METHODOLOGY OF THE STUDY

### 6.1 Introduction

The aim of this chapter is to describe the methodology used in this research. There are four sections in this chapter. The first discusses the **research approach** adopted in the study and provides the rationale for adopting a combination of qualitative and quantitative approaches (6.2). The second is concerned with the **research methods**. It gives an account of how the data in the study was gathered from various sources and describes the importance of the method of triangulation (6.3). The third section describes the **participants** involved in the study and how the samples were chosen (6.4). The last section discusses the **framework of data analysis** and explains how the data was analysed (6.5).

### 6.2 Research Approach

Basically this research employs both quantitative and qualitative research techniques. The quantitative data was derived from questionnaires whereas the qualitative data was collected through interviews, and documents analysis. Unfortunately, classroom observation could not be undertaken due to limitation of time. Moreover, this research is more concerned with studying how reflective teaching skills are inculcated in student teachers rather than their effectiveness in implementing such skills. The rationale for combining qualitative and quantitative research techniques is to maintain a balance of qualitative data, (that could be strong in depth and help interpret the specific issues) and quantitative data (that might be used to establish the extent to which perceptions were generalizable to a wider population). Combining the two research techniques will enhance the validity of the overall analysis by producing data from various sources and help to

build up a rounded and credible overall picture (Mason, 1994). Moreover, results from quantitative studies can be ambiguous and misleading if they are not supplemented by qualitative data.

This study relies mainly on a research methodology that permits the qualitative description of phenomena and events in an attempt to understand and explain them. There are several reasons for this methodological approach. To begin with, it is in line with methodological developments during the last decade where more researchers in the social science disciplines, including educational research, have shifted to a more qualitative paradigm (Miles and Huberman, 1994). One of the characteristics of using a qualitative research strategy, according to Vulliamy (1990) is the incorporation of a variety of data collection techniques. In the present study, three data collection techniques were incorporated: interviews, questionnaires, and documents. The other reasons for choosing qualitative research are: first, because of its emphasis on people's life experience, it is well suited to locating the meanings people place on events, processes, and structures of their lives (Miles and Huberman, 1994). This study has a strong emphasis on exploring the nature of particular phenomena, reflective teaching, rather than setting out to test hypotheses about them. Second, an intention to work primarily with 'unstructured' data, that is, data that has not been coded at the point of data collection in terms of a closed set of analytic categories (Atkinson and Hammersley, 1994). Third, the investigation involves a small number of cases (only three TTC were involved out of 31 throughout the country). Finally, the analysis of data involves explicit interpretation of the meanings and functions of particular actions (reflective teaching), the product of which mainly takes the forms of verbal descriptions and explanations from exploratory interview, with quantification and statistical analysis playing a subordinate role.



Basically, in this study, the researcher's role was to gain a holistic (systemic, encompassing, integrated) overview of the context under study: its logic, its arrangements, its explicit and implicit rules. The researcher has also attempted to capture data on the perceptions of local actors 'from the inside', especially teacher educators, student teachers and co-operating teachers, through a process of deep attentiveness, empathetic understanding, and suspending or 'bracketing' preconceptions about the topics under discussion: the principles and practice of the existing pre-service teacher education for the preparation of reflective teachers.

The study took approximately ten weeks. It was conducted during the final year of the student teachers' teaching practice. A few weeks had also been spent making administrative preparations such as getting approval from the Ministry of Education Malaysia for conducting research in TTCs and schools.

### **6.3 Research Methods**

Since this study is a combination of both qualitative and quantitative research, it uses various methods of data collection. The data was obtained from: questionnaires, exploratory interviews, reflective interviews and official or semi-official documents. The questionnaires and exploratory interviews were applied to four groups of participants, namely teacher educators, student teachers, co-operating teachers, and newly qualified teachers. In addition, student teachers were also interviewed (reflective interviews) during their last week of teaching practice. To incorporate a variety of data collection techniques, triangulation was also used to enhance the validity of the data.

**1. Questionnaire:** The aim of the questionnaire is to provide an initial overall evaluation of the pre-service teacher education programme, in order to

indicate important themes which can be further pursued through exploratory and reflective interviews. In the questionnaire, the experience of the student teachers during pre-service teacher education and the significance of the programme to their reflective teaching were emphasised (Appendix 1). The questions covered concerned the reflective attitude of prospective teachers (Korthagen, 1993), and their reflective practice processes (Roth, 1989). The questionnaire for teacher educators (Appendix 2) was focused on their opinion of the importance of pre-service teacher education (Wideen, 1985), and their practice of inquiry-oriented forms of teaching. The questionnaire for the co-operating teachers (Appendix 3) focused on aspects of mentors' work (Williams, 1993) and their attitudes towards incentive (Whaley and Wolfe, 1984). The questionnaire for the newly qualified teachers (Appendix 4) reflected their experience during teaching practice (Stout, 1989).

**2. Exploratory Interview:** This procedure took place during the initial weeks (week 4 or 5) of the 10 weeks of teaching practice. In this study, the interview was primarily concerned with the participants' views and perceptions; what they think, or how they feel, about the role of pre-service teacher education in the preparation of reflective teachers and what they have learned and what they thought was missing from their pre-service training programme (Appendix 5: Teacher Educators; Appendix 6: Co-operating Teachers; Appendix 7: Student Teachers and Newly Qualified Teachers). In addition, the issue of triadic relationships adapted from research carried out by Harrison et al. (1989) was applied to the student teachers.

The student teachers, teacher educators and newly qualified teachers were also interviewed about the extent to which they understand action research, how they implement it and how they perceive it in terms of reflective teaching. The reason for this is because work in using action research with pre-service student teachers

was ongoing at several places as one way to inculcate a reflective practitioner culture.

Another aim of the exploratory interview was to deepen the researcher's understanding of the themes which emerge from the questionnaire. Indeed, whereas with questionnaire, there is no immediate feedback, the interview permits the researcher to follow up leads and thus obtain more data and greater clarity. Moreover, through a careful motivation of the participants and maintenance of rapport, the interviewer can obtain information that the participants would probably not reveal under any other circumstances (Borg and Gall, 1983).

The most common type of interviewing used in this study was the individual semi-structured interview. Although topics and issues to be covered were more or less specified in advance (the interviewer deciding the sequence and wording of questions in the course of the interview), on many occasions the unstructured interview proceeded under a 'stimulus response' format, assuming that, if questions were phrased correctly, the participants would answer them truthfully, and the researcher would be able to elicit rational responses (Fontana and Frey, 1994). However to increase the salience and relevance of questions, several interviews built on spontaneous or unintentional responses. In these situations, there was no predetermination of question topics or wording. According to Fontana and Frey (1994), unstructured interviewing provides a greater breadth than other types of interviewing, given its qualitative nature.

**3. Reflective Interview:** This procedure took place in the last week (Week 10) of the teaching practice. The researcher engaged another group of student teachers in a 'reflective conference' and asked questions taken from Pultorak (1993), regarding their experiences during the 10 weeks of teaching practice. The researcher encouraged the student teachers to offer thoughts and perceptions on

three categories of reflection: (a) technical rationality; (b) practical action, and (c) critical reflection (Appendix 7). In order to get appropriate responses to a given question, the researcher sometimes offered possible answers and then engaged in discussion about them.

**4. Document Analysis:** The curriculum policy for Initial Teacher Education (ITE) and other related official or semi-official documents were carefully analysed in order to determine how reflective teaching was to be taught in the ITE programme, how teacher educators evaluate whether or not their student teachers were trying to implement reflective teaching during teaching practice, and what instrument or check list was used for this. The analysis of the curriculum materials was then used to cross-check the perceptions of the four groups of participant about the effectiveness of pre-service teacher education for the preparation of a reflective teacher.

**5. Triangulation:** Since this study uses various methods of data collection, it needs to be able to integrate or link data in order to get maximal understanding of the phenomena being studied (Morse, 1994). This is why triangulation is used in this study. Triangulation is a method which allows the use of several different kinds of methods or data to be used for the same research problem. According to Vulliamy (1990), Fraenkel and Wallen (1993), and Ralph (1995), when a conclusion is supported by data collected by a number of different methods, its validity is thereby enhanced.

There are several important advantages of triangulation. First, it allows the researcher to be more confident of the results, especially when different methods of data collection yield substantially similar results. Second, it helps to ensure that any research is free from the problem of 'method-boundedness' (Cohen and Manion, 1994). Triangulation can play many other constructive roles. It can

stimulate the creation of inventive methods and new ways of capturing a problem to balance with conventional data collection methods. In addition, triangulation may also serve as the critical test, by virtue of its comprehensiveness, for competing theories (Jick, 1979). Finally, as mentioned by Krathwohl (1993), triangulation may be particularly important where we seek the covert meaning of situation that differs from the expressed meaning. Stripped to its basics, triangulation is supposed to support a conclusion by showing that there are different and independent grounds to support it (Miles and Huberman, 1994).

#### **6.4 Participants**

Three TTCs in Peninsular Malaysia were selected. The main reasons for choosing these TTCs were:

- They provide courses for primary and secondary school teachers;
- High numbers of trainees;
- The courses offered are from across the National Curriculum instead of covering only one specific area;
- Surrounding schools where student teachers normally do their teaching practice represent both urban and rural schools;
- In terms of location, they are well distributed according to the main regions: north, south and east of Peninsular Malaysia.

The chosen TTCs, their location and the number of participants from each is shown in Table 4 below.

Table 4: The Number of Participants Based on Location and TTC

Location	College*	Teacher Educator	Co-operating Teacher	Student Teacher	Newly Qualified Teacher
North	IPDA	16	13	37	18
South	MPTI	25	17	34	17
East	MPKB	19	10	50	32
Total	3	60	40	121	67

\* IPDA: Institut Perguruan Darul Aman , Jitra, Kedah

MPTI: Maktab Perguruan Temenggong Ibrahim, Johor Bahru, Johor

MPKB: Maktab Perguruan Kota Bahru, Kelantan

There were four groups of participant in this research, namely **teacher educators**, final semester **student teachers** for primary school programme from the selected TTCs, **co-operating teachers** (also known as mentors) at schools where the student teachers were doing their teaching practice and **newly qualified teachers** who graduated from the same programme. Sixty teacher educators, forty co-operating teachers, hundred and twenty one student teachers and sixty seven newly qualified teachers were involved in this research. These figures are actually based on the returned and answered questionnaires. However, for exploratory interview purposes there was only one volunteer from every group of participants from each location, and for reflective interview, there was only one volunteer student teacher from each college. Thus, the number of interviewees were fifteen; twelve for exploratory interview purposes and three (student teachers) for reflective interview purposes.

The reasons for choosing primary school level only were: first; there was a high number of teachers at primary schools and all of them were trained at TTCs; second, not all secondary teachers were graduated from university, some of them were graduated from special programme conducted at TTCs. Since this study will not make comparison between secondary and primary school, therefore, only primary school programme was selected.

## 6.5 Framework of Data Analysis

Basically, this study incorporates two concurrent forms of data analysis: data reduction and data display.

(i). **Data reduction:** This refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appears in written-up field notes or transcriptions (Miles and Huberman, 1994). In analysing the interview data, this study followed Krathwohl's (1993) suggestion, that an analysis of data should start by classifying the main themes that emerge. Having spent time listening to the tape-recorded interviews, extended summary transcripts were constructed which omitted trivial repetitions and reformulations, but which retained the range of essential meanings. Multiple drafts were made and remade as data gathering and analysis proceeded. By reading and rereading the information included in these drafts, sub-categories based on specific topics in the data were formed for identifying issues and drawing conclusion. Obviously, as analysing qualitative data is a complicated business and time consuming (Mason, 1994), some narrowing of focus becomes necessary (Saunders et al. 1995).

It is also essential to mention here that the responses from the interviews quoted in this thesis are translations from spoken Malay to English. Therefore the occurrence of grammatical errors is inevitable.

To make it more amenable to research questions, several frameworks of analysis have been applied to **the third and the fourth research questions**. For **the third research question** (Chapter 1: 5), two analytic frameworks have been used. The first is the framework of analysis of the characteristics of reflective teaching. In order to explore the extent to which student teachers have gained and are inclined to practice some of the characteristics of reflective teaching in their

practice and to identify which characteristics are most prominent, this study has used the Dewey's notion of reflective action. Although Spark-Langer (as cited by Munby and Russell, 1993) claims that it is difficult to identify an exact meaning for reflective teaching, Pollard and Tann (1993), have identified six key characteristics. These are;

1. Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency.
2. Reflective teaching involves a spiralling cyclical in which teachers monitor, evaluate and revise their own practice continuously.
3. Reflective teaching requires competence in methods of classroom enquiry.
4. Reflective teaching requires attitudes of open-mindedness, responsibility and wholeheartedness.
5. Reflective teaching is based on teacher judgements, which is informed partly by self-reflection and partly by insights from educational theory.
6. Reflective teaching is enhanced through collaboration and dialogue with colleagues.

The second analytic framework is used for analysing the student teachers' development of reflective teaching through teaching practice. To explore this, the reflective interview was done. By using this framework, this study attempts to elicit whether or not student teachers have developed as reflective practitioners during their teaching practice. In so doing, this study employs Van Manen's (1977) three types or levels of reflection, summarised by Tabachnich and Zeichner (1991) as in Figure 11 which this study believes can stimulate student teachers to develop their reflective skills.



Figure 11: Types and Concerns of Reflection

Type	Concern
Technical reflection	How goals are to be achieved but does not question the goals.
Practical reflection	Questions and tries to select both appropriate goals and appropriate means to achieve the selected goals.
Critical reflection	Examines goals and means in terms not only of educational consequences but also in terms of political consequences for creating a more rational, just and fulfilling society.

(Tabachnich and Zeichner, 1991: 15)

For the fourth research question (Chapter 1: 5), a framework of analysis is used to ascertain the degree to which newly qualified teachers (NQTs) were encouraged to use reflective teaching skills during their teaching practice. NQTs were asked to provide retrospective information concerning their teaching practice experience, especially how reflective teaching behaviours were encouraged and promoted both by co-operating teachers and college teacher educators, during their teaching practice experience. In order to analyse this, the interview data as well as the questionnaires were analysed according to four reflective teaching concepts: (1) retrospective and predictive thought; (2) critical inquiry; (3) problem solving skills; (4) acceptance and use of feedback (Stout, 1989).

(ii). **Data Display:** the questionnaire and interview data were classified into categories based on themes. Then, both data were compared and the findings of both techniques were synthesised. In particular, the questionnaire data from this study was compiled in a frequency table, providing a rough idea of the extent to which pre-service teacher education goals have been achieved. In most of the frequency tables in the following chapters (Chapters 7 to 10), the mean and standard deviation will be reported together to give a good description of the nature of the group being studied (Van Dalen, 1979; Borg and Gall, 1983). The

standard deviation (SD) is the measure of variability. Basically the SD is a measure of the extent to which scores in a distribution, on the average, deviate from their mean (Borg and Gall, 1983). The deviation from the mean also describes how much in error the mean is as a description of a given score. For the mean only informs the reader about one way that two sets of scores are alike. For example, if two groups of student have the same mean IQ of 100, we cannot assume the two groups are alike because the IQ scores may range from 70 to 120 in Group A and from 95 to 105 in Group B. Obviously the students in Group B are more homogeneous with respect to IQ than the students in Group A (Van Dalen, 1979). Thus, the mean and SD are taken together although this study has no intention to discuss these two statistical results in the research findings.

Based on information gathered from various methods of data collection, information on each of the themes was compiled. A careful analysis was carried out in order to elicit the extent to which the existing pre-service teacher education in Malaysia has successfully nurtured the reflective teaching skills in prospective teachers. Precisely, this stage was concerned with identifying the possible impediments to the successful nurturing of reflective practice and with highlighting the suggestions for improvement (Chapter 11).

## **6.6 Conclusion**

This study was carried out in order to investigate the practice of reflective teaching as well as to identify the problems encountered in inculcating that skill in the pre-service teacher education programme in Malaysia Teacher Training Colleges. Essentially, this study believes that in order for reflective teaching to occur during pre-service teacher education, teacher education itself must be treated as a form of reflective inquiry, open to continual revision and critique. In addition, data from the final semester student teachers could be considered as an

evaluation of the way in which existing pre-service teacher education programme helped student teachers to gain the desired skills of reflective teaching. The perception of newly qualified teachers who have undergone the pre-service teacher education programme was also important in order to evaluate the long term effects. Data from co-operating teachers, as well as teacher educators also contribute to strengthen insights into the effectiveness of pre-service teacher education programmes. Although a combination of qualitative and quantitative methods was utilised, this study was based more on qualitative data. However the quantitative data highlights the relevant issue which was encountered from a variety of qualitative data. This explains why triangulation was used for this study. It broadens the findings of this study and is in line with the rise of pluralism in research methodologies. The next four chapters present the results of this study according to the identified research questions.

## CHAPTER 7

### THE FIRST RESEARCH QUESTION: METHODS WHICH HAVE BEEN EMPLOYED TO CULTIVATE REFLECTIVE TEACHING

#### 7.1 Introduction

This chapter will present the research findings relating to the first research question: **how do pre-service teacher education programmes in Malaysia cultivate reflective teaching in their student teachers?** Since this research question relies on input from teacher educators, the chapter begins by describing the background of the teacher educators who participated in the study (7.2). The main concern of this chapter is to identify the different methods being used by teacher educators in the college and at school during teaching practice, as well as by co-operating teachers (mentors) at school, in order to inculcate reflective teaching skills to prospective teachers. For the sake of clarity, two aspects of reflective teaching are examined in this chapter. They are:

1. *The significance of reflective teaching in the existing pre-service teacher programme.* This will seek to discover if there is any explicit model of reflective teaching being implemented in the programme and, if so, how it is incorporated in that model (7.3).
2. *The methods being used in nurturing reflective teaching.* This will reveal the main methods being used in the existing pre-service training programme in order to train student teachers in reflective teaching (7.4).

## **7.2 The Background of Teacher Educators**

There were 75 teacher educators (25 from each of the three selected Teacher Training Colleges (TTCs)) who were given the questionnaire. They were from various departments but mainly from the Department of Educational Studies at the selected TTCs who ran the course on pedagogy which was supposed to emphasise more reflective teaching skills. Sixty of the questionnaires were returned (80% of the total) of which 16 were from IPDA (64%); 25 from MPKB (100% returned), and 19 from MPTI (76%). All of them were graduates, having at least a first university degree. They were at least 26 years old. Almost all (95%) had school teaching experience of more than five years before they were attached to teacher training colleges as teacher educators. For interview purposes, there was one volunteer teacher educator from each TTC.

## **7.3 The Significance of Reflective Teaching Skills in the Existing Pre-Service Teacher Education Programme.**

Based on the evidence from the teacher educators, it seems that the whole of the existing pre-service teacher education programme is designed in such a way to inculcate reflective teaching skills to student teachers. This is clearly stated by Educator B.

‘Actually the whole programme in pre-service teacher education is encouraging student teachers to use reflective practice. Other departments also have their own programme and play their roles in inculcating reflective teaching.’

In general, the notion of reflective teaching is incorporated into the objectives of teacher education programmes. Table 5 shows that most teacher educators agreed that reflective teaching is one of the important goals of the pre-service teacher education programme (Item 15). 56.7% of all the teacher educators who

participated, said that its importance was 'Very Great' and 33.3% said it was 'Great' whereas 10% said it was 'fairly' important. No one said it was of little or no importance at all. This means, that all the teacher educators who participated in this study agreed on the importance of producing reflective teachers.

Table 5: The Importance of the Following Goals of Pre-Service Teacher Education Programme

Questionnaire Items	Frequency (%) ( <i>N</i> = 60)					$\bar{X}$	SD
	1	2	3	4	5		
To prepare teachers who:							
1. Are knowledgeable in subject or content areas	-	-	3.3	21.7	75.0	4.717	.524
2. Can adapt and work within existing systems	-	1.7	3.3	28.3	66.7	4.600	.643
3. Have effective interpersonal skills	-	-	10.0	21.7	68.3	4.583	.671
4. Can integrate theory and practice	-	-	5.0	21.7	73.3	4.683	.567
5. Have the perceptions & skills to implement changes	-	-	1.7	48.3	50.0	4.483	.537
6. Have skills in various teaching techniques	-	1.7	5.0	23.3	70.0	4.617	.666
7. Can deal effectively with the differences	-	3.3	3.3	25.0	68.3	4.583	.720
8. Can analyse critically the existing system	1.7	1.7	21.7	51.7	23.3	3.933	.821
9. Have the ability to counsel students	-	-	8.3	45.0	46.7	4.383	.640
10. Have the ability to undertake action research	1.7	3.3	16.7	58.3	20.0	3.917	.809
11. Have the ability to undertake committee work	-	-	8.3	55.0	36.7	4.283	.613
12. Have the ability to undertake administrative tasks	3.3	6.7	28.3	45.0	16.7	3.650	.954
13. Have the skills for instruction through audiovisual	-	-	5.0	38.3	56.7	4.517	.596
14. Have the skills in role playing or other simulation	-	-	6.7	48.3	45.0	4.383	.613
15. Have the skills of reflective teaching	-	-	10.0	33.3	56.7	4.467	.679

1 = None; 2 = Little; 3 = Fairly; 4 = Great; 5 = Very Great. (Items adapted from Wiccen, 1985)

The findings of Table 5 show that the existing pre-service teacher education programme is both experience-based and competency-based and incorporates reflective teaching as a major goal. The experience-based programme assumes that when student teachers successfully complete a certain number of courses and the teaching practice, they are ready to teach, whereas competency-based teacher education assumes, instead, that a certain number of behaviours are necessary for

teaching to be effective and that student teachers should be able to demonstrate these behaviours prior to teaching (Richardson, 1990). The experienced-based criterion is represented by the first item of the questionnaire, to which 75%, or the highest percentage, of teacher educators responded as 'Very Great'. The rest of the items (Item 2-14) represented the behaviours of the competency-based programme. These include the skills and knowledge related to pedagogy; the student-teacher relationship; the research base activity, and the rejection of a mechanistic or technical view of teachers. Also they include the skills and knowledge required for producing reflective teachers (Item 15).

Most of the teacher educators responded within the scales 'Great' and 'Very Great' for every item. Few responded within the scales 'Little' and 'None'. However, it seems that action research (Item 10) was not properly taught. Only 20% of the teacher educators rated 'Very Great' with respect to preparing prospective teachers who will be able to undertake action research. It can therefore be seen that in order for student teachers to perform reflective skills, they also need to acquire knowledge about how to gather data through a variety of ways. Since action research in pre-service teacher education has been used in many countries such as UK, USA, Australia, New Zealand and Finland (see Chapter 2, p: 19), there is widespread support for McKay's (1992) suggestion that action research will be more effective than other strategies in bringing about educational change.

However, in this study it is clearly shown that little effort was made by teacher educators to introduce action research as part of their instruction. Table 6, shows that, 50% of teacher educators 'Often' and only 6.7% 'Always' introduce action research in their instruction. This can be confirmed by the input from student teachers and newly qualified teachers. It seems that action research was not properly introduced or taught during pre-service teacher education programme.

Student A: 'We had group assignments, three of us did small research, we wrote a report, there were some data in the report. However, all these processes were not comprehensive ones. I have no idea about action research. The term is something new for me.'

NQT C: 'We used a questionnaire or interview to get information from pupils but that was very basic. I don't think we have been taught in a proper way how to do observation, analyse data, report writing and presentation. So I don't have any idea what action research is all about.'

The above quotations reflect the amount of time spent by teacher educators in nurturing inquiry-oriented skills. As can be seen in Table 6, it seems that introducing action research, conducting micro ethnography, observation, and evaluation were not encouraging enough in terms of the amount of time spent in teacher educators' instruction. The percentages of teacher educators who always spent their time on teaching the four approaches were very low: between 3.3% to 6.7% only. This is especially so with respect to micro ethnography (Item 2) and trainees conducting evaluation (Item 4) which were not being used broadly by teacher educators. The percentages of those who never spent any of their time using these two approaches were considered high: 23.3% and 20.0% respectively.

Table 6: The Amount of Time Spent on Different Forms of Inquiry-Oriented Activities in Teacher Educators' Instruction

Questionnaire Items	Frequency (%) ( <i>N</i> = 60)					$\bar{X}$	SD
	1	2	3	4	5		
1. Introducing action research	3.3	13.3	26.7	50.0	6.7	3.433	.927
2. Conducting micro ethnography	23.3	20.0	31.7	18.3	6.7	2.650	1.219
3. Conducting observation	3.3	25.0	30.0	35.0	6.7	3.167	.994
4. Encourage trainees to conduct evaluation	20.0	23.3	35.0	18.3	3.3	2.617	1.106

1 = Never; 2 = Seldom; 3 = Regularly; 4 = Often; 5 = Always



Enabling student teachers to be reflective must be viewed as the task of a pre-service teacher education programme (not of individual college members). This should be done by attempting to evolve a programmatic commitment to the development of reflection. Therefore, this study has looked at how the existing pre-service teacher education programme provides primary school student teachers with multiple opportunities of reflective teaching experiences. In particular, this study examines two critical issues: the programme's model for emphasising reflective teaching, and the definition of reflection common among teacher educators.

### ***7.3.1 The Programme's 'Model of Reflection'***

For the purpose of this study, a model of reflection means some aspect of the programme designed to stimulate and build reflective values among student teachers during pre-service teacher education programme. The expectation is that there should be an established framework whether it is produced by the teacher educator himself or the college or even by the Ministry of Education (MoE), and that it should be familiar to teacher educators. However, this study reveals that there was no specific model being used which helps student teachers learn how to be reflective practitioners. This was made clear by all the interviewed educators. For example, here are three quotations from educators from the three selected TTCs respectively.

Educator A: 'As far as I am concerned, there is no specific model being used for reflective teaching. I don't have any model either but on top of my head, I am aware of this, that's all.'

Educator B: 'There is no model. However, the programme caters for our trainers to become reflective teachers because we hope by teaching them along this line with all the material, such things as

methodology and proficiency are being geared toward inculcating the concept of reflective teaching.'

Educator C: 'Reflection is entangled in part of the programme, but reflection is not structured in the sense that there is no form to be filled up. However, in most of my teaching time, reflection is done indirectly.'

Since there was no established model, it may be beneficial for the existing programme to provide appropriate opportunities of reflection in several ways explicitly. For example, student teachers could be taught the basic principles of reflection, be provided with and encouraged to read materials about the process of reflection, be engaged in discussing the value of reflection, and writing reflectivity about class activities (Wilkinson, 1996). Secondly, the teaching style of teacher educators, and their awareness of the importance of reflective teaching should be made explicit and the programme itself should be structured to produce reflective teachers. Encouragingly, the second suggestion can be inferred from three statements from teacher the educators.

Educator A: 'There is a reflective week, student teachers will return to college at the last week of the practicum. Reflective sessions will be designed for small group discussion between student teachers and their lecturer. Each student will talk about their reflection on what has happened during practicum, the problems that they have encountered in their teaching, relationship with other teachers, head teacher and pupils, and how successful they were in teaching.'

Educator B: 'They have problem solving activities which blended with reflective teaching approach. First, we ask individuals to come out with answer, then discuss in groups to find what is the best answer for the particular problem. Every group will present their answer and then discuss with the whole class, which answer is the best one. While in group they have to look at their friends answers and think of the best one. In the process of picking up or identifying the best answer, they have again to think and use their past experiences which is reflective. All the time it is thinking process which encourages them to reflect.'

Educator C: 'Every lesson that I do with them has got a reflective aspect. At the end of every lesson, they have a reflection session, time given to them to reflect whether the lesson was interesting or not, difficult or not, they reflect on it, I ask them why was it difficult or not difficult and how it can be applied at primary school.'

A reflective week is held before student teachers complete their initial training. Although the meeting focuses on information rather than instruction, student teachers can express their experience about multiple learning, and theory and practice tensions experienced during their teaching practice. Student teachers can also assess and evaluate the pre-service teacher education programme itself.

### ***7.3.2 The Concept of Reflective Teaching From the Teacher Educators' Perspective***

Although there was no specific model, the philosophy and objectives of the pre-service teacher education programme at all colleges are geared to the concept of reflective teaching as mentioned by these two educators from different colleges.

Educator A: 'The philosophy and objectives are geared to the concept of reflective teaching by giving the student teachers knowledge and skills in colleges and experience during practicum. Although there is no specific material or courses regarding reflective teaching, it is nurtured through lecturer teaching and assignments given to student teachers. All the teacher educators are supposed to know this policy.'

Educator B: 'In the college, we are inculcating them with this value; we hope in school they will continue the same technique, for example choosing activities that could make pupils think. So in asking the pupils to think of the problem, they hope the pupils come out with solutions to the problem. These processes are all harmoniously geared toward achieving the reflective approach. We hope they will be able to apply later on when they graduate from college.'

Based on the responses, it is encouraging to note that reflective practice is gradually becoming the philosophy underpinning the programme. Although there is no specific course, the pre-service teacher education programme engages student teachers in a series of reflective teaching experiences. Nevertheless, student teachers could participate in reflective practice more explicitly by being asked to think deeply or reflect on their experience. According to Cruickshank and Metcalf (1993), besides competence in instructional abilities, student teachers also should be able to reflect critically about their teaching. All the interviewed teacher educators agreed on the importance of reflective teachers for better teaching and learning processes.

Educator A: 'Reflective teaching requires a thinking teacher, who after teaching will look back at what went wrong and what was good about their teaching. If it is good they will retain it, if bad, they will try to improve on the errors that have been made.'

Educator B: 'Reflective teachers are able to use their thinking power to use what they have acquired, maybe from the lectures, from reading or from practical teaching. With the knowledge from there, when they are confronted with problems in their teaching, they can make use, or reflect, from their background knowledge and apply this to situations to overcome or to reinforce what is already good. To use their thinking power to add to whatever circumstances they face during teaching, or before teaching when planning their lesson they can still reflect what they have undergone in the past. That power of reflecting things in the past and bringing something to reality to match or sort of plan their lesson on whatever is reflective. And after their teaching, they can reflect on what they have undergone in the past, keep on thinking, will use whatever available knowledge they have and apply to the present what they are doing.'

Educator C: 'The student teachers are supposed to draw a principle from what we are teaching, it is called the mirror effect. At the end of the lesson there will be a feedback discussion for reflection. They have to reflect upon what they have done during the lesson, what the objectives are, what the principles are, how the teaching was carried out. At the end of the lesson they tell the lecturer what the objectives were, what was good or weak, and

what they think they can improve on. The discussion is reflective, they think about what they have studied and how to apply it. This is experiential learning: thinking about what they have done and how to apply it to primary school. They are supposed to reflect.'

Based on the perceptions of the three teacher educators above, it seems that reflective practice is much more than a passive 'thinking about'. Reflection on professional practice should, in the broadest sense, refer to the capacity of a teacher to think creatively, imaginatively, and at times, self critically about classroom practice. Reflection can also refer to pedagogical practices or to the dynamics of criticism (Lasley, 1992). According to Bennett et al. (1996), it embraces active professional development, directed at particular qualities: open-mindedness or a willingness to seek out and take account of the views of a variety of other people; commitment or a real and sustained attachment to the value of one's own work and to improving its concern; and responsibility which is a concern with the long as well as the short-term consequences of action. This study indicates that Malaysian teacher educators' understanding of reflective teaching matches the conventional concept of reflective teaching reasonably well. Basically, the interviewed teacher educators said that reflection after a lesson is essential if the teacher concerned wants to improve the quality of the teaching and learning processes.

#### **7.4 The Methods Used in Nurturing Reflective Teaching**

As part of this research, a review was undertaken regarding how pre-service teacher training programmes teach prospective teachers reflective teaching skills. After searching related documents from the three selected TTCs and Teacher Education Division (MoE), four basic methods of inculcating reflective teaching skills to student teachers were identified. These are:

- a. micro teaching in peer groups (7.4.1),
- b. Kerja Kursus Secara Proses (KKSP) (7.4.2),
- c. clinical supervision (7.4.3),
- d. journal writing (7.4.4).

The first two are inculcated while the student teachers are at the college and the final two during their teaching practice. However, it is important to stress here that this study has no intention of conducting an in-depth study of all these methods. It is only interested in discovering if and how reflective teaching is being taught through these particular methods.

#### ***7.4.1 Micro Teaching in Peer Groups***

Micro teaching is one of the most important developments in pre-service teacher education especially in practising reflective teaching. Generally, a student teacher teaches a short lesson of about 20 minutes to a small number of student teachers. It is better if the teaching is video-taped as the availability of video recording enhances the effectiveness and flexibility of micro teaching (Wilkinson, 1996). This study has identified that reflective teaching is promoted when there is discussion at the end of a micro teaching session between the student teacher who is doing the teaching, the teacher educator and the other student teachers in the group as pupils. The discussion centres on the student teachers' performance, the techniques used and the lesson planned. That particular trainee would be encouraged to recall and evaluate his/her performance, highlighting its strength and weaknesses. The discussion would also centre on how to improve his/her performance in actual classroom teaching in order to be a reflective teacher. Ideas were also elicited from other members of the class on the trainee's teaching performance. The following responses illustrate these processes:

Educator A: 'They would be encouraged to pass constructive ideas on what they feel were the pros and cons of the teaching done. At the end of the discussion the student teacher who's doing the teaching was asked to summarise the discussion and forward ideas on steps needing to be taken in future to improve their teaching abilities.'

Educator B: 'Before they go for micro teaching, normally we talk about what it is that they have to do. From there, I give them a guideline that I want them to do after their teaching.'

Educator C: 'Normally at the end of the micro teaching, there is an evaluation form distributed to pupils. Besides reflecting on capability in teaching, they also should consider pupils' comments.'

There are several advantages of micro teaching. Although the teaching situation is a contrived one, it is nevertheless real teaching. Also, it allows student teachers to focus upon the acquisition of certain teaching skills or the accomplishment of certain tasks. Micro teaching also offers immediate-feedback-following-performance (Cohen and Manion, 1977). Based on the input from the teacher educators above, it seems that, during micro teaching, attempts are only made to analyse teaching behaviour. However, it is suggested that it is more useful to use micro teaching as a technique for professional reflection rather than simply as a technique for shaping behaviour. Instead of abandoning such practices, it is more interesting when micro teaching is carried out in such a way that it is very open-ended, exploratory and heuristic. As Wallace (1991) reminds us, a more open-ended approach may be advisable because merely following instructions without understanding can lead both to meaningless teaching and to stunted professional development.

However, by looking at input from the teacher educators, it is also noticeable that there was no proper checklist being used in order to evaluate the extent to which student teachers can apply reflective skills during their micro teaching.

Educator A: 'For reflective skills no, there is no checklist. However after micro teaching I will tell them what is it I want them to look back, what other thing was good about the lesson, what can be improved, if the lesson fails it doesn't mean the teaching was bad. It failed because of certain things and normally I give a guideline about what it is they should reflect on.'

Educator B: 'There is no proper checklist therefore there is no immediate feedback for reflective approach from the student teachers. It is a long process, For me, it is indirect when we observe and looking at their lesson plan.'

Educator C: 'Although we have some sort of guideline, no checklist is used during micro teaching in order to elicit whether or not the student teachers try to implement any kind of reflective teaching skills, such as encouraging pupils to ask, trying looking at various perspectives.'

The responses clearly show that there was no checklist being used. Therefore, there is no substantial feedback on how well the student teachers demonstrate the desired ability of reflective teaching. As a result, it can be argued that certain guidelines or a checklist should be used by teacher educators during micro teaching.

#### ***7.4.2 Portfolios or Kerja Kursus Secara Proses (KKSP)***

The portfolio (as known by Educator A) or 'Kerja Kursus Secara Proses', as it is normally known, is a work produced by the student teacher to highlight and demonstrate his or her knowledge and skills in teaching. It is also often promoted as a tool for reflective teaching in teacher education (Wade and Yarbrough, 1996) because it provides a means for reflection and an opportunity to critique one's own work and evaluate one's own effectiveness as a teacher. It should be a document created by the student teacher which indicates his/her duties, expertise and growth in teaching. Consequently, portfolios are becoming increasingly common and can be particularly useful for encouraging reflection by student teachers (Ryan and



Kuhs, 1993). Doolittle (1994) and Dollase (1996) argue that by using the portfolio, pre-service teacher education programmes can increase a student teacher's reflection and provide an ongoing record of a student teacher's growth.

Some reflection activities through portfolios have been found in this study as mentioned by the two educators below.

Educator B: 'In training, through KKSP the reflective skills are again to be reinforced to student teachers. This is based on the process of how to do the project given, and later on they have to evaluate and give comment about the product. All this requires the thinking process, therefore critical thinking is needed in producing an answer. So reflection is incorporated also. Actually the whole process of KKSP encourages student teachers to use reflective skills.'

Educator C: 'For my subject, English, they have a special project: they plan or draw a programme before they go to school. It can be a school based study, in some cases to try out at school especially during their teaching practice, discussing with the supervisor how to carry out the project. When they come back they have to present the findings, an oral report and a written report. This can encourage student teachers to reflect on their strengths and weaknesses during their teaching practice.'

Although the potential of the portfolio is encouraging, it seems that the student teachers in this study only search related literature, collect some data, make reports and present them in a classroom instead of looking at the portfolio as a means to gain essential knowledge, to establish usable or relevant strategies and to link what is taught within and across the courses. However, the presentation is not compulsory. This is clearly admitted by the interviewed student teachers and newly qualified teachers.

Student A: 'We used to do small research for our portfolio project, the topic being identified by the lecturer. We followed the procedure given by the lecturer. We wrote a report and presented it in class. However, this was just for course purposes only.'

Student B: 'Actually, not every student needs to present their work, it depends on the lecturer.'

NQT A: 'There was a project for KKSP, but that was more on note form, went to library did some research or references and wrote report for lecturer.'

NQT B: 'I didn't present my report, maybe because of the time constraint or my work was not good enough to be presented.'

Based on the above responses, it is doubtful whether the portfolio was a good tool for reflective teaching. Moreover, the presentation was not compulsory. These responses are in contradiction to Wade and Yarbrough's (1996) study in which most of the student teachers indicated that they learned from the process of reflection involved in constructing the portfolio. It is clear that, the existing portfolios method in Malaysia's pre-service teacher education programme could be revised in order to make portfolios or KKSP a more effective tool for self-reflective learning. It seems that the development of a portfolio begins with the help of the teacher educator. Ideally, student teachers themselves identify the purposes for their studies by establishing what they need and want to learn in order to become reflective teachers. They have to look for connections between theory and practice. Eventually, they present their report to the teacher educator and other colleagues. Prior to this, student teachers share their portfolio with each other for suggestions and support. When they present their reports in seminars, a sustained and substantive dialogue occurs that can help make the portfolio a living and organic document, and enable them to document their increasing understanding of the dynamic and complexities of teaching in a thoughtful manner and provide a database for more effective classroom planning and decision making. Such exercises make the portfolio more comprehensive in scope and more reflective and analytical in nature (Dollase, 1996). Thus, teaching becomes a collaborative event, expressing ideas in a supportive environment and student teachers become more reflective about their practices.

### ***7.4.3 Clinical Supervision***

Clinical supervision is one way to foster reflective teaching because at some period late in the pre-service programme, the student teachers must demonstrate that they can teach in relation to ideas and reflect upon that performance as well as make the transition from a student teacher to a qualified teacher. As a consequence, the Teacher Education Division, of the MoE has directed all colleges to use clinical supervision in which teacher educators and co-operating teachers must arrange two supervisory conferences with student teachers. The first is called the pre-observation conference and takes place before the student teachers carry out their lessons. The second is the post-observation conference which is held after the students have been observed.

The pre-observation conference allows the student teachers to think critically about the proposed lesson. The purposes of the pre-observation conference are to settle on necessary preliminaries, to put the student teachers at ease, and to exchange information so that the supervisors (teacher educator and co-operating teacher) are informed observers. In this conference, the supervisors can learn specifically how to help the student teachers, thus providing a focus for the subsequent observation. In addition, the pre-observation conference presents an opportunity for the student teachers to reflect on instructional means and ends. When viewed as a mutual exchange of information, this supervisory encounter is less threatening to student teachers (Phelps, 1993). This view is evident in the comments of Educator B and C.

Educator B: 'During the pre-observation conference, we establish a contract with student teachers to observe them teaching by following all the suggested teaching approaches and activities in order to achieve the identified objective.'

Educator C: 'During practicum, we have clinical supervision, we have pre and post conferencing. For example, before the lesson, I have to look at the lesson plan, talk to them about the objectives, what they want to do, the materials that they have prepared, what problem they might have with the materials because I cannot tell them, this material is not suitable or whatever. So the discussion is to make them aware of how to conduct the lesson effectively.'

The post-observation conference should be thoroughly reflective to allow the student teachers to think back on what they have done and have not done. The weaknesses should be pointed out and the topic content adjusted to meet the student teachers' as well as pupils' needs. Teacher educators and co-operating teachers should comment on the teaching technique, set induction, and aspects of the language used. During the observation, the two observers should observe how effectively teaching aids are being used, how set induction and activities are carried out and how the trainees inculcate good values in pupils during their teaching. The comments from Educators B and C suggest that these activities are exercised by the educators in this study.

Educator B: 'After observation we ask him or her to think back on what they have taught. If we have traced their weaknesses that have occurred during the lesson, we give them some guidance or rectification of what they should have done. We are identifying what has already happened in class or how they should have done something which they have done in a different way. So our knowledge has been put into what should have been done by them. So during the post-observation conference, it is more on reflection in the teaching process, not only teaching in school. That discussion allows them to reflect on what they have done, and this reflection is based on a weakness which is then rectified and this gives good reinforcement.'

Educator C: 'After the lesson, there is another discussion or post conferencing and here they reflect. Normally I ask them things like what do you feel, what your are weaknesses and how can you improve. Sometimes they are able to tell us and feel happy with what they have done so we must ask some other question, make them realise.'

Clinical supervision has the primary purpose of improving instruction by focusing on what and how student teachers teach and by developing in student teachers a conviction about the value of reflective teaching. Therefore, parallel with Cohn and Gellman (1988), this study would argue that in clinical supervision, the student teachers should play a central role in the process; they set the agenda for what is to be the focus of the observation, and by the end of the practicum they should have acquired and should be able to demonstrate the skill of reflective teaching. In fact, many years earlier, Cohen and Manion (1977) had acknowledged the important benefits that accrue to student teachers both in supervisory conferences with empathetic supervisors and in informal chats with experienced members of school staffs.

According to Educator A, the teacher educator and mentor must observe at least four times during the second practicum. However, in practice, it is not necessary.

‘It depends much on what the lecturers have got to do. Secondly, it depends on the student's time table and what is going on at school, for example sport, parent teacher meetings, etc.’

The frequency with which mentors do this also varies and it seems that they do not necessarily meet student teachers every time after observation.

Mentor A: ‘No particular time, but normally I tell them when I want to observe. This can give them ample time to prepare, reduce the tension or be prepared mentally and physically. Normally our meeting is after her teaching and after I have read her journal. It should be done everyday to discuss the current matter and solve it immediately. But so far I think she can handle it nicely. We meet once a week or sometimes after two weeks. However I did tell her that she can see me at anytime if she wishes or when she has any difficulties.’

Mentor B: 'So far I have done clinical supervision twice. From this, I think I am able to summarise the strengths and weaknesses of my student teachers. It doesn't mean I don't give feedback beside these two observations. Actually I prefer to give feedback in informal ways especially during our free time, this is to avoid a feeling of tension among my student teachers. However, not every time but almost always after observation, I meet my student teachers, regardless of whether their performance is good or needs to improve. I do believe giving them feedback alternatives as well as encouragement immediately is an effective way.'

Mentor C: 'Not every time, but mostly after observation to tell them what should and should not be done in teaching, comment on their set induction and how they conclude the lesson at the end of the lesson. However, I have drafted a time table to observe student teachers, and also the topic for our discussion.'

Based on these three responses, it is assumed that repeated sequences of the three steps of clinical supervision (before, during and after observation) are routine to all co-operating teachers. Once co-operating teachers are satisfied that a student teacher can 'cope' with the discipline of teaching they tend to confine their involvement in the way that Terrell (1990: 160) describes 'I pop in and out to make sure everything is okay', rather than becoming heavily involved in exactly what is being taught and how. So, co-operating teachers should also offer supervisory advice especially because student teachers' response to any negative criticism concerning classroom performance is likely to be witnessed by the co-operating teacher later in the practice, and the co-operating teacher shares with student teachers an intimate knowledge of the 'ecology' of that particular classroom and its pupils.

From examining all the quotations in this sub-topic regarding clinical supervision, it is clear that the emphasis in pre-observation conference is on process whereas in post-observation conference it is on product. Both conferences should be open-ended, in order to facilitate more reflection among student teachers. However, this study has found that there was no particular

document such as a checklist being used by supervisors during their observation specifically to evaluate student teachers' reflection. This was clearly stated by the teacher educators and co-operating teachers.

Educator A: 'During observation, there is no checklist being used to evaluate student teacher reflection. What I do is check every week their entry. For me, that is some sort of reflection.'

Educator C: 'Individual effort is the main factor but generally they are now better prepared especially in teaching aids. Therefore my evaluation is not based on any particular checklist to evaluate their reflection.'

Mentor B: 'I will see all these at the next observation. Although there is no specific checklist being used, generally they show encouraging development. At the beginning they took a long time to understand the comment and to make any improvement. But now they are able to make an improvement immediately.'

Mentor C: 'I look at the next observation to see if there is any improvement or not. Besides that, I always give feedback outside the classroom which is an informal way and is more friendly. During our free time, I like to talk with them and ask whether they have a problem or not. But there is no specific check list to observe their reflection, because it seems that the student teachers can handle their teaching practice. They can make the plan, identify activities, and exercise class control. I think they know that they will be evaluated, and so they are always prepared.'

#### ***7.4.4 Journal***

Writing is another important component of the programme, which stresses reflection for two reasons. Firstly, reflective writing provides a way for pre-service student teachers to practise critical analysis and reasoning. Secondly, writing provides the college with a way of challenging and supporting each student teacher's reflective thinking. There are several types of writing which may stimulate reflection, but journal writing is the most common (Ross, 1990; Hoover,

1994). In the Malaysian pre-service teacher education programme, it is indeed the most common type of writing. This is indicated in the responses of Educators A and B and Mentor C when they were asked about how they promoted reflection through journals.

Educator A: 'In my case normally there is a form of log book, known by some people as a journal. Each students must write what has happened and what the teaching itself was all about. I actually insist on one full page of writing about their experience such as what went on, what was special about the particular lesson, what could be highlighted, and what other was worth mentioning.'

Educator B: 'By right, student teachers have to write a journal as their reflection after every lesson what do they feel, do they feel that they have learned something after lesson and after implement some activities which are suggested by the lecturer. What are the remedial actions that have been taken.'

Mentor C: 'One of the journal purposes is to identify the pupils' and student teachers' problems. Student teachers write it in their journals. For example, identify the problem which has happened in a specific time and give summary about the problem and the alternatives to improve it. I will read this and will see whether they implement or not the alternatives or to what extent it succeeded. By this way, I encourage them to reflect on their strengths and weaknesses.'

Actually, it is a policy for student teachers to write at least one journal entry each week as their reflection tool (Kementerian Pendidikan Malaysia, 1995). At the end of the week, they must have an entry outlining what have been happening for the past five days of teaching. The log book is also called a journal. As revealed by Mentor C, it is a sort of diary of what is going on.

Mentor C: 'Journal is like a dairy for students to write about what has happened everyday about their teaching.'



Based on the response above, it can be seen that the student teachers are obliged or required to write a journal as a professional diary, documenting events, recording and reflecting on anything which affects their beliefs about teaching. Without such a requirement, the student teachers would only feel that they are supposed to please their lecturer or mentor instead of reflecting on events. However, based on Educators A and C, and all the three interviewed mentors, it seems there is no standard procedure governing how student teachers are supposed to write their journals. Some teacher educators or mentors ask them to write it every day and others ask only once a week. The following responses show this contradiction.

Educator A: 'They must have at least one journal entry for every week. It is a sort of an abstract of what was going on. Normally we ask the students to focus or highlight something unusual about their teaching during that week.'

Educator C: 'Each day they have to do a journal.'

Mentor A: 'She must write in the journal especially about the problem that she has encountered such as class control, pupils concentration, their response, etc. She should write in the journal every time she finishes teaching.'

Mentor B: 'Trainees should write their journal at least once a week and the mentor must read it every week. Write anything about their teaching and pupils learning process.'

Mentor C: 'They are supposed to write after every lesson, but I don't force them to do so because this can burden them. But they must write in it at least once a week.'

Another issue identified in this study is the inconsistency that occurs when the teacher educators and mentors read the student teachers' journals. The following responses illustrate this issue.

Educator A: 'Policy wise, we are supposed to read or look through every time we go to supervise teaching practice. In practice whether the lecturers do it or not, is a different matter.'

Mentor A: 'Since students are asked to write their journal every time they finish teaching. The mentor should read it everyday. But now I don't read it everyday. What I am emphasising is she must write her journal at least once for a week. More than that is all right.'

Mentor B: 'Every week I should read and give feedback. Now I don't read it every week. But I did emphasise trainees to do this every week.'

Without reading the students' journals, teacher educators or mentors cannot foster reflective attitudes to their student teachers. Therefore, Schon's arguments for reflection-in-action (thinking on your feet) and reflection-on-action (contemplation undertaken after the practice is completed) will not be inculcated. As reflection does not occur automatically, attitudes and skills of reflective writing must be consciously developed. However, the teacher educators' and co-operating teachers' responses show that there was no standard procedure for journal writing and no specific time for them to read the student teachers' journals. Therefore, the extent to which student teachers have developed reflective teaching skills is questionable. In addition, this study shows that little effort had been made by teacher educators and co-operating teachers in reporting on the students' practice both in a formative and summative sense whereas it is necessary that both advisors shift from reporting on to inquiring into the student teachers' practices in order to enhance the students' reflection on their practices (Clarke, 1995).

In addition, it also can be argued that journal writing should not be just a form of report writing. According to Hatton and Smith (1995), there are four types of

writing, three of which are characterised as different kinds of reflection. They are: descriptive writing, descriptive reflection, dialogue reflection and critical reflection. There will be no point if student teachers only demonstrate descriptive writing which merely reports events in their journals. At the beginning of their writing they should at least provide descriptive reflection by offering reasons based on personal judgement or relevant reading. After sometime, they should shift to dialogic reflection, as a form of discourse with one's self, an exploration of possible reasons, and eventually demonstrate critical reflection in which they reason for decisions or events which take account of the broader historical, social, and/or political contexts.

## **7.5 Conclusion**

It is plausible that all the methods being used for inculcating reflective teaching skills during pre-service teacher education programme such as micro teaching, portfolio, clinical supervision and journal writing are important catalysts for promoting student teachers' reflection. Although each approach has its particular strength, there are several issues raised by this chapter. Among them are: Firstly, there is no established framework or programme for explicitly fostering reflective teaching skills to student teachers. What this study shows is that the three teacher educators studied do not have clear guidelines about how to inspire student teachers to reflect on their own experiences as learners and on the advantages of various reflective teaching approaches.

Secondly, reflective inquiry-oriented skills are not properly introduced or understood by the student teachers they supervised. Indeed, student teachers are required to acquire such skills for themselves. They should also be capable of monitoring, critiquing and defending their actions in planning, implementing and

evaluating programmes (Hatton and Smith, 1995; Nunan and Lamb, 1996). Therefore, it is important to introduce reflective inquiry-oriented skills especially action research. Also, teacher educators who ask their student teachers to become reflective practitioners must reflect on their own practice (Johnston and Ochoa, 1993). They should not separate themselves as researchers, seeking to understand and improve upon what they do in the classroom day by day, and seeking to contribute to a general body of knowledge in a publicly accepted form (Adler, 1993). In sum, if they want to encourage reflective practice to their prospective teachers, they must themselves acquire the skills of reflective practice.

Thirdly, this chapter has revealed several inconsistent practices amongst teacher educators and co-operating teachers especially in relation to clinical supervision and journal writing. It is therefore doubtful whether student teachers could maximise the opportunities for enhancing reflective practice in the following areas: accessing a multiplicity of perspectives such as peer interaction; watching video tapes of one's practice; interacting with pupils; making explicit one's beliefs about learning as well as discussing with their advisors a number of issues related to their practice such as classroom management, constructing lessons and unit plans, working with special needs pupils, etc. It is also doubtful whether they are able to theorise about practice such as to reflect on problems within their own immediate sphere of influence like pupil learning, their own teaching style, etc.; to make an attempt at problem setting as opposed to technical problem solving, and active participation in the discussion about their practice; and to be encouraged to entertain uncertainty as they explore and experiment with different strategies and approaches to teaching; to be independent, confident, and self-assured. As Munby and Russell (1993); Francis (1995); Schram et al. (1995), and Harrington et al. (1996) mentioned; ambiguity, complexity and uncertainty are hallmarks of professional teaching.

In sum, it can be argued that by providing appropriate reflective experiences, student teachers can acquire a range of other skills. These include technical skills, such as voice projection; interpersonal skills such as counselling and the ability to work as part of a team; communication skills in a variety of contexts; and the ability to criticise the status quo from a moral point of view (Bennett et al. 1996). They also will be able to think beyond immediate issues to consider the larger questions that shape life in the classroom and the minds of pupils (Lasley, 1992). By beginning with technical reflection (reflection-in-action), student teachers will gain confidence in their rudimentary instructional competencies before they can begin to confront important issues such as how and why certain pedagogical practices are used, and to foster consistency between an espoused theory and the actual classroom reality. Further, they will have the capability to engage in dialectical forms of reflectivity (reflection-on-action), and conduct substantial internal and external dialogues about issues that influence their teaching, look critically at the ethical basis for what happens in the classroom and determine the extent to which their practices affect all pupils. These reflection skills allow student teachers to contemplate the social and personal influences on one's beliefs and action; reflect on the micro aspects of the teaching learning process as well as the macro concern about the socio political and historical influences on schooling (Johnston and Ochoa, 1993), and so develop the ability to be self-monitoring, self-directive and professional autonomous (Morrison, 1996). By the time they enter actual teaching, they will have had an intense exposure to the phenomena of schools and classroom in a variety of setting; a large body of foundation and pedagogical knowledge that informs the meaning engendered from participating in the field, and the activity of developing and practising reflective teaching (Armeline and Hoover, 1989).

## CHAPTER 8

### THE SECOND RESEARCH QUESTION: THE CO-OPERATING TEACHERS' ROLE IN NURTURING REFLECTIVE TEACHING

#### 8.1 Introduction

The purpose of this chapter is to answer the second research question of this study: **what is the role of the co-operating teachers (mentors) in nurturing reflective teaching in student teachers?** In order to answer this question, two topics are highlighted. They are:

1. *The mentors' perception of their roles in encouraging reflection in student teachers during their teaching practice.* Basically, three issues will be raised: the motivation to be a mentor; an evaluation of the mentors' roles; and the mentors' capabilities to undertake certain aspects of these roles (8.3).
2. *The obstacles which impede the promotion of reflective teaching.* The obstacles can be classified into two kinds: from the co-operating teacher's perception and from the student teacher's perception (8.4).

Since this chapter relies mainly on input from co-operating teachers, the background of the co-operating teachers who participated in this study is briefly presented in the next section (8.2).

#### 8.2 The Background of the Co-Operating Teachers

Questionnaires were given to a total of sixty co-operating teachers, twenty of them are from primary schools in the north of Peninsula Malaysia, twenty from primary schools in the south, and twenty from primary schools in the east. The

response was considered good: 80% (40) answered and returned the questionnaire. 26% of the returned questionnaires came from IPDA representing the north; 20% from MPKB as the south selected college, and 34% from MPTI as the east selected college. Most of the mentors were experienced teachers; 85% had been teaching for at least 5 years. However, only 25% had been mentoring before. They were from various subject specialisations but most of them were specialising in languages (Bahasa Malaysia or English). The others specialised in math/science, humanities and Islamic studies. All of them had a maximum of two trainees with the same subject specialisation. For interview purposes there were three volunteer mentors with one from each location.

### **8.3 The Mentors' Perception of Their Roles in Encouraging Reflection in Student Teachers**

Teacher educators regard mentoring as a key component of a pre-service teacher education programme (Wildman et al. 1992). This is also true of similar programmes in Malaysia. However, before discussing the role of a co-operating teacher in nurturing reflective teaching, it is necessary to know how a teacher becomes a mentor and what motivates them to be a mentor. Is it because of the professional responsibility or just the personal benefits such as the monetary rewards and provision of release time?

#### ***8.3.1 The Motivation to be a Mentor***

Basically the mentor is selected by the school on the basis of experience, subject matter, and substantial current knowledge about teaching and learning processes. But there are no established criteria to be fulfilled. It is the school's decision. However, the selected teacher must attend a short course at a college before receiving student teachers. Therefore, qualified mentors are very important

because they can give a positive effect to student teachers. Equally important, co-operating teachers can help to organise and operate teaching practice by sharing the responsibility of supervising and grading students. Working with student teachers is also often perceived as an opportunity to develop the co-operating teachers' own teaching because student teachers bring a level of enthusiasm that is refreshing, and introduce new ideas and questions. According to Wood (1991), observing, questioning and guiding student teachers should make mentors more reflective about their own teaching. It should also enable them to have access to newly emerging pedagogic methods and theories by direct link with teacher education programmes. In addition, they can share responsibilities as teacher educators at colleges, even though the mentors should be a 'critical friend' (Frost, 1993), a 'good friend' or a 'good listener' for student teachers (Elliott, 1995).

Existing research makes it clear that student teachers place a high value on advice from co-operating teachers especially because the advice is usually given with the benefit of intimate knowledge of the ecology of the particular classroom in which the student teachers are placed (Terrell, 1990). Certainly, their advice and recommendations are an important element in the student teacher's environment (Dunn and Taylor, 1993). This suggests that co-operating teachers, should be provided with training, particularly in guiding student teachers to be reflective. However, in the case of the co-operating teachers interviewed for this study, those responsible for dealing with student teachers on teaching practice are rarely provided with specific training. This is clearly commented on by these mentors.

Mentor A: 'The course should have a practical session especially on how to evaluate reflective teaching and how to fill in the evaluation form. However, among the course's contents are: how to conduct observation during student teaching; how to judge student teachers in several aspects such as their physical appearance in school; how they socialise themselves in school; how active they



are taking initiatives to improve themselves and etc. The course also should be conducted every year as a refresher course especially for the new mentors.'

Mentor C: 'If mentors rely on that course only, they do not have enough skills to help student teachers to be more reflective. Mentors need experience and substantial knowledge such as in pedagogy and education psychology. However, I will try to help them.'

Table 7 indicates the co-operating teachers' attitude towards the incentives of being a mentor. Basically, this confirms Koerner's (1992) view that the common motivations for being a co-operating teacher are monetary rewards and the provision of release time. This was revealed by Mentor A as well as the questionnaire response as indicated in Table 7.

Mentor A: 'There are many teachers who want to be a mentor because firstly, the teaching periods will be reduced, and secondly they will get a monthly allowance when student teachers are doing their practicum.'

Table 7 suggests that there are another three factors which could be considered important incentives for being co-operating teachers. These are: a special status in teacher certification signed by a title such as 'master teacher' (Item 2); 'working with student teachers is its own reward' when one considers their growth and the intellectual stimulation they provide (Item 7), and formation of 'a professional association of co-operating teachers' to provide support, organisation, and a voice for co-operating teachers in teacher certification (Item 10).

Item 9, which states that co-operating teachers have 'an obligation to work with student teachers and that further incentives are not required' was not seen as a meaningful incentive. Similarly, Item 5, which mentions 'more input and

control' such as official evaluation of the student teachers, received low rating. In particular, the response to Item 5 contradicts the research of Whaley and Wolfe (1984) who found that input and control is the most important incentive for being a co-operating teacher.

Table 7: Co-Operating Teachers' Attitude Towards Incentive

Questionnaire Items	Frequency (%) ( <i>N</i> = 48)					$\bar{X}$	<i>SD</i>
	1	2	3	4	5		
1. Receive financial compensation	2.1	2.1	8.3	27.1	60.4	4.417	.895
2. A special status	2.1	4.2	14.6	27.1	52.1	4.229	.994
3. Participation in the certification of new teachers	8.3	6.3	18.8	45.8	20.8	3.646	1.139
4. The provision of released time	6.3	10.4	18.8	43.8	20.8	3.625	1.123
5. More input and control	2.1	4.2	29.2	50.0	14.6	3.708	.849
6. Greater public and educational system recognition	-	2.1	12.5	52.1	33.3	4.167	.724
7. Working with student teacher is its own reward	-	-	10.4	39.6	50.0	4.396	.676
8. The presence of trainees is a sufficient incentive	-	2.1	14.6	52.1	31.3	4.125	.733
9. An obligation, further incentives are not required	39.6	29.2	14.6	12.5	4.2	2.125	1.196
10. A professional association of co-operating teachers	8.3	4.2	16.7	27.1	43.8	3.938	1.245

1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat; 4 = Agree; 5 = Strongly Agree.

(Items adapted from Whaley and Wolfe, 1984)

Basically the findings of this study are similar to those of Duquette (1994) who concluded that the reasons for becoming a mentor were: wanting to contribute to pre-service education, wanting to further one's own professional development, and feeling that this programme was worthwhile. This study concludes that these important factors may be described as acquiring experience and social motives. These conclusions were reinforced by Mentor C who admitted that there are several advantages to being a mentor to student teachers.

Mentor C: 'There are several advantages, such as an increase in our knowledge especially with regard to the new pedagogical approaches. It also challenges our maturity and capability as a

qualified teacher. It also encourages us to reflect on our own practices and improve them.'

The above comment shows a sense of satisfaction. Indeed, it shows that the benefits of working with student teachers and reflecting on their own teaching practices allow them to experience professional development, time to work and plan programmes with student teachers, meet new colleagues and have the pleasure of watching student teacher development.

The comments by the mentor and the figures given in Table 7 both suggest that, to be a mentor, first and foremost, they must be considered a good and dedicated teacher, concerned about student teachers' problems and able to make them happy in school. However, it is certainly important that the experienced teachers become mentors because the encouragement of reflectivity would be enhanced.

### ***8.3.2 An Evaluation of the Mentors' Roles***

**1. The mentor as a role model:** It is clear that the co-operating teacher greatly influences the student teaching context and also the behaviour and beliefs of novice teachers. As a result, the selection of co-operating teachers who are perceived as good role models is a pervasive criterion for the placement of student teachers. This observation was also common with the interviewed co-operating teachers for this study. For example, Mentor B when asked if mentors should be good role models, said:

'Yes, if not, trainees won't get any guidance, feedback and constructive comment. Moreover, they may not necessarily be able to apply theory they have learned in college to school, so they need immediate feedback from someone who should give them support, and guidance as well as being a resource person during practicum.'

However, in spite of the co-operating teachers' realisation of their role as a model, and the value of student teachers observing them teaching, no one has yet offered student teachers the opportunity to do so. This is clearly stated by the three interviewed mentors.

Mentor A: 'Yes, for example give trainees a chance to observe mentors' teaching. However, so far I have never asked them to see my teaching.'

Mentor B: 'I have never offered them the chance to see my teaching but I suggested that they observe their friend teaching especially when I observe.'

Mentor C: 'I would like them to see my teaching especially using teaching aids, but I have not yet offered.'

The student teachers also reveal their dissatisfaction about the unwillingness of co-operating teachers to be observed by student teachers.

Student B: 'A mentor should also offer students the opportunity to observe how she is teaching, but this has never happened.'

Student teachers need to observe and model the behaviour of co-operating teachers if they are to gain the maximum benefits from their mentors' experience and knowledge. Until co-operating teachers are trained to demonstrate reflective teaching skills, their influence on the development of the student teachers' reflective teaching skills will be questionable. As Lucas (1990), Frost (1993), and Tomlinson (1995) emphasise, co-operating teachers need to be highly reflective practitioners and able to enhance the reflective capacity of student teachers. McIntyre et al. (1996) support this by suggesting that programmes which aim to develop reflective practitioners must create experiences in the field that enable

pre-service student teachers not only to practice reflectivity but also to observe the reflective practices of experienced teachers.

**2. Assisting student teachers to learn from others teaching:** The reflective teaching skills of student teachers are strongly shaped by co-operating teachers as the teaching practice progresses. But, as Cinnamond and Zimpher (1990) note, a student teacher working with one co-operating teacher in one classroom limits the student's ability to become reflective and restricts learning about the multiple communities within the school. They believe that if a student teacher is to develop into a reflective practitioner, then the prospective teacher must become caught up in interaction between all the communities within the school. Consequently, this study sought to find out if co-operating teachers are aware of this. The findings of this study suggest that co-operating teachers did not take any initiative to encourage student teachers to learn from others' teaching. This can be inferred from the statements below where mentors were asked if student teachers had discussions with other teachers in the school.

Mentor A: 'As far as I know, my student teachers only discuss their teaching with me not with other teachers. They even like to discuss other matters besides their teaching practices.'

Mentor B: 'Not in terms of teaching and learning processes, but it doesn't mean other teachers can't, maybe indirectly they also help the trainee.'

Mentor C: 'So far no, because it might disturb other peoples tasks, and from my observation nobody is willing to be observed by student teachers.'

Based on the quotations above, it seems that the co-operating teachers were worried that the instruction would be interrupted if they learn from other teachers.

The reasons for this concern can be reflected in what Koerner (1992) discovered in his research. The co-operating teachers sometimes felt threatened when the student teachers proposed new ideas for instruction. They admitted discomfort and a vague jealousy. They thought they should be the source of ideas for instruction because they had invested so much in their classrooms. They were more comfortable being 'all-knowing' and sharing their knowledge. Another reason may be that the co-operating teachers believed that instruction was at risk because of the presence of a student teacher, who is inexperienced. The co-operating teachers were also concerned about the direct as well as indirect effects of the student teachers' instruction on their pupils' learning. They felt more comfortable when they retained control. On the other hand, this study believes teaching practice can facilitate reflective teaching by assigning reflective activities to student teachers. By interacting with other members in school, reflective teaching can be expedited as well. Therefore, the function of a mentor is very important, which is illustrated by their right of giving marks up to 70% to student teachers for their teaching practice. This was mentioned by all the interviewed co-operating teachers. For example, Mentor A said:

'Mentors give marks up to 70% and the remaining 30% is given by their supervisor from the college.'

It was unfortunate that the mentors did not assist student teachers to learn from others' teaching. As mentors, they are supposed to help student teachers to question them by being willing to be observed in their teaching or provide the opportunity for student teachers to observe other teachers teaching. According to Tomlinson (1995), this can help student teachers examine teaching styles and their effects in a systematic and analytical way. It also encourages them to carry on improving, not only because they repeat and automatise their strategies, but because they are also intelligently examining things all along.

**3. The mentor as a collaborative teacher:** According to Wildman et al. (1992), encouraging reflection involves listening, discussion, modelling and brainstorming, not simply just taking direct actions to satisfy student teachers' need for information, materials or processes that they could immediately use. Despite what has been argued about the role of mentors in nurturing reflective teaching (as indicated in Chapter 4, see 4.4), this study shows that the mentors let student teachers do everything on their own without any prior consultation, joint effort or advanced planning. This is clearly stated by two mentors.

Mentor A: 'Normally before she teaches, she comes to see me to discuss the topic that she is going to teach and the activities that she has planned. I go through but normally I give my comment after observation based on my knowledge about a particular class or based on my observation.'

Mentor B: 'Normally my student teachers will give me everything they have done a few days before they are observed. During observation, I will see whether they do all the things that they have planned earlier.'

Although the student teachers gave their teaching plan earlier, this study shows that reflection activities, especially listening and discussion, only happen after the students' teaching. This is revealed by all the interviewed mentors when they were asked about the reflection time.

Mentor A: 'After she teaches I will ask whether she feels satisfied or not, for example does she think the lesson can be understood by pupils. After that I give my comment, suggestions or alternatives.'

Mentor B: 'I also give comment in their teaching plan book and identify the weaknesses that need remedying, especially after I have observed them.'

Mentor C: 'I write in her lesson plan book, questions about what she has written or I write suggestions based on my observation.'

This uncollaborative effort was conformed by one of the student teachers interviewed. Although the evidence came from only one student teacher, it indicates that there was a tendency of the co-operating teachers not to play the role which they are supposed to adopt as stated clearly in 'Panduan Praktikum II' (Kementerian Pendidikan Malaysia, 1995: 26), 'Continuously giving guidance, based on clinical supervision'. However, as revealed by the following student teacher's comment, this does not happen in practice.

Student A: 'A mentor should gives guidance and advice to improve my teaching style. We should have discussion before and after observation, but we usually have it after she has observed me. The comments are usually in written form in my lesson plan book. There are only a few verbal comments.'

In relation to the above point, what this study would like to argue is that if the co-operating teachers are not told the need for collaborative effort, other student teachers in the future will also be affected. Although the most fruitful reflection arises in the post-observation dialogue between mentors and student teachers (Frost, 1993), in order to be effective in nurturing reflective teaching, it is very beneficial if the mentors could make a joint effort or plan together before student teaching, and see how good this is when implemented during teaching, and followed with discussion after student teaching. Indeed, shared goals is an important process to develop confidence within the student teachers (Elliott, 1995). This way of helping could match the concept of reflection practice, especially promoting 'reflection-in-action' by which they would be skilled practitioners, unconsciously bringing their skills to bear in order to solve problems.

**4. Assisting student teachers to learn from their own teaching:** Several encouraging features on this point were found in this research. One is that the co-operating teachers gave some suggestions how to improve student teachers' reflection, particularly in assisting them to learn from their own teaching in order



to be good and successful as reflective practitioners. The co-operating teachers' functions can be classified as follows:

Firstly, to enable student teachers to assess and improve their own skills (Frost, 1993, Tomlinson, 1995). This can be elicited from the responses of Mentors A and C.

Mentor A: 'Always remind them to engage in discussion with peers, mentor or other teachers, be open-minded, ready to criticise and to be criticised.'

Mentor C: 'First and foremost, basic skills such as the teaching plan must be properly done. Creativity in using teaching aids and set induction is essential and student teachers must also have a knowledge about subject teaching.'

Secondly, to enable student teachers to evaluate the chosen teaching strategies and materials in terms of their appropriateness, as well as to try to develop awareness about the pupils, the interactions in the classroom and about the processes of teaching and learning (Frost, 1993). Mentors A and B seem to realise these as the purpose of their own reflection as well as the purpose of student teachers' reflections.

Mentor A: 'Always encourage them to use a variety of teaching methods in order to find the best one. Be sensitive towards pupils, always find out the reasons why certain groups of pupils can follow the lesson whereas the others can't. Emphasise more in their daily teaching process that pupils matter. They should discuss with the mentor, question themselves, try to attract pupils' attention and use innovative and creative methods. Thus, their relationship with pupils must be very good and teaching and learning should also happen outside the classroom.'

Mentor B: 'They must always think and find new ideas or other alternatives to improve their teaching capability and long term profession. They should also be aware and active in order to improve their knowledge. For example, set induction at the

beginning of the lesson is important. If it is interesting, the lesson will be easier to teach and pupils will be happy to learn. How good set induction is depends on teacher creativity.'

Thirdly, to assist student teachers in classroom management and teaching aids.

These were revealed by the three interviewed mentors.

Mentor A: 'When I find that she is using activities which are not appropriate with pupils' levels, or her attention is not focused on all pupils in the class or other aspects, I will ask her to improve it, sometimes including her time management and teaching aids.'

Mentor B: 'I always ask them indirectly or directly, to find out new ideas about how to make their teaching interesting because this will influence their mark a lot. I emphasise reflectivity aspects when I do assessment.'

Mentor C: 'I also help them to choose suitable teaching aids or give them ideas about how to create teaching aids if they are not available, and also assist them in how to use audio visual equipment such as charts and videos.'

The effort to inspire student teachers to analyse and reflect on their own teaching and its aims is essential. As Tomlinson (1995) points out, for students to extend or even to correct their own reasoning, mentors should try to ensure that the students 'process it meaningfully'. Even if the latter do not happen to agree, they are encouraged to offer evidence and rationales themselves, or at least be assisted in gaining insights. In addition, to motivate student teachers to be more reflective, mentors should analyse and reflect on the positive achievements just as much as, if not more than the weaknesses, and promote a proactive approach by assisting students to plan for further development.

##### **5. Help student teachers to reflect on skills other than their teaching:**

During teaching, student teachers should study and understand the school and the

cultural context within which they will be working. The emphasis on reflective teaching practice is to allow one to begin seeing through a teacher's eyes and to consider responses in the light of practical, social, and ethical consequences. Therefore, the mentors' help is needed to guide student teachers to be more reflective about the social environment in which they are working. This was also emphasised by the co-operating teachers.

Mentor A: 'Besides helping them about teaching and learning processes it is also about school culture and pupils' background and character. Mentors should make sure student teachers take one sport and club activities respectively.'

Mentor C: 'Being a mentor, I should see everyday what is happening to student teachers during their practicum. We should not only see their teaching creativity, capability and overall performance but we must engage them in discussion, make sure student teachers have initiative to find out about their pupils' backgrounds and involve them in extra curriculum activities, good appearance and relationships. Mentors should prepare the syllabus and time table and also introduce student teachers to all the school members and most importantly help them to develop good attitudes towards the teaching profession. Thus, discipline is very important.'

As time goes by, the co-operating teachers begin to feel a commitment towards the student teachers, and they begin to initiate specific situations for student teachers to reflect on other than their teaching skills. For example, the mentors showed the awareness that the student teachers have to function within the culture and context of the entire school.

Mentor A: 'I am willing to help what ever problem she reveals; I even used to help in personal aspects; we discussed together and found out the solution. I think this is important to help trainees concentrate on their training and avoid other matters which disturb their performance during teaching practice.'

Mentor A: 'In other aspects especially in running co-curriculum activities, other teachers really help student teachers.'

Mentor A: 'Student teachers must be punctual as well, and not always come late to class. This can effect teaching and eventually the objective won't be achieved. Also, they need to be innovative in teaching. This can encourage them to evaluate themselves.'

Mentor B: 'I always give student teachers encouragement and involve them in many school activities in order to avoid them feeling alienated in this school.'

Mentor C: 'The discipline in school, including appearance, proper attire and punctuality are signs of their capability to be a teacher and interested in co-curriculum activities as well.'

**6. Mentor as advisor/supporter for professional development:** Another more crucial point seems to be the requirement of co-operating teachers' availability for discussion with student teachers at appropriate times (Lucas, 1990). Co-operating teachers should give clear guidance to student teachers especially in assisting students to prepare their lesson plans. This can be illustrated in the following responses.

Mentor A: 'Before they write the lesson plan, I encourage them to discuss with me the teaching objectives, activities that they are going to do and the time management in the teaching process. The skills to be nurtured depend so much on the pupils' abilities. Indirectly, I assist them to choose the appropriate teaching method and teaching aids parallel with pupils' achievement.'

Mentor C: 'Firstly, I introduced them to the syllabus and the basic steps of making the teaching plan. In their teaching plan, I look for the objective; it must be parallel with pupils' achievement and background.'

Also, if co-operating teachers are to promote in the student teachers the quality of commitment to reflection, there must be some demonstrable redrafting of plans or materials there and then, rather than simply pointing out what should

be done on another occasion. Basically, the mentors seem to realise this and have taken appropriate initiatives. The quotations below demonstrate this.

Mentor A: 'Mentors also need to reflect on their own practice, to evaluate whether their coaching is relevant or not.'

Mentor B: 'Mentors should give encouragement and moral support to trainees and always ask whether they have problems with school pupils or personal matters outside the classroom. We should assume them to be our relatives by creating a close relationship and good friendship.'

Mentor C: 'I also help them by showing them how to solve pupils' problems in learning processes and how to construct question tests and identify the most popular topic in standard examination.'

After the first teaching practice, student teachers went back to their colleges during which reflective teaching was encouraged throughout. However, according to the co-operating teachers some of them in the second teaching practice were still nervous and their performance was not consistent.

Mentor B: 'At the beginning of practicum, they were a little bit nervous and there was some sort of gap between them and the mentor, maybe because they don't have experience and know they will be evaluated. But I used to explain that the evaluation will be based on their performance and good remarks will certainly be given if they are deserved.'

Mentor C: 'At the beginning of their practicum, their performance was not consistent. But now it is getting better and I have no doubt about giving them a good mark.'

At the end of the student teaching practice, the co-operating teachers had to judge whether their student teachers were ready to become reflective teachers. They also began to measure their success in nurturing reflective teaching skills in student teachers. Some mentors were also willing to be assessed by their student

teachers or even by the teacher educators as can be seen from the responses below.

Mentor A: 'I have a special form (PR 2), provided by the college. I put all my comments in the form after teaching practice. I gave it to trainees to look at in order for them to recognise their strengths and weaknesses. After that, we normally have a discussion.'

'I hope they will be reflective teachers, who are concerned with their practices and sensitive to the need of pupils. I try to give them exposure to how to teach effectively with my main objective being to increase the number of pupils who pass excellently in the national assessment.'

Mentor C: 'There will be a written report from the mentor about the student teacher's overall performance. One copy will be given to student teachers, they will bring it to college as evidence to discuss their strengths and weaknesses during the reflective week. The mentor's contribution toward student teachers' development during practicum will also be discussed with their lecturers during the reflective week.'

Koerner (1992) points out, in the best situation, two student teachers with the same option or subject specialisation can work as a team. This practice can facilitate reflective teaching skills such as through discussion and observing each other. Thus, co-operating teachers can encourage such practices. As Mentor C says:

'Since student teachers are paired in practicum, I encourage them to give constructive comments and use a variety of teaching aids especially audio visual. They are also encouraged to observe each other teaching.'

The co-operating teachers, as evident in the following response, also drew upon their past experiences of being student teachers to share with student teachers and then revealed how they expect their students to perform.

Mentor C: 'I used to tell about my past experiences. I hope this can encourage my trainees to feel confidence with all sort of problems of being a teacher. Hopefully they won't be shocked when they become qualified teachers later on. All the problems should be perceived as a challenge which can enrich their knowledge and experiences.'

The fact that the mentors related their experiences to student teachers is encouraging. Looking at past experience is a reflective process, it allows us to draw conclusions about our experience and develop new insights that we can apply for our future activities (Wade and Yarbrough, 1996).

It is also important for mentors to ensure that student teachers will continue to examine and clarify their personal values and beliefs about society, pedagogy as well as their profession. Mentors B and C are seen very concerned about these matters.

Mentor B: 'Student teachers must have clear and good perceptions towards the teaching profession such as it is an interesting job. At the same time, challenge their maturity as one of the ways to increase it. Student teachers, therefore, must keep on evaluating their practices. In future, they should feel satisfied and proud with their former pupils' achievements. Don't perceive all the problems during teaching whether problems with parents, education department or pupils, as obstacles to developing their professional competencies. Eventually, those who are genuinely interested in being a teacher, will feel job satisfaction although they are facing many challenges in their profession.'

Mentor C: 'Reflective teachers also should inculcate good values to their pupils. Comparatively, teacher profession can inculcate good values directly, we can see the effect in short term as well as long term.'

In relation to the co-operating teachers' advice, this study provides support for Dunn and Taylor's (1993) conclusion. Co-operating teachers should give advice with rationale or explanation, compare a present case with past and future cases.

### 8.3.3 Summary of the Mentors' Roles

The co-operating teachers' roles and their capabilities are summarised in Table 8 below. The co-operating teachers were asked whether they had experience of various aspects of a mentor's work, whether they felt competent to undertake these aspects and whether they felt that they need training to carry them out.

Table 8: The Aspects of the Mentor's Roles

Questionnaire Items	Frequency (%) ( <i>N</i> = 48)		
	1	2	3
1. Organising students' subject teaching time table	22.9	47.9	29.2
2. Organising the students' whole programme	10.4	47.9	41.7
3. Helping students with resources	37.5	56.3	6.3
4. Attaching students to a tutor group	29.2	58.3	12.5
5. Helping students to meet other staff	37.5	58.3	4.2
6. Discussing lesson preparation with students	50.0	43.8	6.3
7. Helping students with teaching strategies	31.3	58.3	10.4
8. Helping students to set target	31.3	50.0	18.8
9. Helping students with classroom management	47.9	45.8	6.3
10. Helping in understanding the diversity of pupils	22.9	43.8	33.3
11. Helping students with specific assignments/tasks	20.8	43.8	35.4
12. Helping students with overall school policy	43.8	43.8	12.5
13. Counselling students	33.3	52.1	14.6
14. Observing students teaching	35.4	45.8	18.8
15. Discussing lessons before observation	37.5	50.0	12.5
16. Discussing lessons after observation	33.3	54.2	12.5
17. Providing written feedback on observed lessons	22.9	56.3	20.8
18. Discussing overall progress with students	27.1	60.4	12.5
19. Team teaching with students	18.8	47.9	33.3
20. Being observed by students	45.8	35.4	18.8
21. Helping students to discuss lesson observed	39.6	47.9	12.5

1 = Had Experience; 2 = Feel Competence; 3 = Need Training

(The response scale is not a likert scale, therefore no  $\bar{X}$  and SD are given)

(Items adapted from Williams, 1993)



Items 1 and 2 refer to aspects of the mentor's work which could be described as organisational. Nearly half of them (47.9%) felt competent in realising these roles. Surprisingly 41.7% felt they need training to organise the students' whole programme. This suggests that there was more demand for training in this area than in subject-specific organisation.

Items 3, 4 and 5 refer to the role of the mentor as a facilitator. Most respondents felt competent in this area, although there was a need for training with students attachment to a tutor group. This reflects what Williams (1993: 415) calls, 'a feeling of inexperience or lack of expertise in supporting the student in his/her early attempts at work in the role of form tutor'.

Items 6 to 13 refer to aspects of mentoring which involve acting as an adviser or supporter. Basically, it was found that the demand for training was clear. It is not surprising that few mentors have had experience or felt competent to help students with special assignments and tasks (Item 11), and in understanding the diversity of pupils' background (Item 10). Others areas where many respondents felt a need for training were in helping students to set target (Item 8), and counselling students (Item 13). The majority of respondents felt competent to help students with lesson preparation (Item 6) or with classroom management (Item 9).

Items 14 to 18 refer to the mentor as a teacher in the context of observing the student teachers teach. Most of the sample felt competent in all aspects especially in discussing overall progress with students (Item 18), and in providing written feedback on observed lessons (Item 17). However, there was more demand on training especially on how to provide written feedback from observation (Item 17), and the process of observing student teaching (Item 14).

The last aspect of the mentor's work, referred to in Items 19 to 21, are related to the mentor as a role model. As might be expected, quite a number of respondents reported they need training in teaching collaboratively (Item 19), and in being observed by student teachers (Item 20). These may reflect a feeling of unwillingness of mentors to be observed. Perhaps this is because they are not confident about their own capabilities or because they wish to maintain a gap between them as supervisors and student teachers as trainees who are to be assessed.

#### **8.4 Obstacles to the Process of Nurturing Reflective Teaching**

So far the data collected for this study indicates that there are a number of obstacles that can impede the development of reflective teaching to student teachers. The obstacles can be classified into two kinds: those emerging from the co-operating teachers' perceptions and those from the student teachers' perceptions. From the co-operating teachers' perceptions, there are two main obstacles: the problem with professionalism and the problem of distant relationships between mentor and teacher educator. From the student teachers' perceptions, the main problem discovered can be summarised as the problem caused by the co-operating teachers' enthusiasm for helping student teachers.

**1. Problem with mentors' professionalism:** As discussed earlier in this chapter, the co-operating teachers were not willing to give the student teachers the chance to observe their teaching and did not encourage the student teachers to learn from the teaching of others. This study has also found that a number of co-operating teachers did not have the substantial knowledge they would need to help student teachers. This is personally admitted by two of the interviewed mentors:

Mentor B : 'This is my first year as mentor and I left college a long time ago. I am sure there are a lot of changes and improvements. So for the new method or new approach in teaching and learning, I don't have enough knowledge and there are also many terms especially in English that I'm not sure of the meaning of. This is a handicap, but as far as basic knowledge is concerned I think I am able to help them.'

Mentor C: 'Although this is my second year as mentor, I am sure I don't have enough experience and knowledge, but I try my best to assist student teachers during their practicum.'

The mentors' lack of substantial knowledge to help student teachers was also revealed by one of the interviewed student teachers. She perceived her co-operating teacher as not having enough knowledge to help her to be a reflective teacher.

Student C: 'I have a mentor who I consider to be not well qualified. He has only been teaching one year, and doesn't have much experience. I haven't met him very often. In short, I am not satisfied with my mentor. I have to do everything myself.'

This is a barrier to nurturing reflective teaching in student teachers because the co-operating teachers' lack of ability or unwillingness to engage in reflection about their own or their student teachers' practices contributes to the poor quality of feedback received by student teachers. It also leads to confusion and frustration. In order to expedite student teachers' understanding about reflective teaching, co-operating teachers need to reflect upon and perhaps criticise their own classroom routine (Koehler 1988). Otherwise, the co-operating teachers will not be the most influential actors in the student teaching experience. Should this happen, it will contradict the mentor's role and responsibility during the practicum as stated in the official document 'Panduan Praktikum II' (Kementerian Pendidikan Malaysia, 1995). This document makes it clear that co-operating teachers should encourage and guide student teachers to carry out reflection and self evaluation during the practicum and make sure that they write a journal. Co-

operating teachers should also correct their common tendency to be more oriented towards the practical than towards the theoretical. Student teachers will not see the importance of a co-operating teacher for her teaching practice unless the co-operating teacher is a reflective practitioner who has got substantial knowledge about teaching and learning processes. Thus, it is not surprising that on some aspects the interviewed student teachers revealed their concern about the capability of their mentors and teacher educators as illustrated below.

Student C: 'The mentor should be a reflective teacher with teaching experience of at least 5 years. The mentor must be knowledgeable in many areas such as pedagogy, class control, and educational psychology and must be active in extra curricular activities. They should also be a model, willing to be observed by the student teacher, able to identify our weaknesses and give suggestions to improve it.'

Student D: 'As long as the mentors are senior and experienced teachers. They must know what we are learning in college and understand the environment in college and school because the situation is dynamic, keeps on changing.'

Student E: 'Senior teachers should be appointed as mentors because they are more experienced; they know the practical things in school and they are appreciated by student teachers.'

Student F: 'Teacher educators should have taught at school for several years, so they know the school environment better. But some lecturers are just a few years graduated from university; they do not have much teaching experience.'

**2. Distant relationships between mentor and teacher educator:** At the same time, there were complaints from co-operating teachers about their relationship with teacher educators. As two mentors say:

Mentor A: 'They should come and see the mentor, have a discussion about their student teacher, and together suggest the possible solutions for any problems. Teacher educators must spend

some time having a discussion with student teachers, giving them encouragement and ideas how to improve their professionalism and not only responding mechanically to what has been written in their plan.'

Mentor C: 'The lecturer must observe more frequently because he came only two times for observation. He never saw me before or after his observation to discuss student teacher development. It seems that there is no relationship between mentor and lecturer. It is much better if the lecturer informs the mentor when he will be coming so we can observe together and compare our remarks, discuss and find out if anything that student teacher need to improve on. This should be done at least once especially at the end of the practicum in order to encourage student teachers to be more reflective on their practices.'

This situation is seen as the problem of understanding the partnership of teaching. Co-operating teachers feel they are solely responsible for students' teaching practice. At the same time they want to see more active involvement on the part of teacher educators. This suggests that if the pre-service teacher education programme is to be successful in providing the reflective teacher with the knowledge and skills needed for the expected performance, there must be congruence between the experiences provided in the classroom and the goals established at college. This type of relationship was not evident in this study although there is a common belief that a collaborative team relationship is essential for any successful programme. According to Duquette (1994), it is important that both groups work as equal partners to provide a high quality teacher education programme, one which will benefit teacher educators, co-operating teachers, student teachers, and pupils. Moreover, it is clearly stated in 'Panduan Praktikum II' (Kementerian Pendidikan Malaysia, 1995), that the role and responsibility of co-operating teachers is to supervise together with teacher educators in order to synchronise their assessment. The congruence between them implies that communication is present, that teacher educators and co-operating teachers are aware of each others' needs and expectations (Applegate and Lasley, 1982). Parallel with the argument of Hagger et al. (1995), it is vital that co-operating

teachers are able to work with student teachers in a classroom for sufficient time to build a constructive working relationship with them and to be able to monitor and evaluate their progress with confidence. This type of relationship provides the opportunity to plan ahead, allocate tasks for the coming days or weeks, and draw the student teachers into evaluative discussion of all that they have seen and done during the week.

**3. Problem with mentors' lack of enthusiasm:** Student teachers often express concern about the lack of initiative and enthusiasm exhibited by co-operating teachers. On the other hand, in order for co-operating teachers to encourage reflective teaching, a number of needs must be met. The co-operating teachers must allocate sufficient time for detailed lesson observation, together with time for discussion before and after taught classes, and be consistently responsive to student teachers' queries. Both the student teachers and co-operating teachers must maintain an openness to question and to be questioned and show a willingness to re-examine their own decisions. As Wood (1991) relates, student teachers continually question, reflect on and revise their teaching, whereas the responsibility of the co-operating teachers is to guide student teachers' reflection from issues of daily survival into areas of meaningful pedagogical concerns. However, this practice did not actually occur in the data, as shown in some typical complaints from the student teachers.

Student A: 'Lately we haven't had regular discussion, maybe because we used to discuss several times at the beginning of my practicum, especially before I identified my teaching objective. This was to ensure my objective was in sequence order and at the same level as pupils' abilities. But I think it should be more frequent now so I can learn from what I've done.'

Student C: 'We don't have a regular meeting or fixed time for discussion. We meet when I have a problem and need his opinion.'

I think this shouldn't be so. Being a trainee, I really need help from an experienced mentor.'

Although the co-operating teachers claimed that they help student teachers in preparing teaching plans, according to the student teachers, their mentors did not help them during the preparation stage. They had to do this themselves. The mentors only read the teaching plan and wrote their comment in the preparation book. This is revealed by all three student teachers interviewed.

Student A: 'Encouragement and help in preparing the teaching plan is very rare, but she gives ideas about how to choose teaching aids and activities which can attract pupils' interest.'

Student B: 'She does not help during the preparation stage, but she will read my teaching plan and give a comment. But I was told she can be asked if I have difficulties in preparing the lesson plan. However, it would be much better if the co-operating teacher was pro-active in this matter.'

Student C: 'So far there is nothing that I can say. I am not satisfied, I do everything on my own.'

It is worse still when they do not have a good relationship, and where there is a tendency for co-operating teachers to be authoritarian, as revealed by one of the student teachers.

Student C: 'I expect to be given guidance based on his experience and knowledge. Tell me nicely what is wrong in my practice lessons. Don't treat me like a child. Give constructive comment with suggestions but don't condemn.'

The student teachers' comment about the mentors' role is of central importance. According to Hayon and Wubbels (1992), negative experiences of student teachers are more related to the oppositional behaviour style of the co-

operating teacher. Directivity, such as strictness or anger, or non-directivity, such as dissatisfaction or uncertainty of the co-operating teacher may give rise to student teachers' dissatisfaction with the supervision. On the other hand, if co-operating teachers and student teachers continue to be very polite to each other any disagreements might be either left unexplored or might be ignored (Haggarty, 1995). Therefore, both the leadership style of co-operating teachers and their allowing for student teachers' responsibility play an important role in student teachers' satisfaction (Hayon and Wubbels, 1992). From the point of view of this study, at the end of teaching practice it is assumed that student teachers have achieved basic competence. In order to achieve this, the role of the mentor needs to be developed much further and a co-operative relationship with the student teacher has to be established with a move from the basic level in the early stages of teaching practice, to developed level and eventually to extended level (Williams, 1993). As Maynard and Furlong (1993) stressed, mentors in this final stage of development need to establish themselves as co-enquires with the aim of promoting critical reflection on teaching and learning by the trainee.

## **8.5 Conclusion**

Mentoring is a comprehensive array of ways to provide support to student teachers. Mentors become teachers, leaders, guides, and role models across all the substantive areas of teaching. Indeed, the task of helping student teachers to be reflective teachers, which involves a high amount of time, modelling and collaborative problem solving, suggests that mentors have a serious desire to help develop real competence, not just to offer themselves because of personal rewards such as money compensation and relief time.

Despite the fact that some of the findings reported in this chapter suggest that co-operating teachers do not provide critical feedback to their student teachers,



the conventional wisdom in pre-service teacher education suggests that co-operating teachers who themselves are reflective and articulate about their own teaching should, through modelling and discussion, promote reflective teaching in student teachers. There is no doubt that co-operating teachers play an important role in shaping the thinking and teaching of student teachers. They are the individuals who have first hand knowledge about student teachers' experience and will be in the best position to assist the students in their reflections in which they make sense out of life in the classroom and link theory with practice.

Although this study does not advocate the idea that co-operating teachers should always be experts in their subject and in their training of student teachers, some expertise of this kind is necessary for them to give some kind of help to student teachers. What makes this worrying is the occurrence of several discouraging factors revealed in this chapter. They are: (a). co-operating teachers do not perceive that more input and control in the process of new teacher certification, such as official evaluation of the student teachers' performance, would reinforce their work as co-operating teachers (Item 5, Table 7); (b). complaints from student teachers that some of the co-operating teachers are not competent enough, and (c). obstacles to the process of nurturing reflective teaching. The obstacles can be summarised as: problem with mentors' professionalism; no close relationship between mentors and teacher educators, and problem with mentors' lack of enthusiasm. Possible suggestions for how these problems could be resolved will be discussed in Chapter 11.

## CHAPTER 9

### THE THIRD RESEARCH QUESTION: THE DEVELOPMENT OF STUDENT TEACHERS' REFLECTIVE TEACHING DURING THE PRE-SERVICE TEACHER EDUCATION PROGRAMME

#### 9.1 Introduction

This chapter seeks to answer the following question: **what reflective teaching skills did student teachers learn and develop during the pre-service teacher education programme.** In pursuing this question, four issues will be addressed. Firstly, *student teachers' understanding of the concept of reflective teaching* (9.3). Secondly, *the extent to which they had acquired the characteristics of reflective teaching* (9.4). Thirdly, *the levels of student teachers' development of reflective teaching during their teaching practice* (9.5). Finally, *the attitude of student teachers to becoming reflective practitioners* (9.6). This chapter begins with a brief description of the background of student teachers who participated in this study (9.2).

#### 9.2 The Background of Student Teachers

From each TTC, a number of 50 final year student teachers were selected. This means that 150 student teachers were given the questionnaire, of these, 121 or 80% answered and returned the questionnaire. All 50 student teachers from MPTI returned the questionnaire, but from IPDA, only 37 did so and from MPKB, only 34. The participating student teachers were from various subject specialisations especially from languages, science and mathematics studies. In terms of age, most of them (74%) were between 21 to 25 years old. For the exploratory interview purposes, there was only one volunteer from each college, so the total interviewees were three. This is similar to the second interview (reflective interview) which was conducted during the last week of teaching

practice. However, the interviewees were different from the first (exploratory) interview. This was due to the free time factor of student teachers.

### **9.3 Student Teachers' Understanding of the Concept of Reflective Teaching**

Before exploring the extent to which student teachers had gained and were inclined to practice some of the characteristics of reflective teaching and which are the most prominent, it is necessary to explore first how the student teachers understand the concept of reflective teaching. Based on their responses below, it can be generally said that Malaysian student teachers know or understand the concept of reflective teaching. For example, they show concern about their pupils as well as their teaching capabilities.

Student A: 'It depends more on the attitude of the teacher how far they can use their theoretical knowledge in the classroom to gain useful experience.'

Student B: 'He/she is concerned about pupils, interested in teaching. It refers to a dynamic teacher who always improves their teaching style to avoid too much routine.'

Student C: 'The teacher who has a careful teaching plan, who, after teaching, always evaluates his/her teaching style so that pupils can understand better. A teacher who identifies their weaknesses, tries to correct them, implements new ideas and, re-evaluates whether to improve them or to maintain them.'

It can thus be said that Malaysian student teachers know some of the characteristics of being reflective teachers. Three student teachers A, B, and C further illustrate this by the comments below.

Student A: 'Keep on reading, take part in discussions, always try new methods or approaches and eventually both you and your pupils will feel satisfaction. He/she is sensitive to pupils' needs, understand his/her own weaknesses and takes initiative to correct

them from time to time for the sake of himself/herself as a teacher and of the pupils as customers.'

Student B: 'He/she will try to understand the pupils' situations with respect to their capability level, interest and family background. So they set their expectations in accordance with the nature of their pupils. Thus, they are committed to their work, effective in teaching, and always engage in discussion especially on how to improve their own as well as their pupils' performance. And also they can be an example to pupils.'

Student C: 'We must keep on realising ourselves as a teacher, such as through reflection and then we will know what has happened with our teaching. We will know if the pupils are happy and this can motivate us to improve ourselves.'

Based on the responses above, the data seems to suggest that the student teachers do have some tacit understanding of the concept of reflective teaching. Whatever particular concept they perceived, it seems that they share the underlying assumption that reflective teachers should use logical, rational, step by step analyses of their own teaching and the contexts in which that teaching takes place (Korthagen, 1993a).

#### **9.4 The Extent to Which the Student Teachers had Acquired the Characteristics of Reflective Teaching**

For the purpose of this study the characteristics of reflective teaching are those described in Chapter 6 (p: 102).

##### ***9.4.1 Characteristic 1. Reflective teaching implies an active concern with aims and consequences, as well as a means and technical efficiency.***

This relates to the immediate aims and consequences of classroom practice and is reflected in the student teachers' thinking about the successful implementation of aims, and being alert to the approach and method used in order to get pupils'

attention and understanding. Student B demonstrated this characteristic by being able to identify teaching objectives before teaching.

'The teaching objective must be identified before teaching, while preparing a lesson plan. The method and approach of teaching should also be identified earlier based on what skills will be taught. For example, alternative teaching approaches might be giving examples or asking pupils to give examples, or group or individual activities.'

The interviewed student teachers also seem to have acquired an active concern with the consequences of their teaching. For example, when they were asked how to identify which teaching processes are successful or not, they mentioned several ways of doing so.

Student A: 'Two ways. First, check pupils' exercise books, how far they can answer the questions. Second, evaluate my own teaching style, discuss with mentor or colleagues.'

Student B: 'Observe the pupils' reaction. Based on it, we will know whether our teaching are understood or not.'

Student C: 'I give them a work sheet or task, if they are not able to finish it before time, I assume there must be something wrong maybe because of me, the situation, the pupils or perhaps the subject itself.'

The Malaysian student teachers also recognised that using a variety of teaching styles is important in order to achieve technical efficiency in their teaching. This characteristic of reflective teaching is illustrated by the comments of the interviewed student teachers concerning their teaching effectiveness.

Student A: 'As we know teaching methods or techniques must be suited to pupil ability. For example, in my subject, Bahasa Melayu, for good pupils or a good class, there is no need to do many exercises, but give only guidance and they can do the rest. The

difference with a slow class is they need follow up work to make them understand better.'

Student B: 'When I notice my teaching is not successful, the best step is to check again the lesson plan, the strategy being used, improve it immediately if possible, for example, by using more attractive teaching aids and involving pupils.'

Student C: 'When I find out the objective is not really successful. I always ask myself what was wrong with my technique, my approach or strategy and find alternatives to improve my weaknesses. So, I agree the importance of a variety of teaching styles.'

The student teachers also thought that one way of making lessons interesting and of expediting pupils' understanding is by using basic questions like what? why? who? when? and how? in preparing their lesson plans. This suggests that, the interviewed student teachers tried to reflect on these questions during their lesson plan preparation.

Student A: 'Yes, I always bear these questions in mind when planning my teaching strategy or lesson plan. This can encourage pupils to ask questions about what they don't understand, or practice them to answer open-ended questions as well as to broaden their knowledge not limited to a certain topic only. It is very important to examine the use of these questions in order to evaluate our performance and to identify the strengths and weaknesses as well as the alternatives for improving my teaching.'

Student B: 'These types of questions are very important because it is necessary to understand the reason why not all the pupils can understand the lesson; as a guide during lesson plan preparation especially for identifying the teaching objectives and activities; as well as to find out the alternatives for improving our own teaching competency. In short, these are the strengths of teaching.'

**9.4.2 Characteristic 2: Reflective teaching is applied in a cyclical or spiralling process, in which teachers monitor, evaluate and revise their own practice continuously.**

This refers to the need for reflective teachers to monitor, observe and collect data on their own and to monitor and observe their pupils. It emphasises the fact that self-evaluation is basic to reflective teaching (Korthagen, 1985). It also illustrates how reflection may lead the teacher to revise his or her classroom policies, plans and provision before beginning the process again.

Generally, the student teachers interviewed for this research recognised the importance of the self-evaluation process. When asked whether and how they monitor, evaluate and revise their teaching, the student teachers responded in the following ways.

Student A: 'Yes, from time to time. Indirectly we can improve our weaknesses and increase our capability because the classroom situation is changeable from day to day.'

Another form of self-evaluation is through discussion with their teacher educators, mentors, colleagues or other teachers, as Student B and C illustrated.

Student B: 'We have several discussions. For pre-observation, we discuss the lesson plan. He gives comments about what is not clear, the objectives, etc. Then he observes my teaching and after the lesson we discuss it again but more on teaching technique, class control, set induction and other teaching and learning processes.'

Student C: 'I also discuss my teaching with other student teachers, mentor or other experienced teachers.'

**9.4.3 Characteristic 3: Reflective teaching requires competence in methods of classroom enquiry.**

Reflective teaching requires competence in three methods of classroom inquiry (Bengtsson, 1995). First, *empirical competence*. This refers to the competence in the method of enquiry aimed at showing what is going on in a classroom or school. It involves collecting data, describing situations, processes, causes and effects with care and accuracy. Two sorts of data are particularly relevant: objective data, (such as descriptions of what people actually do) and subjective data (which describes how people feel and think - their perceptions). Second, *analytical competence*: this refers to the competence in methods of enquiry designed to address the issue of how to interpret descriptive data. Such data is not meaningful until it is placed in a framework which enables a reflective teacher to relate different pieces of data to one another and to begin to theorise about them. Third, *evaluative competence*: this refers to the methods required to make judgements about the educational consequences of the results of the practical enquiry. Evaluation, in the light of the aims, values and the experience of others, enables the results of an enquiry to be applied to future policies and practices.

However, from this research it seems that that Malaysian student teachers only develop *empirical competence*. This they do through journal writing in which they record objective data about what is happening in the class during their teaching. For example,

Student B: 'Yes, I write in my journal and make suggestions for solving any problems.'

Student C: 'I write a journal as proof that I am doing reflection. It can give insight about my aspiration, whether it is practical or not. By doing this, I feel more confident to teach because basically I know what the pupils problem is. And I know the next step that should be taken.'



In terms of specific ways of collecting data such as observations, questionnaire responses or interview results, it seems that the student teachers do not really know about this because they have never done it.

Student B: 'I know that. I have come across it in college, but I have never done it.'

Student C: 'Not in the data form, but after a few months at school, through observation I can understand certain pupils' behaviours.'

Although the Malaysian student teachers do not really understand the techniques of data collection, they nevertheless appreciate that this type of information is important from time to time.

Student C: 'Yes, from the data or information we can plan our next action, especially in helping problem pupils. We can give them motivation and monitor their development.'

However, when the interviewed student teachers were asked about teacher research as a form of self-reflective enquiry (Webb, 1996) into their current practice, it seems that they do not really know what action research or small scale research is.

Student A: 'Yes, we had the group small research study. The topic was identified by the lecturer. We follow the procedure given by the lecturer. We wrote a report and presented it in class. They were some data in the report. However, all these processes were not comprehensive ones.'

Student B: 'I doubt we had done the observation, questionnaire or interview in the proper way.'

Student C: 'I have no idea about this. The term 'action research' itself is new to me.'

Although the Malaysian student teachers agreed on the importance of self-reflection in order to establish the skills of reflective teachers, as revealed by Student B below, this is not encouraging because the literature shows that reflective practice in teaching is manifested as a stance towards inquiry (Copeland et al. 1993; Webb, 1996).

Student B: 'Although I have not established all the skills, I believe that self-reflection is necessary to implement reflective teaching skills.'

#### ***9.4.4 Characteristic 4: Reflective teaching requires attitudes of open-mindedness, responsibility and wholeheartedness.***

*Open-mindedness* is an essential attribute for rigorous reflection because any sort of enquiry which is based on partial evidence only weakens it. The term is used in the sense of representing a willingness to reflect upon ourselves and to challenge our assumptions, prejudices, and ideologies as well as those of others. In short, open-mindedness refers to the ability to seek out and evaluate alternative viewpoints (Ashcroft, 1995). *Responsibility* means the willingness to consider the consequences of a projected step. It means to be willing to adopt these consequences when they are followed properly. Also, as Ashcroft and Griffiths (1989) conclude, it involves the willingness to look at both the immediate and the long-term consequences of action for all concerned. *Wholeheartedness* refers essentially to the way in which such consideration takes place. Reflective teachers should be dedicated, single-minded, energetic, enthusiastic and sincere (Van Manen, 1995). In other words, they are willing to take the risk entailed in examining their practice in the light of their values and in examining what those values themselves imply; and that open-mindedness and responsibility are essential to their professional life (Ashcroft, 1995).

The data suggests that Malaysian student teachers seem to be willing to ask their pupil about themselves, but not in a formal way.

Student A: 'So far not in the formal way, but I always ask them verbally what they want from me. It is important to choose the activities according to the pupils' interest and ability.'

Basically, the Malaysian student teachers who will teach in primary schools, realise that they had the responsibility to teach not necessarily their option subject, and that teaching in school is not solely for preparing pupils to pass exams, but to master and be able to implement certain skills in daily life. As a result, teachers should be responsible for creating an environment which is conducive to teaching and learning. They should also be responsible for stimulating pupils' motivation. This is portrayed by Student A and B who revealed that they need further training to deal with that expectation in order to be accustomed to and comfortable with reflective teaching skills.

Student A: 'Being a primary school teacher, I am supposed to be a multi-purpose teacher. We should be able to teach other subjects although not as well as the option teacher. Here the basic knowledge and self confidence is very important. We develop and master the content later. Another great challenge is to prepare pupils for examination because basically those who have excellent results will survive. Also about my teaching method, whether it is suitable to environment as well as to pupils' reaction. Therefore, reflective skill is important in order to give them motivation, moral support, guidance, or examples. Although I still lack these abilities, that is my responsibility to deal with.'

Student B: 'Actually everybody can teach, but the questions are how to teach correctly, how to control a class, to understand the stages of pupils interest, how to evaluate etc. I'm still needs this kind of experiences, but I accept that as my responsibility.'

Although the student teachers admitted that they still lack confidence in handling their tasks in teaching and in motivating pupils effectively, they

constantly accepted it as their responsibility. The student teachers were also willing to reflect on their own practices wholeheartedly. This is clearly revealed by the student teachers when they said:

Student A: 'Yes, because my principle is, whatever I do, to try to deliver as best I can. In daily life I reflect on my attitude towards my responsibility. I must have objectives in teaching pupils.'

Student B: 'I will keep on evaluating my practices. Improvement goes on for the short-term as well as for long-term purposes.'

Student C: 'I do journal writing once a week. I write what has happened in the classroom during the week. Although it is a course regulation, I am happy to do it.'

Based on the above responses, it seems that the Malaysian student teachers have the attitudes of open-mindedness, responsibility and wholeheartedness which reflective teaching requires. As Copeland et al. (1993) have said, if the student teachers only review the issues because of their supervisor's requirement, that teacher cannot be said truly to be engaged in reflection.

***9.4.5 Characteristic 5: Reflective teaching is based on teacher judgement, which is informed partly by self-reflection and partly by insights from educational disciplines.***

This characteristic implies that, since student teachers have learned theories in pre-service teacher education, they should be able to generate solutions based on grounded theories, assumptions, research findings or the relevant theoretical disciplines. This is parallel with Copeland's et al. (1993) argument that the reflective teacher is one who is aware of underlying theories justifying his/her practice. However, when the student teachers were asked how frequently they read the educational journals and articles, in which research findings and educational theories were discussed, their answers were disappointing.

Student A: 'Although I had read several printed material, I do not rely on educational journals in doing my assignments.'

Student B: 'Most of the educational theories learned from the lecture and the main text book, not so much from the journals or published articles. I have never experienced the importance of referring to its, especially the international one.'

Student C: 'Generally if only for self-reflection purposes, I have never purposely read any articles or research journals.'

**9.4.6 *Characteristic 6: Reflective teaching, professional learning and personal fulfilment are enhanced through collaboration and dialogue with colleagues.***

The value of engaging in a reflective activity is almost always enhanced if that activity can be carried out in association with other colleagues (Bengtsson, 1995), be they students, teachers or tutors. On teacher education courses, reflecting together in seminars, tutor-groups and workshops, at college or in school, should bring valuable opportunities to share and compare, support and advise in reciprocal ways. Collaboration produces discussion and action together. Aims are clarified, experiences are shared, and the language and concepts for analysing practice are refined.

The Malaysian student teachers were actually willing to listen to other people, seek opinions and engage in discussion. However they felt that the input must be constructive and not destructive.

Student A: 'In order to become effective in the teaching and learning process, I need to get opinions from other people. Normally, I discuss my teaching weaknesses with my mentor and colleagues or sometimes with lecturers when they come to observe me. I admit, my way is not the best one. Therefore I need comments. Maybe their comments are more practical.'

Student C: 'I am willing to accept any constructive criticism from everybody as long as they do not condemn me. There were several times I had discussions with my friend who teaches the same subjects and also with other experienced teachers in this school. Actually, we are encouraged to observe each other, but so far we have never done it.'

It was unfortunate that the student teachers did not take the opportunity to observe one another. Indeed, to have beneficial effects, mutual observation needs to be conducted in a spirit of support and trust, with agreement on what is being observed and commented upon, for what purpose, and with a determination to improve the acquired skills of both student teachers and pupils (Hargreaves, 1994).

Table 9 illustrates the global picture about the extent to which the 121 student teachers who answered the questionnaires thought that they had developed the six characteristics of reflective teaching as discussed above. In general, it seems that characteristics 1 and 4 were more prominent, characteristics 5 and 6 were relatively prominent, whereas characteristics 2 and 3 were less prominent in terms of the student teachers' development during their practice.

The questionnaire data suggests that the first characteristic implies an active concern with aims, consequences, means and technical efficiency. Four out of the six items (a to d) have received a good response from the student teachers. Most of the student teachers answered at least at the frequency level 'Often'. This is especially so with respect to Item b (what, why, how others do) and Item c (adapt and adjust), where more than 11% of the student teachers answered 'always' in terms of implementation in their practice. Similarly, for the fourth characteristic (open-mindedness, responsibility and wholeheartedness), most of the student teachers responded at least at the 'Often' level. For Item b (others' ideas and viewpoints) and Item c (seek, identify and resolve problem), at least 10% of the student teachers responded at the 'Always' level of frequency in practice.

Table 9: The Frequency of the Reflective Teaching Processes by Student Teachers

Questionnaire Items	Frequency (%) ( <i>N</i> = 121)					$\bar{X}$	SD
	1	2	3	4	5		
<b>1. Concern with aims, consequences, means and technical efficiency</b>							
a. What, why, how I do	0.8	7.4	23.1	59.5	9.1	3.686	.775
b. What, why, how others do	-	8.3	32.2	47.9	11.6	3.628	.797
c. Adapt and adjust	-	3.3	20.7	61.2	14.9	3.876	.690
d. Consider consequences	-	7.4	34.7	47.9	9.9	3.603	.769
e. Analyse what works and what does not work	0.8	10.7	47.1	35.5	5.8	3.347	.782
f. Evaluate what worked, didn't, and why	1.7	9.9	37.2	46.3	5.0	3.430	.804
<b>2. Monitor, evaluate and revise own practice continuously</b>							
a. Ask 'what if...?'	-	7.4	28.1	53.7	10.7	3.678	.766
b. Validate what is given or believed	1.7	2.5	42.1	47.9	5.9	3.537	.719
c. Putting into context	-	1.7	23.1	54.5	20.7	3.942	.711
d. Put into different/varied contexts	4.1	24.8	55.4	14.0	1.7	2.843	.775
<b>3. Competence in methods of classroom enquiry</b>							
a. Inquiry as a tool of learning	3.3	13.2	43.8	33.9	5.9	3.256	.881
b. Sufficient or validate data	1.7	11.6	31.4	47.9	7.4	3.479	.857
c. Identify and test assumptions	5.8	22.3	43.8	27.3	0.8	2.950	.874
d. Hypothesise	6.6	21.5	44.6	22.3	5.0	2.975	.953
e. Synthesise and test	2.5	14.0	52.9	27.3	3.3	3.149	.792
<b>4. Open-mindedness, responsibility, wholeheartedness</b>							
a. Keep an open mind	-	2.5	13.2	57.0	27.3	4.091	.707
b. Others' ideas and viewpoints	-	4.1	22.3	61.2	12.4	3.818	.695
c. Seek, identify and resolve problem	-	5.8	26.4	57.9	9.9	3.719	.721
d. Make decisions in practice	2.5	7.4	33.9	47.9	8.3	3.521	.848
<b>5. Teacher judgement by self-reflection and insights from educational disciplines</b>							
a. Seek alternatives	-	5.8	25.6	58.7	9.9	3.727	.719
b. Framework, theoretical basis, underlying rationale	3.3	8.3	24.8	51.2	12.4	3.612	.925
c. Function within uncertainty, complexity, variety	5.0	14.0	46.3	28.1	6.6	3.174	.928
d. Use prescriptive models	1.7	9.9	30.6	47.1	10.7	3.554	.875
<b>6. Collaboration and dialogue with colleagues</b>							
a. Compare and contrast	-	3.3	29.8	57.0	9.9	3.736	.680
b. View from various perspectives	-	7.4	31.4	45.5	15.7	3.694	.825

1 = Never, 2 = Seldom; 3 = Regularly; 4 = Often; 5 = Always

(Items adapted from Roth, 1989)

By contrast, the second characteristic (applied in a cyclical/spiralling process: monitor, evaluate and revise own practice continuously), and the third characteristic (competence in the methods of classroom enquiry), were seen to be less prominent in terms of the student teachers' development during their practice. In particular, student teachers showed little competence for reflection in formal ways like classroom enquiry. Specific ways of collecting data such as observation, questionnaires, interviews and action research have been rarely or never implemented, according to the responses given by the student teachers interviewed.

### **9.5 The Levels of Student Teachers' Development of Reflective Teaching Through Teaching Practice**

As mentioned in Chapter 6 (p: 103), to examine the levels of student teachers' development of reflective teaching during their teaching practice, the interview data is analysed according to three types or levels of reflection: technical reflection, practical reflection and critical reflection.

#### ***9.5.1 The Development of the Student Teachers' Technical Reflection***

The first level, technical reflection, focuses on classroom competency and effectiveness demonstrated by measurable outcomes. The teacher at this level considers only the technical implementation of basic curriculum principles for the purpose of attaining a given end (Ecclestone, 1996). This is the lowest level of reflection. Within this form of reflection the student teachers provided a description of what occurred regarding the events but did not reflect 'practically' on its educational purpose.



The following quotations illustrate how the Malaysian student teachers had developed the skill of technical reflection in order to evaluate themselves at the end of their teaching practice.

Student D: 'In the first practicum, there was nothing, I was out of evidence, but now I am ready to go with pupils. I am able to identify pupils' characteristics such as which class is better and which class is weak, suitable activities for them; their interests, or even their learning difficulties especially in my subject area, English. I also realise other factors which influence their attitude and achievement such as their parents and their home situation.'

Student E: 'I know how to attract their attention. For example when I notice they start slowly, are not active or happy at the beginning of the lesson, then I try to make a joke, involve them in a group activity, call their names and praise them, give them simple examples which are related to their daily life.'

Student F: 'In general, I notice the pupils' interest has increased. Unlike at the beginning of my practicum, I didn't know whether my pupils understood or not what I had taught them. But now, I feel happy when my pupils understand the basic concepts or skills and can answer most of the questions whether in class, homework or test. When I notice they have difficulties in understanding, I always reflect on my teaching style, try to find out any better approaches or exercises from other books or at least refer back to the text book. I think, I am now able to identify their interests and weaknesses as well as how to attract their attention especially in the middle of their learning process. For myself, I feel more interested and more confident in teaching my subject, Mathematics.'

The student teachers also could identify some reasons for certain pupils' weaknesses in a particular subject. This ability also corresponds to the notion of reflection at the level of technical rationality. In the following examples, the student teachers illustrated that they had this technical ability.

Student D: 'Especially for English, they affiliate among the same ethnic group. Thus they do not try to speak English. Family involvement or encouragement is also very limited. However, I give them encouragement and advice. Despite these problem, my interest is still there.'

Student F: 'In Mathematics, they don't master the mathematical tables, therefore it's difficult for them to understand the four basics of calculation (plus, minus, times and division). The family influence and peer group are also not very encouraging. Anyway, I keep on trying my best, this is a challenge to me.'

The Malaysian student teachers also showed their capacity for technical reflection in their comments about controlling a class. By considering their development in these skills, they can reflect on how to teach comfortably.

Student E: 'I am also confident in handling the class in future, but of course the problems will still be there. The most important is how effective is the class when I am teaching, whether pupils pay attention and do what I ask them to do.'

Student F: 'Class control doesn't mean there will be no pupil problem at all. It is natural that pupils walk here and there as long as a conducive situation for the teaching and learning process is there. In future, with some experience and theory learned from college, I think I will be able to manage a class properly. At the beginning, it was difficult to control a class but now, my instruction is quite clear, and the pupils pay attention when I am teaching. They do all the work given and I can leave a class for a few minutes.'

Another ability which corresponds to the notion of technical reflection is the ability of student teachers to ask why a lesson went well and what needs to be done next time (O'Donoghue and Brooker, 1996). This kind of ability gives them ideas on how to minimise possible obstacles to effective teaching and learning processes. Although there are certain factors that are beyond their control, at the end of their teaching practice, the student teachers realised that certain factors disturbed the effectiveness of teaching and learning activities. In the following examples, the student teachers portrayed some of the events.

Student D: 'There are particular times when the pupils' concentration tend to decrease. For instance, after recess the pupils may be full, and at the last period, they may be ready to go home, and their mind may already be outside the classroom especially

when they see some other pupils are already outside. It may also be because of the temperature. That time usually very hot and humid, and it is worse still if the classroom does not have a fan.'

Student E: 'The topic lesson is very influential, I should teach one topic in one period. What I did was, I tried to teach various topics. To get effective learning, the activities and introduction must also be very interesting, and try to minimise writing and memorising facts.'

The student teachers also commented on the timetable arrangements which indicates their reflection on the worth of competing goals and experiences. The other two student teachers interviewed revealed their problem.

Student E: 'Besides a good introduction, strategies and a good lesson plan, time management is also important. Therefore, to be effective the timetable arrangement is also very important.'

Student F: 'To be effective the time table arrangement is also very important. On Tuesday especially, there is a tendency for my mood to worsen because on that day I have too much classes to teach. Worse still most of my Math classes are after recess when the pupils are already full and a bit tired. On this day, I feel a little bit stressed because of too much work.'

Although technical reflection is considered the lowest level of reflection (Tabachnich and Zeichner, 1991), this ability gives an opportunity for student teachers to think about the content to be taught, the effectiveness of method employed to deliver that content and why that method is applicable. Technical reflection also enables students to think about their teaching in ways that allow them to formulate problems, hypothesise on what might or might not work and then settle on a course of action which they can test in their teaching. Overall, these results show that student teachers felt more confident because of their increased technical understanding and because they had improved their own technical skills in dealing with various aspects of their teaching.

### ***9.5.2 The Development of the Student Teachers' Practical Reflection***

At the second level, practical reflection, the teacher goes beyond technical rationality and becomes concerned with clarifying the values, assumptions and predispositions underlying competing pedagogical goals and with assessing the educational consequences towards which teaching leads. Practical reflection relies on personal experience (Ecclestone, 1996) and/or observation (Zeichner and Liston, 1987, McFee, 1993; Carr, 1995). Evidence from the interviews shows that some students demonstrated the ability for this kind of reflection. Student D, for example, questioned her teaching style against the worth of competing pedagogical goals.

Student D: 'From my experience, sometimes I should use one way traffic in my teaching because of my intention to finish the topic or syllabus. On the other hand, I realise that two way traffic interaction will encourage pupils to talk and be active in learning but I worry about doing this because I may not finish the topic and eventually the syllabus.'

The following quotations also confirm their ability for practical reflection about aims and values.

Student D: 'I inculcate good values directly and indirectly. Firstly, integrated in teaching. I give them an example of what they should and should not do to a pet, like a cat at home. Secondly, at the end of the lesson, I ask them what good values they have learned from the lesson, and thirdly, in the lesson plan itself, I must state the good values that will be imparted during the lesson.'

Student E: 'I give them examples such as telling them story or showing them through our appearance. I involve them in drama, story telling competitions or I simply praise them whenever they do something good or tell them or sometimes I punish a little for those who did an offence.'

From the quotations above, it seems that the student teachers realised that there were certain alternatives that would improve the educational value of their practices. Practical reflection equates with improving the way the lesson is taught. In short, it appears important for students to recognise that practical reflection focuses on a concern for pedagogical development so that they understand that learning may be 'good' and 'bad' from an educational point of view. A 'good' lesson can encourage student teachers to reconsider the learning from a teaching experience, while a 'bad' lesson might cause them to dismiss the episode completely (Loughran, 1996). Although the data provides some evidence that Malaysian student teachers did, on occasion, reflect practically, contrary to my impression, they did not do this in any extensive way. Most of their reflections did not go beyond technical reflection.

### ***9.5.3 The Development of the Student Teachers' Critical Reflection***

The third level, critical reflection, incorporates moral and ethical criteria into the discourse about practical actions (McFee, 1993; Jarvis, 1992). Teachers are concerned with such issues as the worth of knowledge and the educational effects of social circumstances. Reflections on teaching are made with moral, ethical and cultural considerations. According to Zeichner and Liston (1987), in critical reflection both the ends and means of teaching and the surrounding social and cultural contexts are considered together.

However, this study found that the student teachers only showed a very limited ability for critical reflection. This can be seen from their remarks on the school's politics and environment which include the opportunity to see what the total school environment is about and to understand the politics of schools and society. Students E's and F's responses illustrate these intentions.

Student E: 'Practicum gives me an opportunity to understand better the real school environment. It teaches me how to prepare the actual lesson plan, time management and how to organise tasks. There was also an opportunity to learn how to organise a special programme in school because I was a committee member on several occasions.'

Student F: 'At school, I learn real things and thus, gain confidence. There was a chance to find out and try out the best method especially the integrated one. We could also try out the theory, to decide whether it can be applied or whether we have to make amendments.'

In this kind of reflection, by looking at themselves within their communities, student teachers can begin to engage in a critique of the pattern of social relationships and institutions in the school. They can also learn about the culture of the school (Binkley and Brandes, 1995). However, looking at all the interview data, it must be admitted that Malaysian student teachers have little capacity for critical reflection.

### **9.6 Exploring the Attitudes of Student Teachers to Becoming Reflective Practitioners**

All the items in Table 10 show that the student teachers' attitudes to reflection were generated in a variety of ways. Some student teachers had a highly positive attitude or *internal orientation* and were able to learn independently from their experience. Other student teachers had a greater need for feedback and often required concrete instructions or *external orientation* (Korthagen, 1993).

If 40% is the cut off point for the highest scale of frequency, which is 'Always' for highly positive attitude or *internal orientation* (*Scale A*) and 'Totally Applicable' for *external orientation* (*Scale B*), the results are as follows.

In 'highly positive attitude' or *internal orientation*, there are only three out of 15 items perceived by the student teachers which are above 40%. These are:

1. Item 8: 'I find it important to have personal contact with my fellow students', 43.8%;
2. Item 13: 'I am interested in my fellow student', 43.0%, and
3. Item 14: 'I try to get to know my fellow students', 39.7%.

Moreover, there are two items of this type of attitude which are perceived by student teachers as being lower than 40% although these are combination of 'Often' and 'Always' scales. These are item 1: 'I ask myself, who am I' (38.0%), and item 4: 'I am interested in the problems of my fellow students' (37.2%).

Generally, in order to be more reflective, the Malaysian student teachers relied more on *external orientation*. There are seven items which illustrate this attitude:

1. Item 2: 'I want people to tell me what I am doing wrong', 73.6%;
2. Item 1: 'I appreciate it when people tell me how I can improve my conduct', 67.8%;
3. Item 9: 'I like it when someone shows me how to solve a certain type of problems in my major subject', 65.3%;
4. Item 5: 'I consider it important to receive information from a supervisor about my way of dealing with my fellow students', 63.5%;
5. Item 4: 'I am interested in hints on the best way of working with my fellow students', 62.8%;
6. Item 6: 'I think it is important to be given suggestions for better ways of co-operating with my fellow students', 56.2%,

7. Item 7: 'I like to have the support of others when I am working on my major subject problems', 42.1%.

Based on these findings, it seems that Malaysian student teachers have a positive attitude to become reflective practitioners, who reflect *inwardly* to address issues related to classroom practice, methodology, etc., and *outwardly* to consider the interaction between what they do in the classroom and the social context in which that educational endeavour is framed. These inclinations are similar with the terms used in this analysis, internal and external orientation. However, in general, it seems that Malaysian student teachers rely more on external orientation rather than internal orientation, and yet, as argued by Sultana (1995), a reflective practitioner is one who reflects inwardly and outwardly.



Table 10: The Attitude of Student Teachers to Becoming Reflective Practitioners

Questionnaire Items	Frequency (%) ( <i>N</i> = 121)					$\bar{X}$	SD
	1	2	3	4	5		
<b>Internal Orientation (Scale A)</b>							
1. I ask myself 'Who am I'	2.5	17.4	42.1	33.9	4.1	3.198	.862
2. I think about my own development	-	3.3	11.6	66.9	18.2	4.000	.658
3. I reflect on myself	0.8	8.3	30.6	43.0	17.4	3.678	.887
4. Interested in the problems of my fellow students	1.7	23.1	38.0	30.6	6.6	3.174	.919
5. Solve my major subject puzzle in my spare time	-	6.6	34.7	46.3	12.4	3.645	.784
6. Thinking about my major subject problems	-	10.7	33.1	43.8	12.4	3.579	.844
7. I later consider my way of reacting	-	4.1	25.6	60.3	9.9	3.760	.683
8. Important to have personal contact with fellow	-	-	5.8	50.4	43.8	4.380	.595
9. I think about my fellow students	2.5	14.9	42.1	32.2	8.3	3.289	.908
10. Engage into the minds of my fellow students	-	7.4	25.6	61.2	5.8	3.653	.704
11. I ask someone for advice	2.5	9.9	28.9	45.5	13.2	3.570	.929
12. Questions myself when material is presented	-	8.3	38.8	45.5	7.4	3.521	.754
13. Interested in my fellow students	3.3	3.3	19.8	30.6	43.0	4.066	1.031
14. Try to get to know my fellow students	9.1	2.5	20.7	28.1	39.7	3.868	1.231
15. Prefers to solve my own major subject problems	-	10.7	43.8	35.5	9.9	3.446	.816
<b>External Orientation (Scale B)</b>							
1. People tell how to improve my conduct	0.8	-	11.6	19.8	67.8	4.537	.764
2. Want people tell what I am doing wrong	0.8	-	2.5	23.1	73.6	4.686	.606
3. Like people comment on my conduct	7.4	1.7	19.0	37.2	34.7	3.901	1.128
4. The best way of working with fellow students	-	5.0	6.6	25.6	62.8	4.463	.827
5. Receive information from a supervisor	0.8	0.8	6.6	28.1	63.6	4.529	.731
6. Better ways of co-operating with my fellow	2.5	1.7	9.1	30.6	56.2	4.364	.904
7. To have the support of others	4.1	5.0	18.2	30.6	42.1	4.017	1.088
8. Textbooks in which everything is explained	22.3	15.7	26.4	19.8	15.7	2.909	1.372
9. Someone shows me how to solve problems	0.8	0.8	11.6	21.5	65.3	4.496	.797
10. Read books psychological compatibility	1.7	15.7	36.4	30.6	15.7	3.430	.990
11. Spend hours working on other subjects	14.0	11.6	28.1	27.3	19.0	3.256	1.288
12. If I cannot solve, I ask someone for help	-	8.3	19.8	54.5	17.4	3.810	.820

Scale A: 1 = Never; 2 = Seldom; 3 = Regularly; 4 = Often; 5 = Always

Scale B: 1 = Not at all Applicable; 2 = Not Applicable; 3 = Less Applicable; 4 = Applicable;

5 = Totally Applicable

(Items adapted from Korthagen, 1993)

Based on the finding in Table 10, it seems that the student teachers tend to concentrate on external orientation. In order to be more reflective, they needed greater feedback and often required concrete instruction, especially from their teacher educators or co-operating teachers. This is not very encouraging. Moreover, on some aspects, the interviewed student teachers revealed their concern about the capability of their mentors and teacher educators (Chapter 8, see 8.4).

Generally, one of the encouraging features that has been found from this study is that the Malaysian student teachers showed their positive attitude to becoming a reflective teacher, including the significant impact of being a reflective teacher on their attitude towards their teaching profession. The following are some examples.

Student B: 'All the routine work can be done nicely, with obstacles minimised and the problems only perceived as temporary. Teachers motivation and interest will increase.'

Student C: 'I believe being reflective teachers, they will teach happily, feel relaxed and not tense or burdened, so they will be satisfied with their job.'

Student D: 'If all the teachers reflect on their teaching the quality of the teaching profession can be improved and eventually we will feel more satisfied with our job.'

Student E: 'In order to be a reflective teacher, we should know the strengths and weaknesses, be willing to evaluate ourselves and take any initiative for improvement. Through practicum I know a little bit about myself, this can help me when I have real responsibility later on.'

Although the student teachers did not claim that they are reflective practitioners, it seems that they had positive attitudes about becoming reflective

practitioners eventually. The findings in Table 10 and the following quotations reflect this inclination.

Student D: 'In short, a reflective teaching approach trained us to be innovative and to choose the best method for the best situation. It doesn't mean that all that we have learned in college can be implemented in schools. Creativity is very important in order to have an effective teaching process. It trained us to be flexible.'

Student E: 'Actually there is no end to being reflective teachers. The initial training in college, including teaching practice, is not enough but it was a good and a strong foundation for us. As experience increases we should become more reflective later on.'

Student F: 'Not really, but we know the spirit of what a reflective teacher is. I have tried to be a reflective practitioner but I still need guidance and encouragement from all parties.'

## 9.7 Conclusion

This chapter is designed to depict the relationship between the understanding of student teachers about the concept of reflective teaching, the development of their reflection skills during their teaching practice, and their reflective attitude towards becoming reflective practitioners. Basically, the student teachers did have some understanding of the concept of reflective teaching. For example, they were aware of their strengths and weaknesses; they were willing to evaluate and take any initiative for improvement. This is not to say that they had already become reflective teachers, but that their development of such skills seems to be encouraging during teaching practice. However, two issues can be highlighted.

Firstly, in terms of the development of the six characteristics of reflective teaching, it seems that the student teachers did not acquire the competencies associated with Characteristics 2 and 3: the ability to apply a cyclical or spiralling process, in which student teachers monitor, evaluate and revise their own practice

continuously; and a competency in methods of classroom enquiry to support the development of reflective teaching. Basically these two characteristics are closely related to inquiry-oriented skills. Therefore, it can be argued that inquiry-oriented skills were not properly introduced during the pre-service teacher education programme. Secondly, in terms of student teachers' attitude to becoming reflective practitioners, they seem to concentrate on external orientation. They needed greater feedback and required concrete instruction especially from their teacher educators or co-operating teachers. There was a lack of internal orientation. They were not willing to learn independently from their experience.

Based on these two issues, it can be concluded that the student teachers showed greater development of technical reflection than practical and, especially, critical reflection. Their development of technical reflection can be seen from their thoughts about their approaches to pedagogy, and practical reflection is a vehicle for learning for attempting appropriate approaches; then it is through critical reflection, that they can learn from and about their practice in action. However, Malaysian student teachers do not seem to know any of the specific ways of collecting data or how to conduct action research as a way of critical reflection. In addition, they do not take the opportunity to observe one another among their colleagues. This evidence seems to show that Malaysian student teachers do not really make any progress in developing the capacity to reflect critically on their teaching. Thus, this research would support the view that the existing pre-service teacher education programme in Malaysia should be revised in order to produce more student teachers who can reflect in more practical and critical ways. This also raises the question of what type of programme may be expected to foster the development of practical and critical reflection among prospective teachers. This question will be discussed in Chapter 11.

## CHAPTER 10

### THE FOURTH RESEARCH QUESTION: THE NEWLY QUALIFIED TEACHERS' VIEWS OF THE EMPHASIS ON REFLECTIVE TEACHING SKILLS DURING THEIR TEACHING PRACTICE

#### 10.1 Introduction

The aim of this chapter is to examine **how newly qualified teachers (NQTs) respond to and apply the emphasis on reflective teaching skills in their teaching practice**. In order to do this, two issues will be considered.

1. The evaluation of NQTs of the pre-service teacher training programme. Based on the quantitative and qualitative data, further analysis will be done to identify *the strengths and the weaknesses of the pre-service teacher education programme* (10.4).
2. Based on the above, the analysis will focus on the extent to which NQTs were encouraged to use reflective teaching skills during their pre-service training programme. This will be presented through *the effects of the programme on actual teaching from the perspective of the NQTs* (10.5).

This chapter begins with a description of the background of the subjects who participated in this study (10.2) which is then followed by a list of important reasons for seeking to answer the above mentioned research questions (10.3).

#### 10.2 The Background of the Newly Qualified Teachers

80 newly qualified teachers from primary schools were given a questionnaire each. In order to get a good response, they were personally approached to explain to them the purpose of the study and how to answer the questionnaire. They were

also told when the answered questionnaire would be collected. The response was good: 67 NQTs (84%) answered and returned the questionnaire. The teachers had undergone initial teacher training for the primary school programme in the selected TTCs and now teaching in the same or neighbouring state of their previous colleges. In terms of experience and subject area, they had been teaching for less than 3 years and had been trained in several subject specialisations. Most of them (81%) however specialised in language related subjects. For interview purposes, three NQTs were selected, one from each of the three locations: the north, south and east Peninsular of Malaysia.

### **10.3 The Reasons for Studying the Newly Qualified Teachers' Views on the Necessary Emphasis on Reflective Teaching Skills.**

Much of the literature on reflective teaching deals with the competency of NQTs. Reynolds's (1992) synthesis of the literature includes her expectations for NQTs. One of these is that NQTs should enter their first year of teaching intending to reflect on their own actions and their pupils' responses in order to improve their teaching, and the strategies and tools for doing so. Although there must be a difference in the reflective concern of experienced and novice teachers, it cannot be denied that NQTs do reflect on their practice. For example, NQTs' reflection may concern the clarity of their explanation and examples, their use of chalk and talk methods, their ability to respond to pupils' questions, and pupils' participation in the lesson. NQTs also may have difficulty focusing on what is instructionally important for reflection because they have not developed the schemata for organising the enormous quantities of information gathered during class, or it may be that the questions used to elicit reflective answers are inappropriate. Moreover, NQTs almost always encounter problems they have never seen before (Ducharme and Ducharme, 1996). Yet, NQTs are expected to be able to reflect on their own actions and pupils' responses. The reason why this study wants to

study the views of the NQTs on the required emphasis on reflective teaching skills during their teaching practice is to ascertain whether their previous training and preparation have helped them to learn to reflect on their work.

#### **10.4 The Strengths and the Weaknesses of the Pre-Service Teacher Education Programme**

The NQTs, both those who were interviewed and those who answered the questionnaire, were asked to evaluate their pre-service training programme in nurturing their reflective teaching skills. In Chapter 6 (p: 103), it was suggested that data about the extent to which NQTs were encouraged to use reflective teaching skills during their teaching practice could be analysed according to the four reflective teaching concepts: (1) retrospective and predictive thought; (2) critical inquiry; (3) problem solving skill, and (4) acceptance and use of feedback. Based on their responses, the strengths and the weaknesses of the pre-service programme according to the four concepts of reflective teaching can be identified.

##### ***10.4.1 Concept 1: Retrospective and Predictive Thought***

Basically, a teacher who engages in retrospective thought reflects on completed lessons, classroom interactions and pupil behaviour and evaluates the effectiveness of instruction. Based on this reflective assessment, the teacher makes alterations and thus new instructional and managerial plans that are more predictably successful (Stout, 1989).

Generally the pre-service teacher education programme at Malaysia TTCs aims to develop a set of training tasks and procedures that could reliably stimulate an attitude of inquiry and reflection. Parallel with these attitudes, the interviewed NQTs described how, during their final teaching practice, they were generally

encouraged to be reflective teachers, in particular to reflect on the completed lessons. They also described how they responded to that encouragement.

**NQT A:** 'After teaching, if I had found it difficult to explain the lesson clearly I reflected on myself by examining what my strengths and weaknesses were. I also referred to books and asked for other colleagues' opinions. During a lesson, I tried to detect my pupils' reaction such as when they looked bored. Then I would try to discover the reason and attempt to overcome them.'

**NQT B:** 'When I noticed the pupils didn't understand the lesson, I took the initiative to reflect on my own practices such as my teaching style, teaching aids, set induction, teaching objectives, language, and even the problems of the pupils themselves.'

**NQT C:** 'Yes, there were several occasions when I was told to evaluate the completed lesson. The pupils' performance after a lesson was the indicator of my teaching style, my pupils' capabilities as well as the subject content. So, I looked for the alternatives to make the class and lesson interesting every time if possible.'

It seems that the NQTs were also concerned about the long-term effects of their teaching instruction. They were encouraged to question and evaluate their motives and goals in planning and implementing lessons both before and after a lesson is taught. The following responses show this encouraging feature.

**NQT A:** 'I have been encouraged since being at college to consider the basic questions like who? when? what? why? and how? both when drafting my teaching plan and when teaching comprehension. In mathematics also, I tried to give examples or explanations based on these questions. In drafting monthly tests, the questions should be based on the topics covered, and in the examination year special attention should be given to the most common questions appearing in the national assessment.'

**NQT C:** 'Before trying to implement theory into practice, we planned the lesson. In this process, we identified the objective and activities for every particular lesson parallel with pupils' ability. From time to time, we evaluated the pupils' achievements. If not



satisfied, we were encouraged to reflect as much as we could about ourselves as a teacher, about teaching methods or approaches, teaching aids, as well as set induction. We were also encouraged to explore any factors from the pupils angle and the environment itself which might have disrupted the effectiveness of the teaching and learning processes.'

In addition to the long-term effects, NQTs were also concerned about their pupils' affective domain. It seems that during teaching practice, the NQTs were also expected to promote learning in the affective domain in the classroom. The way the NQTs did this was by showing their exemplary behaviour to pupils. The following responses illustrate this matter.

NQT A: 'Generally, beside teaching, I should also be a model for my pupils. Pupils tend to listen more to their teacher than to what their parents say. Therefore, teachers, including myself, must show good examples such as not smoking in front of them, wearing proper attire, using proper language and creating a good relationship with them, if we want them to appreciate us.'

NQT B: 'In practicum, all efforts were taken to please the mentor and lecturer. For example I asked my pupils to give full co-operation and behave well when I was being observed. I told them this at the beginning of my practicum. However, I was concerned about my conduct throughout the practicum.'

These responses show their concern about the affective domain. This is encouraging because during the teaching practice NQTs understood the need for continuing responsiveness to the particular circumstances of their teaching.

In general, it was also clear that the three interviewed NQTs were aware of individual differences in their pupils' background and cognitive level and planned for their teaching activities accordingly. The following quotations portrayed this awareness.

NQT A: 'Basically pupils have different backgrounds, language competency, achievement, ability and experience and even their aggressiveness differs especially between rural and urban pupils. Thus, the way to tackle them or to approach them is different because the degree of the problem is also different. It was similar during my last teaching practice.'

NQT B: 'Yes, it was necessary to consider individual differences in my planning because pupils' responses were different due to their different ability and background.'

NQT C: 'Yes, I had some concern about pupils' differences. I tried my best to plan the activities and objectives parallel with pupils' background and cognitive level.'

The above three responses show that the NQTs were sensitive to their pupils. Therefore, there is little doubt that flexibility was established in order to be able to modify instruction according to individual pupils' needs and to specific learning circumstances. In general, this sensitivity is important because to be reflective teachers, NQTs are expected to be able to plan, deliver and maintain the quality of their teaching. This finding is consistent with Rovegno (1992), who says that teachers need to respect the received knowers' perspectives as they respect other individual differences among pupils.

The NQTs seem to be committed to considering the effects of their teaching. They studied the outcomes of their teaching for the purpose of future implications, and to improve their instruction.

NQT A: 'Normally after teaching every topic, I always gave my pupils exercises or simple tests. If their achievement was below my expectation, it meant something had been wrong with the teaching and learning processes. Normally I re-taught that particular topic.'

NQT B: 'My next actions were based on pupils' achievement. Normally I re-taught the lesson for the slow learner groups. They

need more examples, guidance and exercises. Therefore, the teaching objectives were sometimes different between classes.'

Beside understanding the pupils' background, NQTs should also be knowledgeable, flexible and able to adapt to the continuing changes in the teaching and learning processes. As Blake and Hill (1995) mentioned, they must keep up to date with changes and developments in both subject knowledge and in knowledge about how pupils learn best.

Despite some strong features from this aspect of the study, one weakness has been identified. This has to do with their retrospective and predictive thought. It seems that the NQTs had not been taught formally or had not been given guidelines or provided with strategies to develop their own approaches for reflection. As a result, their reflection may be unintentional as well as unfocused or unsystematic. The interviewed NQTs went on to elaborate this feature.

NQT A: 'At college there was no specific lesson or module or specific course about reflective teaching but the emphasis was there. We tried to implement reflective teaching during micro teaching with relevant teaching aids. One trainee acted as a teacher and the rest as pupils. After teaching, there was a discussion session, to identify the strengths and weaknesses of the teacher, and give alternatives to improve his/her practices. I suppose that was a reflection process.'

NQT B: 'There was no specific course about reflective teaching, thus, no specific guidelines were given. So my reflection didn't focus on any particular aspect.'

NQT C: 'Sometimes I didn't know that I was reflecting on something. I came to realise later when or if my lecturer asked about my reflection.'

To review all the above findings, particularly the strengths and the weaknesses of the pre-service teacher training programme, Table 11 offers a summary of the

concept of reflective teaching in terms of retrospective and predictive thought which the NQTs should have established during and after their pre-service teacher education programme. The Table presents a frequency distribution for responses to individual questions. Response scales for each question vary from 'None' to 'Very High'.

Generally most of the items in Cluster 1 (retrospective and predictive thought) received a 'High' rating. However, only two items were rated 'Very High' by more than a quarter of the NQTs. These are: Item 5, (outlining plans for improvement), 31.3%, and Item 4, (self-evaluation of teaching performance), 25.4%. These are parallel with what the interviewed NQTs have reported. However, these findings seem to indicate that in general the NQTs had not received thorough encouragement of retrospective and predictive thought (Item 1) from either their teacher educators or co-operating teachers during their teaching practice.

Table 11: The Reflective Teaching Skills in Terms of Retrospective and Predictive Thought During Newly Qualified Teachers' Teaching Practice ( $N = 67$ )

Questionnaire Items	Frequency (%) ( $N = 67$ )					$\bar{X}$	SD
	1	2	3	4	5		
<b>Cluster 1 : Retrospective and Predictive Thought</b>							
1. Encouragement in reflective thought	1.5	4.5	40.3	44.8	9.0	3.552	.784
2. Long-term lesson effects	-	11.9	34.3	37.3	16.4	3.582	.907
3. Student individual differences	1.5	14.9	20.9	41.8	20.9	3.657	1.023
4. Self-evaluation of teaching performance	1.5	6.0	25.4	41.8	25.4	3.836	.931
5. Outlining plans for improvement	1.5	-	13.4	53.7	31.3	4.134	.757
6. Generating new classroom ideas	-	3.0	19.4	53.7	23.9	3.985	.749

1 = None; 2 = Small; 3 = Moderate; 4 = High; 5 = Very High

(Items adapted from Stout, 1989)

### ***10.4.2 Concept 2: Critical Inquiry***

In Chapter 3 (p: 45), it was suggested that critical inquiry is concerned with questioning one's own assumptions, beliefs and values about teaching and learning. The following examples show that the NQTs understood the importance of critical inquiry in their teaching, especially during their last teaching practice.

NQT A: 'Normally committed teachers are actually reflective teachers. As teachers, we must keep on improving our capability, knowledge, teaching style, communication skills and enthusiasm for the job. Always evaluate our own practices, engage in discussion, get the constructive comments from colleagues and experienced teachers as well as pupils. Basically that was what I tried to do during my last teaching practice.'

NQT B: 'I was encouraged to be critical of my own teaching because it could improve my teaching and creativity as well as allow me to understand the pupils' problem. However, the question was how effectively could I face that challenge.'

Although the NQTs seem to have understood and developed the idea of critical inquiry, they did not seem to know how to conduct small research as a method of practising their critical inquiry. This can be gathered from the responses of two NQTs below when asked about the important aspects which they did not learn at college.

NQT B: 'The skill of how to conduct research was not really exposed. As a result some of us new teachers don't know how to conduct research.'

NQT C: 'We should learn how to conduct small scale research. This will help teachers plan their activities for the long term.'

Table 12 presents a summary of the concept of reflective teaching in terms of critical inquiry (Cluster 2). Notable here is the fact that very few of the NQTs who answered the questionnaire rated the six questionnaire items highly. Of those who responded, less than 20% rated the items as 'Very High' and less than 50% rated the items as 'High'. In terms of application to research (Item 6), there are low percentages for both scales 'High' and 'Very High'. The combination of these two scales is only 44.8%.

As advocated earlier, it seems that the NQTs had not been encouraged enough in terms of critical inquiry. This is reinforced by finding in Table 12. For example, it seems that most of the NQTs did not question 'the curriculum, the content, and values' (Item 1) that they perpetuate and promote on a daily basis. Accordingly, it can be assumed that the NQTs took for granted the social and cultural assumptions of schooling, and did not question objectively its underlying assumptions. Responses to Item 5, 'modelling co-operating teacher', indicate that the NQTs had not been strongly encouraged to model their co-operating teachers' behaviour. One possible explanation was that co-operating teachers were not intensively engaged in critical inquiry and did not comprehensively encourage this behaviour among their student teachers.

Table 12: The Reflective Teaching Skills in Terms of Critical Inquiry During Newly Qualified Teachers' Teaching Practice ( $N = 67$ )

Questionnaire Items	Frequency (%) ( $N = 67$ )					$\bar{X}$	SD
	1	2	3	4	5		
<b>Cluster 2 : Critical Inquiry</b>							
1. Curriculum, content, and sequencing	4.5	14.9	46.3	25.4	9.0	3.194	.957
2. Accepted teaching methods	3.0	19.4	40.3	26.9	10.4	3.224	.982
3. Values promoted in classroom	1.5	13.4	28.4	46.3	10.4	3.507	.911
4. Ethical/political principles underlying teaching	-	7.5	34.3	38.8	19.4	3.701	.871
5. Modelling co-operating teacher	3.0	14.9	29.9	40.3	11.9	3.433	.988
6. Application of research	6.0	11.9	37.3	28.4	16.4	3.373	1.085

1 = None; 2 = Small; 3 = Moderate; 4 = High; 5 = Very High

(Items adapted from Stout, 1989)

### ***10.4.3 Concept 3: Problem Solving Skill***

Problem solving skill is a primary attribute of reflective teaching. According to Stout (1989), teachers should be the primary decision makers in the classroom and should approach all aspects of instruction as problematic, using carefully devised strategies to reach solutions. The NQTs were encouraged to do so and showed some confidence in solving problems or making decisions for their classroom independently. The following responses show this.

NQT B: 'Although I had never been involved in making decisions while I was doing my practicum, we need to be open-minded, but we must be firm in making decisions. It is important to make pupils learn seriously, follow the instruction and do all the work, otherwise we won't achieve the teaching objectives. All the complaints from pupils, colleagues or parents should be seriously evaluated before making a decision.'

NQT C: 'If we base decisions on evidence from several sources such as from parents, pupils and other teachers, we will be confident with the decision that has been made and we should be able to explain to everyone if we were asked for further explanation.'

However, as revealed by the responses below, this study found that there was very little encouragement for the NQTs during their initial training to read professional literature such as current research in teacher effectiveness, understand the circumstances under which the research is applicable, and then apply the research in the classroom. This information is very important because it will help them in their problem solving and decision making.

NQT A: 'Basically I am supposed to be a multi-purpose teacher at primary school, but at college, there was more stress on theory, micro teaching and assignments about my own subject area only. So, I did not read much about the research in teaching and learning aspects.'

NQT B: 'I admit that reading journals especially about teaching is necessary. However, I didn't see the importance of it during my initial training. Maybe it was because there were too many assignments about my subject specialisation especially in making models or teaching aids. As a result, I didn't refer much to journals.'

NQT C: 'I think we should also be exposed to other subject content as well as the current development in teaching. But we were exposed more to pedagogy aspects of our subject specialisation.'

Table 13 presents a summary of the concepts of reflective teaching in terms of problem-solving skills. Item 4 (flexibility and adaptability) received 32.8% 'Very High' response, which is in fact the highest response for the higher scale compared to others items to all questions from the other clusters (Clusters 1, 2 and 4). Nevertheless, in terms of strategies for problem solution, only 13.0% rated 'Very High' response. This is among the lowest response from the four clusters. In sum, during the NQTs pre-service training programme, there is little doubt that the idea of flexibility and adaptability was stressed but, in general, problem solving skills were not given priority.

Table 13: The Reflective Teaching Skills in Terms of Problem-Solving Skills During Newly Qualified Teachers' Teaching Practice ( $N = 67$ )

Questionnaire Items	Frequency (%) ( $N = 67$ )					$\bar{X}$	SD
	1	2	3	4	5		
<b>Cluster 3 : Problem Solving Skills</b>							
1. Personal philosophy and theories	3.0	13.4	31.3	35.8	16.4	3.493	1.021
2. Independent problem solution	1.5	3.0	20.9	56.7	17.9	3.866	.796
3. Strategies for problem solution	1.5	9.0	28.4	47.8	13.4	3.627	.885
4. Flexibility and adaptability	-	4.5	14.9	47.8	32.8	4.090	.811

1 = None; 2 = Small; 3 = Moderate; 4 = High; 5 = Very High

(Items adapted from Stout, 1989)



#### ***10.4.4 Concept 4: Acceptance and use of Feedback***

Feedback comes from several sources within a school such as collegial exchange, formal evaluation from teacher educators and co-operating teachers, self evaluation, peers and pupils; for the purpose of self reflection this is the most valuable information available. Prospective teachers must learn to expose their thinking to others and open themselves to criticism. In fact it is a prerequisite to professional growth. Encouragingly, it seems that the NQTs had been encouraged to seek feedback and to reflect carefully on it during their teaching practice. Below, the interviewed NQTs illustrated the importance of the acceptance and the use of feedback for their professional development during pre-service programme.

**NQT A:** 'Basically, we must realise that there is no perfect teacher. Therefore we need to be criticised and provided with constructive comments. The integrated ideas are very important to improve our capability as a teacher and pupils' performance because they are our customers.'

**NQT B:** 'During teaching practice, I assumed that everything I had done could be improved. I needed to listen to other peoples opinions. However, sometimes, I felt exhausted, tired or even a little bit angry when pupils didn't understand the lesson or didn't follow my instruction. In such situation, I needed to be open-minded.'

**NQT C:** 'Criticism was very important and I was ready to be criticised. I took all the criticisms positively although it was from my pupils because they were actually receiving my teaching service. There is no difference in handling criticisms either during my initial training or in actual teaching now.'

When the NQTs were asked whether they were satisfied with their teacher educators' feedback during their teaching practice, the interviewed NQTs revealed that they were unfortunate in that they did not get very committed supervisors. The following responses illustrate that the NQTs complained about their teacher

educators as well as mentors who, they argued, did not give them proper supervision, especially towards the end of their teaching practice.

NQT A: 'Generally I was not really satisfied, during the few weeks before the practicum ended. He only came for a few minutes and didn't observe me. Even some feedback from the beginning of practicum was not very clear or there was no further explanation, it made it difficult for me to react.'

NQT B: 'Teaching practice was a heavy job because I had to do a lot of preparation such as lesson plans and teaching aids and it had to be ready to be observed by the lecturer and mentor. In fact sometimes I didn't feel that I was given proper supervision or advice by either of them especially during the last few weeks of my teaching practice.'

NQT C: 'Sometimes I felt I was not really supervised by my lecturer. He had too many trainees at several schools and areas that needed to be observed too. As a result, at several times, he only came for few minutes and didn't observe me, so no feedback was given. Or otherwise some of the feedback was not very clear or there was no explanation.'

Table 14 is a summary of the concepts of reflective teaching in terms of acceptance and use of feedback (Cluster 4). Basically, this cluster is concerned with various sources of feedback such as teacher educator, co-operating teacher, peers, or even pupils. The response rate for Item 3 shows little written feedback was received. Again, this reveals that most probably co-operating teachers gave little attention to critical inquiry, whereas they were expected to be a mentor to promote reflective teaching skills. This is not encouraging because many studies reveal that qualified and experienced teachers' feedback is important and highly regarded, as is the opportunity for frequent and supportive feedback during student teaching. For example, Koetsier and Wubbels (1995) highlight that carefully supervised student teaching appears to be one of the best contexts for acquiring beginning teacher competencies.

Table 14: The Reflective Teaching Skills in Terms of Acceptance and Use of Feedback During Newly Qualified Teachers' Teaching Practice ( $N = 67$ )

Questionnaire Items	Frequency (%) ( $N = 67$ )					$\bar{X}$	SD
	1	2	3	4	5		
<b>Cluster 4 : Acceptance and Use of Feedback</b>							
1. Sharing professional thought	-	7.5	9.0	52.2	31.3	4.075	.841
2. Soliciting feedback	-	11.9	29.9	41.8	16.4	3.627	.902
3. Receipt of written feedback	4.5	19.4	32.8	32.8	10.4	3.254	1.035
4. Receipt of oral feedback	4.5	17.9	31.3	34.3	11.9	3.313	1.047
5. Use of feedback	3.0	7.5	23.9	47.8	17.9	3.701	.954
6. Feedback from pupils	-	9.0	31.3	46.3	13.4	3.642	.829

1 = None; 2 = Small; 3 = Moderate; 4 = High; 5 = Very High

(Items adapted from Stout, 1989)

Comparing the four clusters, it is clear that Cluster 1 (retrospective and predictive thought) and Cluster 4 (acceptance and use of feedback) received better responses than Cluster 2 (critical inquiry) and Cluster 3 (problem solving skills). This is to say, during their teaching practice, the NQTs received more encouragement from both their teacher educators as well as co-operating teachers in two clusters: retrospective and predictive, and acceptance and use of feedback, whereas the other two clusters: critical inquiry and problem solving skills, received low encouragement. It can also be inferred that, during their teaching practice, the NQTs received more encouragement for reflective teaching skills in the form of theory or from external factors rather than from internal factors, namely, their own practices or experiences especially through doing research, or critical inquiry activities. Stout (1989) points out that teacher reflection needs 'room' or opportunity for independent thought and action. But, as this finding shows, the NQTs were not given the needed opportunity to do so.

Much can be discerned from the NQTs perceptions of their teaching practice. Moreover, since they have been teaching less than three years, their experiences were still relatively fresh and relevant. Nevertheless, the information should be

viewed in terms of its implication as a model for inquiry rather than as a presentation of definitive empirical data. Furthermore, the outcomes apply to a fairly small number of NQTs, so the possibility for generalisation on the basis of these results is quite limited. There are some areas which warrant future investigation, especially the issues which have been identified as the weaknesses of the existing pre-service programme.

### **10.5 The Effects on Actual Teaching**

There were several effects of not seriously developing reflective teaching skills during the NQTs' teaching practice. One of them concerns journal writing. It seems that journal writing is non-existent (not practised) among the NQTs. All the interviewed NQTs confirmed this fact.

NQT A: 'I think the initial training programme is an ideal time to train prospective teachers to be reflective practitioners. And then, it's up to the individual to continue applying such experience in their real work in school. However, I doubt if new teachers continue keeping a journal due to the constraints of time and teaching tasks.'

NQT B: 'During teaching practice, we were collecting data through journal writing. But now I never do that any more. The reasons are we have a lot of work, teaching several classes and sometimes we have to do administrative work such as filling custodial data, printing handouts or test papers etc. Moreover, I have no idea how to collect data properly. I wish I could at least carry on writing a journal.'

NQT C: 'I do not write a journal now, unlike, during my pre-service course, when I had to do it because I knew, the assessment was based on the journal. But in reality now, I have too much work. Sometimes I've got to bring work back home. This is time consuming, especially for those who have a family. On top of that, I have also been appointed as secretary for extra-curricular activities, member of the Parent-Teacher Association, etc.'

There were also clues that some of the NQTs had not been exposed to conducting careful monitoring, criticising and evaluating processes; thus, they were not able to conduct small research or action research as their way of reflection. As a result, they were not able to evaluate, monitor and outline plans for improvement in their own teaching or generate new teaching ideas for their classroom through research. This is especially obvious when they were asked about action research. The following responses reveal this handicap.

NQT A: 'Basically, I have no idea how to collect data properly or to carry out systematic observation and evaluation. So, I doubt that I'm able to keep on generating new ideas in my teaching on the basis of these methods.'

NQT B: 'I don't think that we have been taught properly how to do observation, analyse data, write reports and give presentations. What we did was only for the purpose of the assignment. So I don't have any idea what action research is all about.'

NQT C: 'Although we used questionnaires or interviews to get information from pupils, that was at a very basic level. I don't think we have been taught properly how to do observation, analyse data, write reports or give presentations. In fact, action research is something new, something alien for me.'

Despite this handicap, it must be acknowledged that the NQTs did exhibit some encouraging features, especially the impact of reflection on their actual teaching attitude. To mention just some of them: firstly, it seems that the NQTs became more comfortable and were able to adopt the idea of reflection and self examination and gave attention to a wide variety of problems, taking a much more autonomous posture on how to minimise the problems. The interviewed NQTs gave good examples of this:

NQT A: 'I try to teach effectively, be friendly with pupils and colleagues, and not simply accept the established practices. I always have reasons if I am not willing to do something. Our own

and colleagues' past experiences should be taken into account in our daily practice. At the same time, I try to avoid all the proven bad practices. In order to get feedback about my practice, I ask for verbal opinion from other teachers and pupils about my teaching, my language etc. Although no formal evaluation is made except by examinations, normally I ask my pupils for feedback after the lesson or after several topics, but the focus is on what area or topic they don't understand as well as on my teaching style, whether they can follow or not.'

NQT B: 'My teaching approach is always changing in order to avoid boring my pupils and to make the lesson enjoyable and to see objectives achieved. Using teaching aids is also very important in helping pupils understand more easily.'

NQT C: 'I always ask my pupils about their development, especially which subject they don't understand, ask them about my teaching style, do they understand my language or instructions, etc.'

Secondly, the ability of the NQTs to understand the non-verbal behaviour of their pupils developed. This ability is essential because the influence of pupils tends to lead the NQTs to be more reflective. It is not enough if NQTs are only concerned with the observable learning behaviour of pupils; the abstract processes of cognition and non-verbal behaviour also have to be looked at. This was an encouraging feature, and the interviewed NQTs described this development as follows.

NQT A: 'It is an important aspect in my actual teaching too. For the obvious ones [non-verbal behaviours], I can understand them. Basically, from pupils' reactions I know whether they understand or not, are happy or bored or feel threatened.'

NQT B: 'Although non-verbal behaviour had not been taught specifically at college, our lecturers always stressed to us to be aware of pupils' expressions during teaching. Basically, I can see the difference; for example, in the morning time, pupils are active but in the afternoon they look tired, sleepy and do not always pay attention to the teacher. At such a time, I always give them physical exercises such as writing or simulation but not listening. It is similar during my teaching practice and my actual teaching.'

NQT C: 'Yes, during my last teaching practice, I was able to notice when they started not to pay attention or look bored, normally from their expression and reactions such as looking passive or blank. To overcome this, I used to change my teaching style, normally giving them a quiz, competing among themselves, or sometimes I purposely made joke to refresh them and then the lesson could continue. Same situation with my actual pupils now.'

Understanding the pupils' non-verbal behaviour makes it easier for NQTs to give more explicit instructions, to emphasise effective teaching and learning processes, and to avoid any pressure situations. This argument is consistent with the conclusion of Sullivan and Leder (1992), that, if teachers are not aware of the influences on their teaching, then they cannot analyse these critically, and their teaching will become less reflective.

Thirdly, generally the NQTs made positive remarks about the pre-service teacher education that they had undergone especially in the way it had prepared them to be reflective teachers. The comments of all the interviewed NQTs demonstrate that they appreciated the programme as the foundation for them to establish the concept of reflective teaching.

NQT A: 'Although there are some idealistic theories at college which don't apply at school, I can't deny that the pre-service training was very important at least as a foundation for being a reflective teacher, therefore the continuing in-service course is also important to strengthen such skills. There is no end to this process, otherwise I would feel unsatisfied and would be uncommitted to my work.'

NQT B: 'I admit, the teaching practice was really useful and important, it gave me exposure to the real school situation. Being evaluated and knowing my strengths and weaknesses. All these gave me a little bit of confidence when I was posted to the real school. Basically the pre-service course was only a first step to being a teacher. I only gained basic knowledge and training in particular how to teach effectively, because everybody can teach without initial training but how effective it is, is really questionable.'

To be a good teacher, an in-service course, prior experience and our own initiative are needed. As time goes by, I have started to feel confident, based on knowledge and training gained from college. I am now developing it further, at least I can think of alternatives to solve the problem or to minimise it.'

NQT C: 'For me, what I learned during two and half years at college with two periods of teaching practice were good experience. However to be a reflective teacher depends so much on the individual. For example, a reflective teacher is the one who likes to have co-operative spirit, to expand existing knowledge through reading, attend courses or engage in discussion with colleagues. To maintain the reflective teaching skills needs continues effort. It is definitely not enough to rely only on initial training.'

The fourth point relates to job satisfaction. NQTs B and C related their self reflection to their job satisfaction. As the following quotations illustrate, they held positive attitudes which were in line with Wells (1994), who says that the sense of satisfaction and self-confidence are important and are the benefits of reflection.

NQT B: 'As time goes by, the level of a teacher's job satisfaction will change, practising the same method and nothing new could cause us to feel dissatisfied. Therefore, a reflective attitude is important, it can influence the performance as well as job satisfaction as a whole. For time being, I feel satisfied with my job, maybe I am still new and energetic.'

NQT C: 'Being teachers, we must have self-confidence otherwise we can't teach effectively and will always feel tense and definitely be unable to cope with 40 pupils in one classroom. With self-confidence, teachers will be able to offer solutions, be creative, innovative and love teaching. Pupils will be happy and understand lessons more easily. Eventually the teachers be will sensitive to their own practice and feel satisfaction with their job. This what I'm trying to practice now as was emphasised at college.'



## 10.6 Conclusion

Basically the NQTs had some understanding of the concept of reflective teaching. With this kind of basic understanding the NQTs may be equipped to deal with the difficulties they encounter or to develop effective teaching strategies, and challenge the pressure to conform (Kuzmic, 1994). However, based on both the qualitative and quantitative data, it can be argued that during their pre-service training programme, the NQTs had been given little explicit support or direction for reflection. Among the weaknesses are the following. First, most of the NQTs' reflections were not intentional, focused or systematic. Second, they had not been trained on how to carry out small scale research particularly action research as an inquiry-oriented skill. Third, the NQTs had not been exposed to professional literature especially research papers or journals which are related to the contemporary issues in teaching and career development. Lastly, some of their teacher educators or co-operating teachers were not seriously committed to nurturing in them reflective teaching skills.

It seems that critical inquiry skills and problem solving skills had not been thoroughly taught or understood during the pre-service teacher education programme. Consequently, the NQTs did not seem fully proactive in reflection on their actual teaching. They did not continue their journal writing and did not conduct small scale research as ways of reflection. This phenomenon is in line with Howey and Zimphers' (1989) conclusion, that in many pre-service programmes both the daily problems that confront classroom teachers and the knowledge that makes teaching a more scientific endeavour are inadequately addressed.

Obviously, teacher educators and co-operating teachers have the responsibility of educating prospective teachers to reflect on their practice in the light of broader

educational goals, ethical concerns, and political issues. This is paramount in order to produce NQTs who care deeply about their situation; and are moved to act; to recognise and transform school and societal structure which burden the teachers with their onerous demands. On top of that, their own attitude is also important; as Rovegno (1992) has pointed out, NQTs prefer not to rely on authority to direct their lives, work, play, actions, relationships, and the way they conceive of the world and their place, but trust in their own abilities to make sense of experience, the task and the solution. This is similar to Howey and Zimpher (1989), who concluded that reflective teachers who understand relevant theoretical constructs and the use of theories, can use that reflection to engage in classroom inquiry such as action research to improve practice.

Therefore, during pre-service, especially during the final teaching practice, explicit instruction about reflection is indispensable. In some situations peers are also able to establish a safe, effective and supportive environment for reflection. Consequently, the issues discussed in this chapter will refine the understanding of reflection and extend the effort to produce reflective NQTs as the product of the pre-service teacher education programme. The final section of this thesis (Part Three) deals some of the impediments to the successful nurturing of reflective teaching that have been identified in this research and makes positive recommendations about how they may be resolved.

## **PART THREE: CONCLUSION AND SUGGESTIONS**

### **Summary**

This part contains the last two chapters. Chapter 11 concentrates on possible impediments to the successful nurturing of reflective practice, highlights the main issues emerging from the study and makes suggestions for improvement. Chapter 12 contains the general conclusion of this study and suggestions for further research in order to improve the existing programme in nurturing reflective teaching for Malaysian prospective primary teachers.

## **CHAPTER 11**

### **ELIMINATING THE IMPEDIMENTS TO THE SUCCESSFUL NURTURING OF REFLECTIVE PRACTICE**

#### **11.1 Introduction**

This chapter will identify and examine some of the impediments to the successful nurturing of reflective practice surrounding the existing Malaysian pre-service teacher education programme which have been found in this study (11.2). Several recommendations will then be made to improve the programme in order to successfully nurture reflective teaching skills.

#### **11.2 The Impediments to the Successful Nurturing of Reflective Practice**

It is generally agreed that the purpose of pre-service teacher education or initial teacher education (ITE) is to prepare teachers for the early years of teaching and to serve as a foundation upon which subsequent training and development can be built. Therefore, the ITE curriculum should equip student teachers with basic teaching skills and with a willingness to be lifelong learners. Besides subject matter and content knowledge, reflective teaching skills must also be an important goal in ITE. As Lucas (1991) points it out, the more reflection is explicitly encouraged, worked on, developed, and analysed, the more we are likely to learn and understand what it might mean. On this basis, this study would like to argue that ITE should inculcate the concept of pedagogical reasoning and action via technical reflection, practical and critical reflection. This will allow student teachers to self-diagnose, to evaluate their own subject knowledge and to comprehend new knowledge resulting from their teaching practice. As stated by Calderhead (1989), encouragement should begin from the start of a teacher's career, enhanced by the fact that several countries have begun to acknowledge the

role of teacher reflection, professional judgement, and self evaluation. However, this research has identified several major impediments which need to be addressed for the successful nurturing of reflective teaching skills in student teachers in Malaysia teacher education. These are:

- 1. Student teachers are not explicitly exposed to reflective teaching skills.**  
This research has found that there is no established model of reflective teaching in Malaysia initial teacher education (Chapter 7: 111).
- 2. The methods being used to teach student teachers do not explicitly nurture reflective teaching.** The teaching methods used in Malaysia initial teacher education (micro teaching, KKSP, clinical supervision and journal writing) are not explicitly employed in order to promote reflective teaching effectively (Chapter 7: 118, 120, 125, 127).
- 3. Some of the teacher educators do not themselves practice reflective teaching skills.** This can be seen from the interview with the student teacher and NQT and teacher educators responses to the questionnaire which clearly show that the teacher educators spend only a small amount of time on the introduction of inquiry-oriented skills to student teachers (Chapter 7: 110).
- 4. Some of the co-operating teachers are not well qualified and do not provide a role model for reflective teaching.** As revealed in Chapter 8, there is a problem with the mentors' professionalism (p: 152) and their lack of enthusiasm for nurturing reflective teaching skills (p: 156).
- 5. A lack of an effective triadic relationship (student teacher - teacher educator - co-operating teacher) during teaching practice.** This research has found that there is no close relationship between mentor and teacher

educator (Chapter 8: 154) or between student and teacher educator (Chapter 10: 200).

- 6. Student teachers as well as newly qualified teachers do not possess the inquiry method skills necessary for them to conduct classroom research.** This was revealed through the interviews with both student teachers (Chapter 9: 167) and newly qualified teachers (Chapter 10: 203) as well as their responses to the questionnaire (Chapter 9: 172; Chapter 10: 196).

Since the elimination of all these impediments is a necessary, if not sufficient prerequisite for the development of reflective teaching and the successful acquisition of reflective teaching skills, it is important to modify the existing ITE programme. Accordingly, some modifications to the existing ITE programme are now recommended which may eliminate some of the impediments to nurturing reflective teaching skills in student teachers which this study has identified. These recommendations are:

- 1. Student teachers should be explicitly exposed to reflective teaching skills.** It is essential to develop a set of training tasks and procedures that could reliably stimulate an attitude of inquiry and reflection in prospective teachers (11.3).
- 2. Change the teaching methods of teacher education.** The methods of teacher education particularly micro teaching, 'Kerja Kursus Secara Projek' (KKSP), journal writing and clinical supervision should be geared more explicitly to inculcating reflective teaching skills and attitude (11.4).
- 3. Teacher educators should be encouraged to become reflective practitioners.** Teacher educators need to reflect on the existing beliefs and

knowledge of their own pedagogical practices, particularly in connection with basic skills required by reflective practitioners (11.5).

4. **Co-operating teachers should themselves become more reflective.** This is necessary if co-operating teachers are to provide the appropriate kind of support to student teachers during their teaching practice (11.6).
5. **The triadic relationship (student teachers - supervisor - co-operating teacher) needs to be strengthened to promote reflective teaching effectively** (11.7).
6. **Action research as a formal way of developing reflective practice should be introduced** (11.8).
7. **Critical reflection should be encouraged and promoted.** This will involve systematic critical and creative thinking about action, with the intention of understanding its roots and thus, of refining, improving or changing future actions (11.9).

### **11.3 Recommendation 1: A Development Programme to Stimulate an Attitude of Inquiry and Reflection**

This study has shown that there is no specific model of reflective teaching being implemented in Malaysian pre-service teacher education programme and that reflective teaching skills are only being inculcated implicitly (Chapter 7: 111). This suggests that the focus and purposes of reflection need to become more explicit (Ecclestone, 1996). To achieve this, it is important for Malaysian pre-service teacher education to develop a set of training tasks and procedures that could reliably stimulate an attitude of inquiry and reflection in prospective

teachers, as well as creating an environment in the workplace (college and school) that contributes positively to collaborative reflection. It is only by having a specific model of reflective teaching that the development of reflective teaching in pre-service programmes can be smoothly pursued, documented and analysed. Moreover, teacher educators can be guided and informed about their own practices. With this kind of experience, student teachers' reflection can help to eliminate problems or make more sense of puzzling situations. In this way, student teachers can work towards a better understanding of the problems and ways of solving them; and reflection involves the thinking process which, when organised and linked, can lead to action (Loughran, 1996). Actually, the reflective cycle of 'suggestions-problem-hypothesis-reasoning-testing', need not be followed in a particular order but student teachers need to experience the cycle in order to understand the effect of reflection on practice. Consequently, this study supports a development programme to stimulate and build reflective values among student teachers during a pre-service teacher education programme of the kind advocated by Wildman et al. (1990). A possible developmental programme for this purpose is given below (Figure 12).



Figure 12: A Development Programme to Stimulate and Build Reflective Practice

TASKS	PHASE 1		PHASE 2		PHASE 3		PHASE 4		
	1. Talking about Teaching	2. Classroom Awareness	3. Critical Analysis	4. Critical Analysis with Colleague	5. Looking at Own Pupils	6. Looking at Own Lessons	7. A Broader View of 'Looking'	8. Planning Reflection with a Colleague	9. Reflection Day and Evaluation
Task description	Discriminating judgements versus observations	Comparing importance of classroom events based on own values and beliefs	Building on Task 1, using observation instruments to record classroom events	Building on Tasks 1-3, role playing teacher/observer dyads with observations and conferences	Developing a case study of selected pupils to increase sensitivity to complexity of own classroom	Analysis, description, and interpretation of 3 of their own audio taped lessons	Using Looking in Classroom instrumentation, examination, and practice with a variety of ways of looking at one's own lessons	Building on all prior tasks, planning and development of a professional 'reflection' day with their experienced colleague	Implementation and evaluating plan developed in Task 8.
Task purpose	Allowing the student teachers to discover the nature of their talk inductively	Encouraging student teachers to use increased awareness of classroom in self-reflection about their own teaching	Integrating the self-awareness in to self-reflection by identifying biased versus less biased descriptions of teaching	Providing practice and developing strategies that could be used to initiate collaborative reflection about teaching	Revealing the complex yet implicit nature of teaching	Focusing attention on the interactive nature of the classroom environment	Providing a number of choices of ways to look at teaching	Developing a plan for reflection with the experienced colleague	Providing a 'learning day' for the student teachers, while the mentors served as brokers for the student teachers' reflection
Trainer concerns	Difficulty of initial task; creating a task that would allow discovery at an easy level; time	Getting student teachers to 'unpack' and reveal their conceptions of teaching in terms of values and beliefs	Reflecting on own teaching in negative light; withdrawing from participation; developing a negative attitude toward training	Timing of role playing (do student teachers 'have' the tools to conference and reflect together); making sure student teachers know the difference between evaluation and analysis	Use of own beliefs and values to exclusion of other interpretations or other points of view	Completion of task; their ability to develop a focus for observation and reflection	The number of 'ways' would be overpowering	The experienced colleague may be too directive; administrative permission to allow student teachers' plan	Success and/or learning emanating from the plan; positive reaction from administrators to ensure future reflection days
Student teachers reactions									

(Adapted from Wildman et al. 1990: 142-143)

At **Phase 1**, the programme aims to get student teachers to talk about teaching and looks at their teaching more systematically and precisely than they normally would. This requires Malaysian student teachers to read vignettes of teaching episodes and then write down descriptive and interpretative comments. The goals are to alert student teachers to the distinction between objective observation and judgements, and to increase their classroom awareness.

The purpose of **Phase 2** is to develop classroom awareness and to help Malaysian student teachers integrate this awareness into self reflection about their own teaching. They can watch normal teaching settings through video tape segments, and prepare a description of what they see. They should detail the classroom environment, and the role of beliefs, values, and intentions in both teaching and looking at teaching. They should then work in pairs to begin the process of learning how to analyse teaching episodes with a colleague. Therefore, a 'critical friend' is essential (Hatton and Smith, 1995).

**Phase 3** represents the move from looking at 'neutral' teaching episodes to an examination of each student teacher's own teaching. They can develop case studies of selected pupils in their classroom. This can develop the appreciation of (1) the amount of information that is available in the classroom; (2) how difficult it is to be aware of all this information; and (3) how important this information is in managing a classroom that provides equal opportunity to all pupils. Developing an understanding of these appreciations will increase their sensitivity to the observation process, which is fundamental in constructive reflection (Wildman et al. 1990).

**Phase 4** involves the co-operating teachers working directly with student teachers. The co-operating teachers will arrange a reflection day during which student teachers give their reflection on their teaching. For this purpose, mentors

could ask student teachers to decide one or more reflection activities they would like to try. For example, they could exchange classrooms for a day; do formal observation and audio taping and then conduct an analysis on particular aspects of the lesson. In all instances, the student teachers will engage in extensive discussion about teaching before, during, and after their experiences. According to Krause (1960), student teachers can also assess and evaluate the initial training programme itself.

In addition to the development programme, this study supports Wildman et al. (1990) with regard to five other practical proposals to promote a better environment to facilitate reflective practice in school. First, a carefully designed set of tasks can help student teachers develop (a) a sensitivity to their ways of looking at and talking about teaching, (b) a positive attitude towards inquiry, and (c) a self-analytic approach to teaching. Second, student teachers need to organise their reflective thinking around shared problems, mentoring episodes involving modelling and coaching, and self-analytic needs. Third, student teachers need to understand the common problems, shared theories about teaching, or social responsibility outside school which will make them more aware of their practices. This can facilitate reflection more broadly in schools. Fourth, more attention should be given to the development of a literature from which student teachers can draw detailed examples for reflective thinking. This is to develop the explicit moves that student teachers make during reflective thinking. Fifth, it is important to provide an environment for reflective thinking, such as time, compatible colleagues, a conducive climate, and explicit administrative support.

#### **11.4 Recommendation 2: Methods Geared to the Attitude and Skills of Reflective Teachers**

At present, there are four main methods being used to promote reflective teaching in Malaysian teacher education programme: micro teaching, Kerja Kursus Secara Projek (KKSP), clinical supervision and journal writing. However, several weaknesses have been found which need some adjustments for improvement.

Basically, **micro teaching** not only assists in giving student teachers experience of teaching but functions as opportunities for reflection on practice. However, this study has found that micro teaching is employed only to analyse teaching behaviour rather than for reflective teaching (Chapter 7: 117). This can be overcome by videotaping at least one lesson. The student teacher can then watch the videotape playback of their lesson, review the peer observations and answer reflective questions about their lesson such as ‘What are the strengths of the lesson you taught?’, ‘What would you do differently if you taught this lesson again?’ (Wilkinson, 1996: 215).

At present, there are also no specific guidelines being used by teacher educators in order to evaluate the extent to which the student teachers can apply reflective teaching during micro-teaching (Chapter 7: 117). Therefore, to be more effective in nurturing reflection, it would be beneficial to adapt Cruickshank’s (1985) guidelines for evaluating Malaysian student teachers’ micro teaching. These are (a). Assess pupil learning, where the student teacher actively determines the extent to which pupils understand the content or task and, as appropriate, makes instructional adjustment; (b). Provide opportunity to learn, where the student teacher structures activities to allow time for pupils to think about, respond to, and synthesise what they are learning; (c). Use examples, where the student teacher uses appropriate examples to assist pupils’

understanding, and (d). Review and organise, where the student teacher reviews prior work and prepares pupils for upcoming work.

With regard to '**Kerja Kursus Secara Projek**' (KKSP), it is doubtful whether this portfolio was a good tool for reflective teaching or whether the portfolio experience was valuable. What this research finds is that student teachers only search related literature instead of looking at the KKSP as a means to practising reflective teaching (Chapter 7: 120). It can be argued that in order to allow KKSP to promote reflective teaching skills effectively, KKSP design should be explicit in its purpose. It should also clearly integrate student teachers' academic course work with their experiences in the field. KKSP is the student's own personal reflection and should be multipurpose in nature so as to evaluate the success of student teachers in a programme instead of relying solely on examination, which is too mechanical. KKSP should use more varied strategies for enhancing reflection about teaching, self confidence, and sense of collegiality (Anthanas, 1994). It also gives both student teachers and teacher educators an opportunity to reflect on student teachers' growth and development throughout the course of a programme (Barton and Collins, 1993). Clearly, student teachers' KKSP should be designed to foster reflection and offer opportunities for student teachers' experiences, thoughts, actions and subsequent learning to be documented. KKSP, therefore, should focus attention on students' initial understanding of the KKSP process, its purpose in the course, and its role in enhancing reflection.

With regard to **clinical supervision**, this study has found that there was no particular document being used by teacher educators and co-operating teachers during observation to evaluate student teachers' reflection (Chapter 7: 125). Also, there was not much effort to encourage dialogue (Chapter 7: 123; Chapter 8: 142). Student teachers should be encouraged to become involved in reflective

dialogue about their practices and beliefs. 'Dialogue' suggests a 'stream of meaning' flowing among and through the participants, out of which can emerge some new understanding, and in dialogue nobody should be trying to win and no absolute agenda prevails (Kapusinski et al. 1995). If the dialogue in clinical supervision focused on self-awareness, it could broaden thinking and provide a safe, supportive environment in which questions can be posed and risks taken (Johnston, 1994). Through reflective dialogue, a number of important processes could be activated: testing out theories and ideas; building on ideas; considering alternative views; being encouraged to try out the idea; motivation; creating structure; formulating goals; planning and reviewing. In short, clinical supervision in the Malaysian pre-service teacher education programme ought to be restructured to express reflective goals. Therefore, it can be argued that both teacher educators and co-operating teachers should organise pre and post lesson meetings so that they can provide the basis for reflective dialogue or discussion.

Through this kind of reflective approach to clinical supervision, several key questions could be used to focus student teachers' attention on their own intentions, their thoughts and feelings during teaching, and on related pedagogical concepts. Attention could also be directed towards contextual interpretations of events, potential solutions to problems, advantages and disadvantages of various solutions within the particular instructional context, and on the development of a plan to monitor the effects of any solution attempted (Ross, 1990). This non-threatening approach can strengthen the supervisory relationship by respecting the student teachers' professionalism (Phelps, 1993) and would foster the development of a reflective practitioner (Cohn and Gellman, 1988).

**Journal writing** also can foster reflective skills. However, this study has found that there is no standard procedure governing the writing of journals in Malaysian teacher education programme (Chapter 7: 127). Journal writing can

provide both opportunity and encouragement on experiences in various ways (Guillaume and Rudney, 1993). For example, it enables student teachers to communicate regularly with their teacher educators and co-operating teachers as well as with colleagues in order to exchange ideas, offer and receive advice. It also provides a basis for analysis and discussion. Student teachers can also ask questions arising from tutoring or teaching practice. Therefore, through journals student teachers can display the attitudes of open-mindedness (recognising and acknowledging the validity of other perspectives), responsibility (considering the moral and ethical consequences of choices), and whole-heartedness (identifying and clarify limitations in one's assumptions when making decisions (Loughran, 1996; Harrington et al. 1996) as well as increase self-awareness to reflect on their own development (Morrison, 1996). As Roe and Stallman (1994) show, journal writing can be very beneficial for student teachers especially in reinforcing reflective posture.

In order to contribute more to the development of reflection, journal writing procedure must stress two things: first, student teachers need to be taught techniques (such as what questions to ask) that will encourage thoughtful journal writing; and second, they receive thoughtful, meaningful feedback about the content of their entries (Ross, 1990). To make it more understandable, Francis's (1995) guidelines for reflective writing, as shown in Figure 13, could be used.

Figure 13: Guidelines for Reflective Writing

Summary:	a brief summary of the key points.
↓	
New Learning:	major new insights that come out of the session <u>for you</u> .
↓	
Questions:	questions that emerge from the topics, issues or strategies.
↓	
Personal Reaction	a personal reaction to the context, content or strategies used

(Francis, 1995: 233)

The suggestions of Brinton et al. (1993) regarding the procedure of commenting on students' journal entries are also worth adapting. These are: (a). Respond directly and personally: avoid impersonal or general statements that are not tailored to the specific entry; (b). Be sensitive, show extreme sensitivity to the novice's experience and offer responses in an encouraging tone; (c). Use journals as a teaching tool, such as by asking participants to focus on aspects that have arisen in class discussion or readings, giving advice or suggestions, or referring them to outside literature and resources; (d) Share experience. It is comforting for novices to know that they are not alone in their struggles, questions, and setbacks, and (e). Be honest. Express honest opinions and avoid false confidence building.

Another issue identified in this research was the inconsistency between when and how often teacher educators and co-operating teachers read student teachers' journals (Chapter 7: 127). In relation to this, it can be suggested that the journal should be written both daily and weekly. For a weekly journal, tasks such as exploring student teachers' observations, developing educational issues, and questions for exploration would be more suitable; whereas for a daily journal, the focus should be on lesson analysis which considers the success of the lesson in terms of intended pupils' outcomes, reasons underlying the lesson's success or failure, and if necessary, alternative approaches to consider (Hoover, 1994).

### **11.5 Recommendation 3: Teacher Educators as the Reflective Practitioners**

This study has shown that both student teachers and newly qualified teachers are concerned about the ability of their teacher educators, who did not appear to be very committed and capable in nurturing in reflective teaching (Chapter 7: 110; Chapter 8: 153). Indeed, if teacher educators want student teachers to be reflective practitioners they themselves must be more proactive in articulating the



shared vision of the reflective practitioners (Goodman, 1988; Elliot, 1993; Borko and Mayfield, 1995; Quicke, 1996). They should create opportunities to develop their research work (Dunne et al. 1996) in order to become reflective inquirers (Adler, 1993). In addition to these roles, this study would like to adapt Pultorak's (1996) suggestions regarding how teacher educators can prepare student teachers for reflective teaching more effectively. This is Malaysian teacher educators' need to:

1. Furnish a list of supervisory questions that encourages student teachers to reflect beyond the technical aspects of the classroom and consider, with open-mindedness, whether important human needs are being met;
2. Provide a more accurate barometer of what to expect from novices in terms of the presence and character of reflectivity and at what stages of the student teaching experience;
3. Serve as a guide in prescribing activities to facilitate reflective growth at various stages of the experience;
4. Help prepare novices to be autonomous thinkers of intellectual independence.

Above all, it is important that teacher educators and student teachers are in a learning partnership. As Warham (1991) states, the apparent tension between the role of the teacher educators and the needs of the student teachers should not exist where both the parties are in an active partnership, the students developing personal meanings, and the teacher educators assisting students to frame their meanings within the conventions of the cultural context. This idea concurs with that of Turney (1987): the assistance of teacher educators can provide better opportunities to link theory and practice in the realistic setting of the classroom, a greater degree of co-operation in trying different patterns of teaching. Student teachers feel more involved as active partners and welcome the opportunity to exchange ideas about their own methods. Mistakes are as beneficial as successes in coping with teaching problems.

In addition, teacher educators should be approachable, open minded and aware of the particular circumstances of the placement. They should give feedback (both positive and critical) and advice, which should be constructive and challenge students to observe more carefully and to ask more questions about what they see (Gore and Zeichner, 1991). They should encourage student teachers to analyse behaviours in more detail, to consider multiple perspectives, to produce alternative explanations of an event and to evaluate the adequacy of the evidence used to support an argument (Ross, 1989). Their expectations of the student should be explicit, specific and clear and they should make efforts to communicate with the teachers and help them to understand the students' position (Stark, 1994).

To achieve an inquiry-oriented approach to teaching, it is the responsibility of teacher educators to help student teachers do three things: develop a commitment to understanding the world of the classroom; acquire some basic principles of classroom research that can feed their understanding; to have some constructive experience of what reflective research will yield when applied to the everyday problems and dilemmas of teaching and learning in schools (Rudduck, 1989). Therefore, it is important for teacher educators as reflective practitioners to establish such commitment and capacities, and for student teachers to be familiar with their methods, which in turn enhances their reflective teaching skills during the Malaysian pre-service teacher education programme.

#### **11.6 Recommendation 4: Co-Operating Teacher as a Role Model**

As is generally recognised, student teachers are just beginning to explore the possibilities of their chosen profession. Although they might strive to be reflective decision makers, they are still required to compromise with reality, being aware of and living within limits (Goodman, 1988). For this reason, co-operating teachers

must serve as role models for their student teachers. In fact, one of the factors that makes student teachers feel they have completed the transition from a student teacher to a teacher is when they are comfortable with their relationship with the co-operating teachers (Guillaume and Rudney, 1993). As Turney (1987), McCulloch and Lock (1992), Watkins (1992), and Wilkin (1992) revealed, student teachers want a professional relationship to be established with co-operating teachers which includes a generous amount of trust, support, understanding, and consideration. They also hope that the co-operating teachers offer constructive criticism, share ideas and materials with them, and provide opportunities and support so that they can experiment, innovate and develop teaching strategies on their own initiative. This process provides the opportunity to inculcate a reflective practice (Watkins, 1992; Hargreaves, 1994; Borko and Mayfield, 1995). With support from their co-operating teachers, student teachers can improve reflective practice. However, this study has found that student teachers (Chapter 8: 138) and newly qualified teachers (Chapter 10: 196) had not been provided with a role model for reflective teaching by co-operating teachers.

It can therefore be recommended that the co-operating teacher or mentor should be a senior member of staff who already has some responsibility for the care and development of staff. Accordingly, teachers who are perceived by McCulloch and Lock (1992) as 'weak', 'lazy' or 'ineffective'; experiencing professional or personal problems; hostile to student teachers, and those who do not have the skills which enable them to observe, evaluate and give positive feedback, should not receive student teachers because they would not be appropriate as role models. This scenario occurred during this research where the co-operating teachers were not willing to allow their student teachers to observe in the classroom, and there was a lack of ability or an unwillingness to engage in reflection of their own and their student teachers' classroom practices (Chapter 8: 138). On the other hand, student teachers should be given opportunities to

observe good teachers at work in the classroom, to participate with experienced practitioners in teaching their specialist subjects and, as confidence develops, to undertake periods of continuous whole class teaching (Burn, 1992; Circular 9/92 (England) and 35/92 (Wales)). This type of experience is critically important in developing and securing many of the competencies required of new teachers. It provides the opportunity to learn in a practical, realistic, everyday context rather than in hypothetical situations. Students would be able to put theory into practice in 'real', everyday situations and gain 'down to earth' experience of classroom management (Stark, 1994).

The good mentor will also create a school atmosphere which is conducive for reflective practice and demonstrate a willingness to support student teachers; they will fight for 'quality time' for meetings and promote reflection. Such an atmosphere will encourage student teachers openly to discuss their ideas about school, the curriculum, and their teaching (Watkins, 1992). As Tomlinson (1995) says, the idea in reflective discussion, is not just to discuss the strengths and weaknesses but to follow these by devising strategies to continue the learning effectively. With such assistance, student teachers will be guided to reflect on the day's events, seeking deeper understandings of teaching problems and possibilities (Stanulis, 1995). Above all, co-operating teachers and student teachers should bear in mind that something that is demonstrated is better than something discussed. Thus, the best co-operating teachers are master teachers who can demonstrate 'the way to do it' (Goodman, 1988; Dunn and Taylor, 1993).

This study would like to suggest that the Malaysian co-operating teachers should have certain characteristics which cover their specific responsibilities, personality and emotional stability as based on some suggestions made by Ashcroft and Griffiths (1989); Wildman et al. (1992); Corbett and Wright (1993), and McIntyre et al. (1996). They are:

1. Willing to be a mentor and showing interest in the student teacher's works.
2. Sensitive, that is, know when to back off.
3. Helpful, but not authoritarian, give advice rather than orders.
4. Emotionally committed to their student teachers, a good listener and flexible enough to respond to individual needs.
5. Astute, that is, know the right thing to say at the right time.
6. Diplomatic, for example, know how to counteract bad advice given to their student teachers by others. Honest and sensitive.
7. Able to anticipate problems. Offer and explore strategies, suggest possible ways.
8. Nurture and encourage open-mindedness. Know that learning is a two-way process.
9. Timely in keeping the student teachers apprised of their successes.
10. A successful classroom teacher; able to reflect on teaching fluently and with enthusiasm.
11. Good role models at all times.
12. Willing to attend training courses and actively engaged in professional development.
13. Able to form positive relationships in order to be able to motivate and raise self-esteem, thus they work with student teachers in a non-threatening way.
14. Well organised and have good record-keeping skills;
15. Able to help student teachers to self-assess and to develop action plans.
16. Act as facilitators of the students' learning and investigations, questioners rather than imparters of knowledge, chairperson rather than leader.

Although this list of characteristics is indicative of an ideal mentor, it is important for all mentors at least to try to follow them as much as they can. Without such characteristics everybody could claim to be an influential mentor. Indeed, the proper selection for co-operating teachers and training for them are important (Dunne et al. 1996, Hargreaves, 1994, Schuttenberg, 1983) especially in

reflective supervision which takes place within a context that rewards reflection and the critical analysis of teaching (Koehler, 1988). Such training is essential because firstly, a pre-service teacher education programme cannot equip student teachers with all the knowledge and skills, and secondly, it avoids the non-effective supervision of student teaching. Moreover, it is believed that co-operating teachers are responsible in shaping future teachers by deciding what behaviour will be emphasised; and what theories, practices, and philosophies will be reinforced (McIntyre et al. 1996). In addition, the small honorarium and minimum release time provided for co-operating teachers is helpful, although it is not a powerful incentive (Wildman et al. 1990).

From the perspective of this research, the teaching practice itself is the first priority in developing a reflective teacher. Reflective teaching practice, therefore, should begin as early as possible in the pre-service teacher's programme (Bullough, 1989). To do this the Malaysian co-operating teachers should meet student teachers before their first day of teaching. The purpose is to learn about student teachers' previous teaching experiences, areas of expertise, their expectations for the teaching practice, their values and interests, their possible strengths and weaknesses as well as allowing them the opportunity to share ideas about working together, work positively, professionally and with the recognition that learning opportunities occur throughout the day and not simply when lessons are being taught (Wood, 1991). In addition, during teaching practice, co-operating teachers could follow through by requiring student teachers to maintain a journal (Lemma, 1993). If possible, co-operating teachers could videotape the student teachers' teaching, and then the student teachers could analyse the tape and share their observations with the co-operating teachers and with their teacher educators. Such reflective assistance is very important in assisting student teachers to analyse the nature of the effects and the 'how' and 'why' rather than just telling them what is right and wrong in what they have done (Tomlinson,

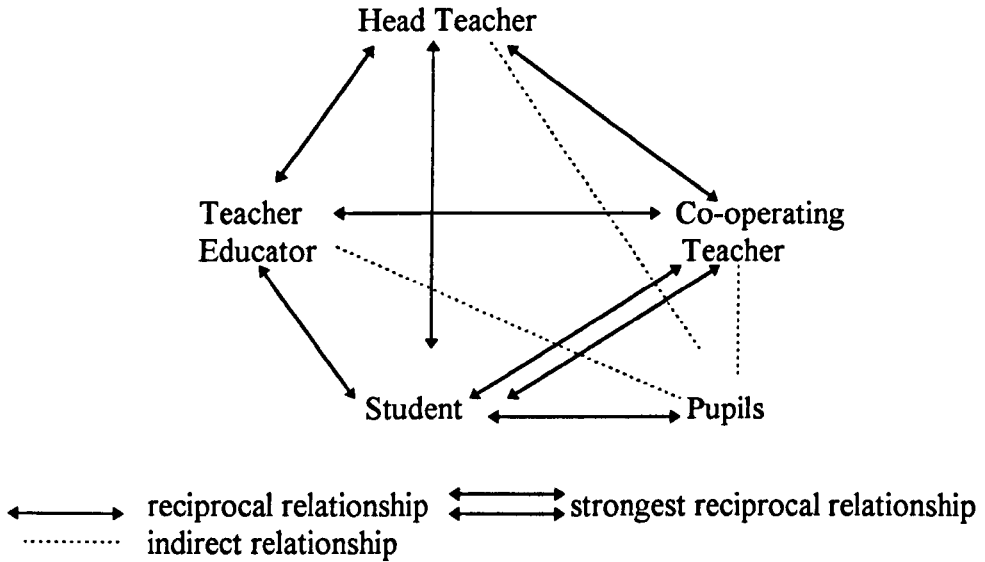
1995). They will be able to rationalise theory with certain situations instead of following any theory mechanically.

To summarise, co-operating teachers could be most effective within the context of reflective practice for several reasons. First, the experienced teachers should activate and make explicit what they know and believe about teaching, and also their tacit understandings of teaching could be revealed and made available for critical analysis. Second, the mentor should bring their inexperienced colleagues into the reflective process by modelling problem solving and providing judicious feedback (Wildman et al. 1990). Co-operating teachers, therefore, must be a role model for student teachers, instructor as well as a co-enquirer. This is what Maynard and Furlong (1993) called the reflective model, from teaching to learning.

### **11.7 Recommendation 5: Strengthen the Triadic Relationship to Promote Reflective Teaching**

This study has shown that there is no close relationship between co-operating teachers and teacher educators in Malaysian teacher education (Chapter 8: 154). It can therefore be recommended that the training institution should address the issue of providing a triadic relationship between teacher educators, student teachers and co-operating teachers. Several studies (see for example, Boydell, 1986; Hodgkinson, 1993) about the pattern of the triadic relationship in teaching practice supervision have recommended a model of the 'ideal' relationship between the student (S), the teacher educator (T), the co-operating teacher (CT) and the head teacher (H) with an emphasis on student teacher and co-operating teacher. Based on these studies, this research would recommend that in order to promote reflective teaching skills more effectively in Malaysian ITE, the ideal relationship during teaching practice as shown in Figure 14 should be considered.

Figure 14: The Ideal Relationship During Teaching Practice



From the figure, the importance of open and regular communication in school based work is clear - certainly, where student teachers and co-operating teachers work together. It can be argued that co-operating teachers may be the most influential factor in the student teaching experience, because co-operating teachers are more oriented towards the practical and particular rather than towards theory and generalisations. Therefore, this study emphasises that a deep relationship between students and their mentors may initiate interactions more frequently (Dunn and Taylor, 1993; Elliott, 1995), and perhaps more importantly, the relationship itself may be the very source of learning about reflective teaching for the student teachers.

Since the roles of co-operating teachers have been discussed in Chapter 4 (See 4.4), the following discussion will focus on the role of head teachers. To be more effective in nurturing reflective teaching, the head teachers should offer student teachers support by (a) clarifying and articulating the philosophies and objectives of the school; (b) holding professional discussions with student teachers; (c) helping when classroom relations with the teacher breakdown (Turney, 1987).



Head teachers, therefore, need to work along-side teachers in helping them to determine goals for the preparation of the new generation of teachers, facilitate the involvement of student teachers into the collegial functions of the school, help student teachers understand the school culture (Binkley and Brandes, 1995), and also model reflective skills for student teachers as well as for teachers (Lee, 1991). In fact, the leadership of the head teachers is central to the changes to be effected (Corrie, 1996). Clearly, leadership style and school context have a pervasive impact on teacher reflection, professional development and the feeling of professional worth. Therefore, Malaysian teacher educators should select environments that will support their student teachers' reflection such as by looking for a head teacher who will discuss school philosophy and goals and who specifically mentions the importance of teacher decision making (Hayes and Ross, 1989).

In addition, reflective practice does not stop with the teachers, it is ultimately concerned with pupils' outcome (Copeland et al. 1993; Guillaume and Rudney, 1993; Harrington et al. 1996). Therefore, it is essential for Malaysian student teachers to have positive relationships with their pupils and be able to seek solutions which have positive consequences in terms of pupils' learning. They consider both the immediate implementation of the solution and its long-term consequences. This kind of interaction is most likely to enable 'meaningful learning' to occur (Bonnett, 1996).

Although reflection is primarily driven by the individual, collegial groups provide both the emotional and technical support necessary for professionals reflecting about the practice (Wildman and Niles, 1987) as well as intellectual tools in the process of learning (Wistedt, 1994). Certainly, when the learning activities are undertaken in partnership with others, there is an opportunity to enact the experimental learning cycle in a far more powerful way than when

learning is undertaken by an individual (Whitaker, 1995). However, this is not to say that all learning should be conducted collaboratively or in partnership with other learners. What is desirable is that the triadic relationship during teaching practice should be able to create a learning environment that encourages the sharing of ideas, tasks and activities (Whitaker, 1995), and provide time for reflection (Stanulis, 1995).

To summarise, in order for Malaysian ITE to nurture reflective teaching skills, there should be two interwoven strands in the relationship between the members of the triadic partnership - the interpersonal and the professional. Interpersonal qualities include friendliness, honesty, approachability and a sense of humour or fun. The relationship should also be professional in that the teacher must be supportive, helpful, organised and constructive. This nature of relationship during teaching practice is obviously important for student teachers be able to act as reflective practitioners.

### **11.8 Recommendation 6: Action Research as a Vehicle for Reflection**

This research revealed that Malaysian student teachers and newly qualified teachers had no experience of conducting research and were unable to employ research methods as a basis for reflection (Chapter 9: 167; Chapter 10: 203). This finding raises doubts about the recommendation of some writers that the process of reflection should be formalised for classroom teachers to become researchers (Zeichner and Liston, 1987; Carr and Kemmis, 1989; Wallace, 1991; Adler, 1993; Tomlinson, 1994; Zeichner and Gore, 1995). In fact research is fundamentally a reflective and learning process (Tafel and Fischer, 1996). This, of course, would help to undermine the dichotomy between theory and practice. More explanation about action research is given in Chapter 2 (See 2.4).

Basically action research is a form of collective self reflective inquiry undertaken by participants in a social situation in order to improve the rationality and justice of their own social practices, as well as their understanding of these practices and the situations in which these practices are carried out (Kemmis and McTaggart, 1988). For example, it is done by practising teachers inside the classroom for their own strengths and using self-criticism for the benefits of insiders (Wallace, 1991; Woodward, 1991). As a result, teachers should be able to reflect critically on what has happened. In short, action research is applicable to student teachers to be able both to define their own immediate problems and to reflect on their practice and their own personal ideologies from a wider perspective. Action research claims to bring theory closer to practice (Kember and McKay, 1996). According to its advocacy, critical reflection upon practice is an important element of action research because it is through critical reflection that changes of attitude can occur. Perhaps, the collaborative work between student teacher, teacher educator and co-operating teacher could provide opportunities for action research and problem solving (McCulloch and Lock, 1992).

In summary, student teachers who use action research will grow personally and professionally, gain sense of empowerment (Brunner, 1995), assume greater responsibility for the future of their learning and teaching, and most importantly raise the status of teacher from skilled technician to scholar-practitioner, or in other words, from technical rationality to reflective rationality. In short, since action research is reflective research, it must be demonstrated and used by student teachers. This would enhance their long-term professional development. (See Chapter 2: 2.4 for other benefits of action research). Therefore, it is important to establish such commitment and capacities during the pre-service teacher education programme. In this regard, it is the responsibility of teacher educators to help student teachers do three things: develop a commitment to understand the world

of the classroom; acquire some basic principles of action research that will allow them to feed their understanding, and, have some constructive experience of what reflective research will yield when applied to the everyday problems and dilemmas of teaching and learning in schools (Rudduck, 1989). Indeed, this study supports Adler's (1993) conclusion that reflective teachers are researchers, who are able to systematically reflect on their own teaching.

### **11.9 Recommendation 7: Develop and Sustain Critical Reflection**

Based on the evidence in Chapter 9 (p: 186), it can be concluded that student teachers have developed more in technical reflection but less in critical reflection. Therefore, this study recommends that the existing Malaysian pre-service teacher education should foster the development of critical reflection among student teachers by encouraging them to examine critically their beliefs and practices. The aim should be to help the student to think critically about oneself, one's assumptions, and one's teaching choices and actions (Johnston, 1994). Reflection must be integrally linked with action, integrating theory and practice, thought and action to become more realistic (Osterman and Kottkamp, 1994; Emery, 1996). Also, the practitioners must have an interest in change (Schon, 1991). Accordingly, this study would like to highlight the developing and sustaining of critical reflection. Several key questions underpinning critical reflection can be promoted as suggested by Kyriacou (1991: 141). (Other questions about teaching (Kyriacou, 1986; Richards and Lockhart, 1994) which could promote critical reflection are in Appendix 8).

1. Do I regularly consider my current practice with a view to identifying aspects that can be usefully developed?
2. Do I make adequate use of evaluating my lessons in informing my future planning and practice?

3. Do I make use of systematic methods of collecting data about my current practice that may be helpful?
4. Do I try to keep well-informed about developments in teaching, learning and assessment in schools that have implications for my teaching?
5. Do I make use of a variety of different ways of developing a particular teaching skill (e.g. attending workshops, using training manuals, collaborating with colleagues)?
6. Do I make the best use of my involvement in a scheme of teacher appraisal to consider my development needs?
7. How well do I help colleagues to appraise and develop their classroom practice?
8. Do I regularly review how I can organise my time and effort to better effect?
9. Do I use a range of useful strategies and techniques to deal with sources of stress effectively?
10. Do I help create a supportive climate in my school to help colleagues discuss and overcome problems?

By asking such questions, student teachers could develop a reflective approach to their teaching, examining their attitudes, beliefs, assumptions, and practices, and using the information obtained as a basis for critical reflection. As Smyth (1989, 1992) pointed out, such teachers will 'become different' by thinking critically and creatively.

### **11.10 Conclusion**

By reflecting on the findings of this research, this chapter has identified six impediments to successful nurturing of reflective teaching. By reviewing the research literature it has also made specific recommendations about how these impediments could be eliminated so as to ensure that the pre-service teacher education programme in Malaysia could more effectively promote reflective teaching. In summary, these are:

1. A development programme to stimulate an attitude of inquiry and reflection;
2. Methods geared to the attitude and skills of reflective teachers;
3. Teacher educators as the reflective practitioners;
4. Co-operating teachers as a role model;
5. The importance of triadic relationship to promote reflective teaching;
6. Action research as a vehicle for reflection;
7. Develop and sustain critical reflection.

During implementation, the recommendations are not without their pitfalls, they are potentially valuable tools in Malaysian ITE aimed at developing reflective teaching. Therefore, the appropriate course structure, personnel and pedagogy which are consolidated in the above recommendations are vital factors in nurturing reflection to prospective reflective teachers at Malaysian Teacher Training Colleges. In addition, the recommendations are also consistent with, and advance, the realisation of the Philosophy of Teacher Education which is itself derived from the National Philosophy of Education and which aims to produce teachers who have insight into, and seek to reflect and cultivate, the goals and aspirations of the nation so as to ensure the development of the individual and the preservation of a united, democratic, progressive and disciplined society. In this sense, the idea of reflection is an important objective in Malaysian pre-service teacher education programme (refer to Figure 10), and it provides a crucial link between the National Philosophy of Education and the efforts to revitalise the teaching profession through teacher education. It is believed that the time has now come to promote the preparation of reflective student teachers amongst those who work in institutions delivering programmes of teacher education. To this end, the final chapter of this study outlines some suggestions for further research related to teacher educators, co-operating teachers, student teachers as well as newly qualified teachers which may contribute to the task of improving the existing pre-service programmes in nurturing reflective teaching skills in Malaysian prospective primary school teachers.

## CHAPTER 12

### CONCLUSION: REFLECTIONS ON THE RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH

#### 12.1 Introduction

This chapter has two purposes. The first is to reflect upon the general findings of this study (12.2). The second is to describe the way in which further research can be done in this area in order to improve the existing pre-service programme in Malaysia in nurturing reflective teaching skills in prospective teachers (12.3).

#### 12.2 Reflections on the Findings of the Study

Basically reflective teaching refers to an approach to teaching in which teachers regularly think about and evaluate their own practice in a systematic way with a view to developing and further improving their classroom practice. They are also able to link their experiences in a meaningful way with the knowledge and skills they possess, thus providing the basis for further development. Therefore, giving reflective practice greater and stronger emphasis during pre-service teacher education is important and necessary. However, reflecting on the results of this research, there are some prerequisites that need to be fulfilled if this aim is to be achieved.

**1. Development Programme.** One of the things that this research has shown is that, in the context of Malaysian teacher education, there should be an explicit development programme for developing the competence of a reflective teacher. It is indicated that modelling is an instructional strategy that could play an important role in helping student teachers to develop their reflective skills. In short, reflective teaching skills should be systematically taught during the whole of the

pre-service teacher education period, and continued in the in-service period. On this basis, this research confirms Stout's claim that:

'If reflection is to become a realistic goal, part of the explicit agenda for student teachers, then teacher education training courses must establish the conceptual basis for reflective thought, requiring students of teaching to read the literature and understand the principles underlying the application of reflective behaviours.'

(Stout, 1989: 524)

There are some difficulties in encouraging reflection in student teachers. As Calderhead (1994) points out, creating a programme that helps student teachers to become more analytical about their practice and to take charge of their own professional development is a task with a number of inherent dilemmas. However, teacher educators as well as co-operating teachers should reconcile their traditional role as gate keepers to the profession to that of facilitators of reflection. Also, to be effective in fostering reflective teaching, collaborative effort on the part of both teacher educators and mentors is required.

This study would also argue that reflective teaching is very challenging. To become reflective, Malaysian teachers should be concerned not only with examining their values, aims and commitments; classroom relationships; considering how children learn; reviewing curriculum, classroom management, communication skills and assessment. Their reflection should go beyond classroom reflection, that is, they should consider an innovation in schools as a whole as well as their responsibilities as reflective teachers in society. Education is not just concerned with 'what is' but also with 'what ought to be'.

Obviously, the ability to reflect about practice does not fully develop in one particular course. However, the evidence presented in this research indicates that a revised pre-service programme in Malaysia could provide an introduction to



reflective teaching skills and help student teachers to begin to elaborate on the elements of reflective processes. In this way, Malaysian student teachers and novice teachers could become accustomed to question, to debate, to analyse, to argue from evidence and to examine their own habitual assumptions. They should be encouraged to search for alternative explanations of classroom events, to use evidence in supporting or evaluating a decision or position and, so to reduce their dependency on outside evaluators to provide them with feedback on their teaching. Consequently, there is a need to have a curriculum and clear directives from the Teacher Education Division (Ministry of Education Malaysia) which is likely to enhance reflectivity.

**2. Teaching Practice Experience.** The second general finding of this research suggests that student teachers should have substantial teaching practice experience because the major element of skill learning takes place prior to the period the student teacher spends in school (Terrell, 1990). In fact, it is argued that teaching practice is a time of intense reflection (Hedge and Whitney, 1996) especially in the process of educating student teachers for critical reflection (Armeline and Hoover, 1989). Accordingly, this study urges that teaching practice should include observation and reflection on the extent to which the methodological ethos of co-operating teachers is compatible with their practice. In addition, student teachers should be encouraged to enter fully into the life of the school (McCulloch and Lock, 1992), and become familiar with the notion that crisis is quite normal and to be expected in different forms to be a natural part of the teaching practice experience (Welch, 1992). This kind of experience would enable them to get a 'feel for teaching' in the real world and an important opportunity for building up reflective teaching skills. In this context, co-operating teachers who have direct knowledge and experience of the class with which student teachers will be involved should be able to work closely with and undertake the day to day training of student teachers in the immediate

practicalities of reflective practice. In sum, co-operating teachers must have an active rather than a passive role. As Wilkin (1992) points out, co-operating teachers must be empowered to teach rather than just supervise the student, and there should be time for reflection and debate.

Criteria for selecting schools are also essential. In agreeing with Furlong et al. (1988) and McCulloch and Lock (1992), this study would argue that for the effective teaching of reflective teaching skills, training institutions will need to work closely with a relatively small number of schools where appropriate staffing and facilities exist. Classes which have had a number of recent changes; classes with 'job-share' teachers; classes with large elements of special needs; and difficult classes are other disqualifications for receiving student teachers.

**3. Reflective Coaching.** The research findings also support the claim that student teachers need reflective coaching, which includes planning the teaching on the basis of a clear understanding of aims and context, and appropriate selection of strategies; then, engaging in the teaching activity, whilst monitoring that action and its effects; and finally, feeding back information from this monitoring into reflection and re-planning of the teaching or particular aspects of it. All these stages need to be combined in repeated plan-teach-reflect cycles relating to meaningful units such as whole lessons or syllabus topics. As Gilroy (1993) points out, mentors and educators have to enable student teachers to reflect upon and develop their own performance.

What this study has also shown is that student teachers need the support of co-operating teachers and teacher educators in a harmonious relationship. Without the involvement and the closest collaboration between co-operating teachers and teacher educators in contributing to student teachers' reflection, coherent training is not possible. Such relationships will provide valuable time for reflection. In

fact, the strength of this relationship is described as central to the success of the partnership (Kennedy, 1993; Clift et al. 1995; Dunne et al. 1996). Therefore, if not weekly, at least a monthly, seminar should be arranged. This should be attended by all three parties, the student teacher, the co-operating teacher and the teacher educator. It should provide opportunities for reflection on teaching issues and for the generating of new lesson plans by students. This research therefore supports the argument that:

‘Training in reflective practice requires that student be introduced in a developmental way to the complexities of teaching situations, starting with those simple situations which they can more readily be expected to deal with adequately. Progression in the handling of ever more difficult content, in using different teaching styles, from work with individuals, to groups, to whole classes, from joint teaching and part-lesson teaching to full-lesson responsibility over a period, enables students both to understand more clearly the demands of teaching and to develop systematically the more difficult practical skills required. Courses therefore need to be planned so as to co-ordinate work in schools and in the training institutions within an agreed developmental structure.’

(Furlong et al. 1988: 207)

Consequently, this study would like to argue that the leadership behaviours from both teacher educators and co-operating teachers contribute to student teachers’ capacity for reflection. Such behaviours are: giving ‘freedom to think’ (opportunity); recognising the value of thinking; expressing confidence in independent thought; providing opportunities to implement thinking such as supporting innovative ideas, and providing time for planning; granting responsibility for one’s thinking or action, and encouraging sharing, discussion and debate of ideas (Blase and Blase, 1994). This is similar to Stouts’ argument that:

‘College supervisors who share this conceptual base must overtly reinforce its importance throughout the student teaching period. Moreover, co-operating teachers who are themselves reflective practitioners must be chosen to direct student teachers, thus

monitoring and guiding the preprofessionals in their first application of reflective teaching behaviours in the classroom.’

(Stout, 1989: 524)

**4. Action Research.** Another issue that emerged from this study concerns the role of action research in initial teacher education. Some researchers have argued that teachers need to be competent in conducting action research in order to develop their own educational philosophies to critique each other (Blake and Hill, 1995). Moreover, the teacher-researcher movement, which is claimed to potentially enhance the long-term professional self development of teachers, has grown internationally. Such an approach can begin in initial teacher education (Tickle, 1989). With this kind of approach such skills as recognising a problem, making a hypothesis and giving suggestions would be the start of the reflective cycle. However, different approaches work for different people in different circumstances and in different ways. As Hagger et al. (1995: 57) mentioned:

‘The purpose of any training course is not simply to produce teachers who can perform effectively in the classroom, but to allow student teachers to learn about teaching, to explore different strategies, and to discover what kind of teacher they want to be. This kind of learning can only happen if student teachers are made aware of the range of possible approaches open to them, and are helped to access the implications of adopting different strategies.’

Clearly, it is important to support the growing use of reflective inquiry in pre-service teacher education since reflective inquiry (i.e. action research) and the concept of the teacher as reflective practitioner have become popular notions in recent years. As Adler (1993) said, teaching and conducting research should be seen as parts of the same whole, not as conflicting or even different. Being a researcher, the teacher will be able to systematically reflect on their own teaching. In short, the role of teacher and researcher becomes inter-changeable, i.e. teachers as reflective practitioners become researchers of their own practice (Keiny and

Dreyfus, 1989; Schratz, 1992). This research therefore support Stenhouse's argument that:

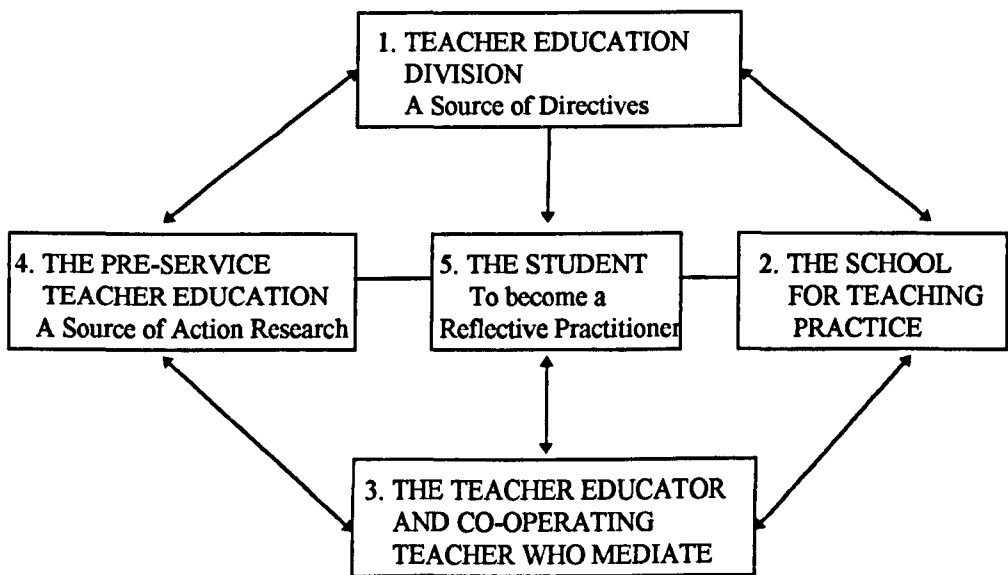
'It is difficult to see how teaching can be improved or how curricular proposals can be evaluated without self-monitoring on the part of teachers. A research tradition which is accessible to teachers and which feeds teaching must be created if education is to be significantly improved.' (Stenhouse, 1975: 165)

**5. Reflective Attitudes.** This study also argues that the existing Malaysian pre-service teacher education programme should be revised in order to foster the development of reflective attitudes among prospective teachers. There are three attitudes as prerequisite for reflective teaching: open-mindedness, responsibility and wholeheartedness. Malaysian student teachers need to be sensitive to these three attitudes for them be able: to counter the premises that have underlaid their own elementary education; to consider and possibly assume the responsibilities of teachers committed to social responsibility and to experiment and create new ideas, without fear of being condemned if their efforts do not work as planned. A reflective attitude also includes the desire for further development. Clearly, the three attitudes should be the aim of the teacher education programme and the key to the development of teachers as reflective practitioners as well as the first step to self development and empowerment (Quicke, 1996).

The five reflections above are complementary and supplement to each other. Malaysian pre-service teacher education programme needs to be understood as an interactive system in which all the agencies are inter-related. These agencies are: Teacher Education Division (Ministry of Education), which acts as a source of directives; the school, which provides a place for teaching practice; the teacher educators and co-operating teachers, who mediate the reflective teaching processes; the initial training as a source of inculcating action research, and fostering reflective attitudes amongst student teachers, all of which complement

and supplement each other. Therefore, it is concluded that it is essential that reflective teaching skills are nurtured in student teachers from the beginning of their course. These can be illustrated as Figure 15.

Figure 15: An Interactive System of Pre-Service Teacher Education Programme



### 12.3 Suggestions for Further Research

This study has argued that the development of reflection, especially critical reflection should be the primary goal of the Malaysian teacher preparation programme. If reflection is to be more than a slogan, teacher educators and co-operating teachers must document their effectiveness in helping student teachers develop reflective abilities. This study is amongst the initial research into reflective teaching in Malaysian pre-service teacher education. Consequently, it is important to suggest several areas for further study that would contribute to the improvement of the existing pre-service teacher programme in Malaysia.

**1. A study of Malaysian teacher educators' and co-operating teachers' own understanding of reflective teaching, especially their values, knowledge, theories, and practices about reflective teaching.** This is essential because the preparation of reflective teachers requires teaching not only the element of the reflective processes but also increasing the range and depth of knowledge in each of them.

**2. A study of Malaysian student teachers' attitudes to becoming reflective practitioners.** Research to identify whether the Malaysian student teachers have the attitudes necessary to develop a concept of reflection. The research questions to be addressed would include: firstly, whether or not student teachers are *open-minded* in the sense that they are: constantly examining the rationale underlying what is ordinarily taken to be natural and right (Zeichner, 1981); willing to consider new evidence such as unexpected occurrences in a classroom; able to give full attention to alternative possibilities, and to recognise the possibility of error (Ross, 1989, Goodman, 1991). The second attitude concerns whether or not they are *responsible* by asking *why* they are doing what they are doing in the classroom and asking in such a way that transcends the question of immediate utility (Zeichner, 1981). The questions of whether or not students have this attitude could be answered by discovering whether they are open to a variety of ideas, have a desire to synthesise diverse ideas, and are willing to consider the moral and ethical consequences of choices (Lounghran, 1996; Harrington et al. 1996). Thirdly, such research should discover whether or not they have an attitude of *wholeheartedness* by devoting themselves to analysing and evaluating the purposes and consequences of their actions (Zeichner, 1981), and being able to work through their fears and insecurities (such as fear of making mistakes, being criticised, disturbing traditions and making changes).

**3. A study of the ability of student teachers to conduct action research.**

One of the primary goals of the pre-service teacher education programme is that, to nurture reflective teaching, students should be helped gain the expertise and judgement necessary to use research findings appropriately. Action research is the formal way of promoting reflective teaching (Noffke and Brennan, 1991), and more critical thinking about the aims of the teacher, the characteristics of the pupils, the teaching context, the skills of the teacher, and the intended and unintended potential consequences of teacher action (Ross and Kyle, 1987). To conduct this kind of study, any research project will require at least time and commitment in order to provide an opportunity for longitudinal work, and for student teachers to learn to organise ideas and to think systematically in relation to their actions over time. Besides that, such a study should try to show the extent to which action research has a technical (how to), practical (what to) or critical (why) dimension.

**4. Research into the student teachers' process of reflective thinking.** This is important because the process of reflection does not merely refer to a method of problem solving but to a way of thinking. There are three different ways of thinking that could be examined among student teachers: *routine thought*, *rational thought* and *intuitive thought* (Goodman, 1991). *Routine thought* is a way of thinking routinely, which is guided by tradition, authority and official definition of social reality within a given setting. *Rational thought* refers to the actions of a teacher who processes information logically, sequentially and orderly, searches relevant information and makes decisions based upon careful deductive reasoning. *Intuitive thought*, in contrast, involves imagination, creative ideas, humour, emotions, integration and synthesis, tacit understanding, and non-verbal expression of ideas. Since reflective thinking occurs with the integration of both rational and intuitive thought processes, the Malaysian pre-service teacher



education programme needs to provide opportunities for student teachers to be encouraged to use both ways of thinking.

**5. A study of the ability of newly qualified teachers (NQTs) to reflect on their practice** (Sullivan and Leder, 1992). This could include an examination designed to answer the following questions: Can NQTs reflect on their teaching? Does the ability to reflect decline or increase with experience? Does reflection involve mainly pupils' responses? Do NQTs use achievement of content objectives, for example, as a basis for reflecting on their teaching? Is the ability to reflect on practice a personality trait and if not, is it possible to develop this skill?

**6. A study of the effectiveness of the recommendations as proposed by this study in order to nurture reflective practice** (Chapter 11). This incorporates research designed to address such questions as: Do reflective teachers always employ better teaching methods than other teachers? Do all pupils profit from teachers who are reflective decision makers? If not, what pupils would benefit from these types of teacher? Research into the way these newly qualified teachers mediate their instruction in classrooms that are taught by reflective approaches would begin to give us some data to answer these types of questions. If the development of these teachers is a worthwhile goal, it is meaningful to research into the experiences of NQTs in classroom with this predisposition.

**7. A study of the patterns of interacting roles and relationships in the student teaching triad (student teacher - teacher educator - co-operating teacher) which effectively promote good reflective teaching.** Here, the concern is to identify the frequency of the meetings between student teachers, teacher educators and co-operating teachers; the matter(s) being discussed during the meeting, and the conditions under which the relationship between the co-

operating teachers, student teachers and teacher educators can be strengthened. In relation to this, as Harrison et al. (1990) concluded, teacher educators and co-operating teachers are key agents in promoting the triadic relationship in pre-service training which should be strengthened, not weakened or even removed.

Although this overview of needed research is not exhaustive, it is also necessary to conduct research which examines ways in which reflective teaching skills can be realistically implemented in school. Preparation programmes aimed at nurturing pre-service teachers to become reflective could benefit by addressing the seven areas for further research, mentioned above. If it is agreed that reflection is the heart of teaching professionalism, and a basis for teacher preparation, then such research may best be undertaken by employing the aims and methods of action research. By doing this the pre-service teacher education programme in Malaysian Teacher Training Colleges could be reconstructed on the basis of an approach to research that itself embodies the principles and values of reflective teaching.

#### **12.4 Conclusion**

To be a reflective teacher it is not only essential to have developed classroom and teaching skills but also requires other skills such as the ability to communicate and exchange ideas; to observe using a variety of methods; to analyse and evaluate data collected; to engage in self-assessment, and to develop the ability to criticise from broader perspectives. In addition, the attitudes and values that need to be developed are open-mindedness, responsibility and wholeheartedness. Pre-service teacher education in Malaysia should be the starting point for student teachers to develop these attitudes and skills. However, it is necessary to avoid making the tasks student teachers have to undertake in their practice too complex. Also, it is important that teacher educators and co-operating teachers should be models of

reflection to enable the reflective programme to succeed. It seems that the existing Malaysian pre-service teacher education programme needs a new approach, from the dominant process-product linear approach towards one based on a more reciprocal relationship between the various factors which contribute to the promotion of reflective practice in prospective teachers. To conclude, this study has noted the need for a more appropriate epistemology in the initial teacher education, an epistemology of practice that will run against the traditional view of technical rationality but which will produce the novice teacher who will begin to think critically and reflectively about practice. This is the main frame of reference of this study through which the pre-service teacher education programme, in Malaysia in particular, should initiate this paradigm shift. The accomplishment of such a major shift is the real challenge for the future.

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## APPENDIX 1

### QUESTIONNAIRE FOR STUDENT TEACHERS PRINCIPLES AND PRACTICE OF REFLECTIVE TEACHING IN THE PRE-SERVICE TEACHER EDUCATION PROGRAMME OF MALAYSIAN TEACHER TRAINING COLLEGES

#### INTRODUCTION

The questions below cover a wide range of subjects, but each one can be answered simply by placing a tick (✓) or circling the number. In some cases you are asked to write answers. No special knowledge is needed to fill in the questionnaire, and I am sure that everyone will be able to give an opinion on all the questions.

All the responses must be based from your experiences at the school where you are doing teaching practice now.

#### PART A : GENERAL INFORMATION

1. Teacher Training College: 1 (    ) Institut Perguruan Darul Aman (IPDA)  
2 (    ) Maktab Perguruan Kota Bharu (MPKB)  
3 (    ) Maktab Perguruan Mohd Khalid (MPMK)
  
2. Ethnic Background: 1 (    ) Malay  
2 (    ) Chinese  
3 (    ) Indian  
4 (    ) Other (Specify: \_\_\_\_\_)
  
3. Gender: 1 (    ) Male            2 (    ) Female
  
4. Area Option: 1 (    ) Languages      2 (    ) Maths/Sciences  
3 (    ) Humanities      4 (    ) Religion
  
5. Age: 1 (    ) Below 20 years old  
2 (    ) 21 - 25 years old  
3 (    ) Above 26 years old

6. Marital Status: 1 ( ) Married      2 ( ) Single

7. Highest Level of Education Attained: 1 ( ) SPM  
 2 ( ) STPM  
 3 ( ) Diploma  
 4 ( ) Degree

8. Initial Teacher Training for: 1 ( ) Primary School  
 2 ( ) Secondary School

9. Name and address of the school where teaching practice is held:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PART B: THE PROCESSES OF THE REFLECTIVE PRACTITIONERS**

**Response Scale: 1: Never; 2: Seldom; 3: Regularly; 4: Often; 5: Always**

1. Question what, why, and how I do things	1	2	3	4	5
2. Question what, why, and how others do things	1	2	3	4	5
3. Emphasise inquiry as a tool of learning	1	2	3	4	5
4. Suspend judgement, wait for sufficient data, or self-validate	1	2	3	4	5
5. Seek alternatives	1	2	3	4	5
6. Keep an open mind	1	2	3	4	5
7. Compare and contrast	1	2	3	4	5
8. Seek a framework, theoretical basis, underlying rationale	1	2	3	4	5
9. View from various perspectives	1	2	3	4	5
10. Identify and test assumptions, seek conflicting evidence	1	2	3	4	5
11. Put into different/varied contexts	1	2	3	4	5
12. Ask 'what if ...?'	1	2	3	4	5

**Response Scale: 1: Never; 2: Seldom; 3: Regularly; 4: Often; 5: Always**

13. Ask for others' ideas and viewpoints	1	2	3	4	5
14. Adapt and adjust to instability and change	1	2	3	4	5
15. Function within uncertainty, complexity, and variety	1	2	3	4	5
16. Hypothesise	1	2	3	4	5
17. Consider consequences	1	2	3	4	5
18. Validate what is given or believed	1	2	3	4	5
19. Synthesise and test	1	2	3	4	5
20. Seek, identify, and resolve problems	1	2	3	4	5
21. Initiate after thinking through or putting into context	1	2	3	4	5
22. Analyse what makes it work; in what context would it not?	1	2	3	4	5
23. Evaluate what worked, what didn't, and why?	1	2	3	4	5
24. Use prescriptive models (behavioural models, protocols) only when adapted to the situation.	1	2	3	4	5
25. Make decisions in practice of the profession (knowledge created in use)	1	2	3	4	5

### **PART C : THE REFLECTIVE ATTITUDE OF PROSPECTIVE TEACHERS**

**To what extent are the following statements about your way of learning correct? Please indicate your answer by circling the appropriate number.**

**Response Scale: 1: Never; 2: Seldom; 3: Regularly; 4: Often; 5: Always**

1. I ask myself 'Who am I'	1	2	3	4	5
2. I think about my own development	1	2	3	4	5
3. I reflect on myself	1	2	3	4	5
4. I am interested in the problems of my fellow students	1	2	3	4	5

**Response Scale: 1: Never; 2: Seldom; 3: Regularly; 4: Often; 5: Always**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 5. I try to solve my major subject puzzle in my spare time                         | 1 | 2 | 3 | 4 | 5 |
| 6. I sometimes go on thinking about my major subject problems that have come up    | 1 | 2 | 3 | 4 | 5 |
| 7. I later consider my way of reacting   | 1 | 2 | 3 | 4 | 5 |
| 8. I find it important to have personal contact with my fellow students            | 1 | 2 | 3 | 4 | 5 |
| 9. I think about my fellow students  | 1 | 2 | 3 | 4 | 5 |
| 10. I seriously engage myself into the minds of my fellow students                 | 1 | 2 | 3 | 4 | 5 |
| 11. If I have problems with my fellow students I ask someone for advice            | 1 | 2 | 3 | 4 | 5 |
| 12. I think of new subject questions myself when study material is presented to me | 1 | 2 | 3 | 4 | 5 |
| 13. I am interested in my fellow students  | 1 | 2 | 3 | 4 | 5 |
| 14. I try to get to know my fellow students  | 1 | 2 | 3 | 4 | 5 |
| 15. I am someone who prefers to solve my major subject problems by myself          | 1 | 2 | 3 | 4 | 5 |

**Response Scale:**

**1: Not at all Applicable; 2: Not Applicable; 3: Less Applicable; 4: Applicable; 5: Totally Applicable**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. I appreciate it when people tell me how I can improve my conduct   | 1 | 2 | 3 | 4 | 5 |
| 2. I want people to tell me what I am doing wrong   | 1 | 2 | 3 | 4 | 5 |
| 3. I like it when others comment on my conduct  | 1 | 2 | 3 | 4 | 5 |
| 4. I am interested in tips on the best way of working with my fellow students                                       | 1 | 2 | 3 | 4 | 5 |
| 5. I consider it important to receive information from a supervisor about my way of dealing with my fellow students | 1 | 2 | 3 | 4 | 5 |

**Response Scale:**

**1: Not at all Applicable; 2: Not Applicable; 3: Less Applicable;  
4: Applicable; 5: Totally Applicable**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 6. I think it is important to be given suggestions for better ways of co-operating with my fellow students | 1 | 2 | 3 | 4 | 5 |
| 7. I like to have the support of others when I am working on my major subject problems                     | 1 | 2 | 3 | 4 | 5 |
| 8. I like to work on my major subject textbooks in which everything is explained step by step              | 1 | 2 | 3 | 4 | 5 |
| 9. I like it when someone shows me how to solve a certain type of my major subject problems                | 1 | 2 | 3 | 4 | 5 |
| 10. I enjoy reading books which explain the psychological compatibility of people                          | 1 | 2 | 3 | 4 | 5 |
| 11. I am willing to spend hours working on my major subject problems                                       | 1 | 2 | 3 | 4 | 5 |
| 12. If I cannot solve my major subject problem right away, I prefer to ask someone for help                | 1 | 2 | 3 | 4 | 5 |

**END OF THE QUESTIONNAIRE**

**PLEASE CHECK THAT YOU HAVE ANSWERED ALL THE QUESTIONS**

**THANK YOU VERY MUCH FOR YOUR HELP**



## APPENDIX 2

### QUESTIONNAIRE FOR TEACHER EDUCATORS

#### PRINCIPLES AND PRACTICE OF REFLECTIVE TEACHING IN THE PRE-SERVICE TEACHER EDUCATION PROGRAMME OF MALAYSIAN TEACHER TRAINING COLLEGES

#### INTRODUCTION

The questions below cover a wide range of subjects, but each one can be answered simply by placing a tick (✓) or circling the number. In some cases you are asked to write answers. No special knowledge is needed to fill in the questionnaire, and I am sure that everyone will be able to give an opinion on all the questions.

#### PART A : GENERAL INFORMATION

1. Ethnic Background: 1 ( ) Malay 2 ( ) Chinese  
3 ( ) Indian 4 ( ) Other (Specify: \_\_\_\_\_)
2. Gender: 1 ( ) Male 2 ( ) Female
3. Age: 1 ( ) 21 - 25 years old  
2 ( ) Above 26 years old
4. Marital Status: 1 ( ) Married 2 ( ) Single
5. Highest Level of Education Attained: 1 ( ) SPM 2 ( ) STPM  
3 ( ) Diploma 4 ( ) Degree
6. Area of Specialisation: 1 ( ) Languages 2 ( ) Maths/Sciences  
3 ( ) Humanities 4 ( ) Religion
7. Teaching Experience at Schools: 1 ( ) Less than 5 years  
2 ( ) More than 5 years

8. Teaching Experience at Teacher Training College: 1 ( ) Less than 5 years  
2 ( ) More than 5 years

**PART B: IN YOUR OPINION, OF WHAT IMPORTANCE ARE THE FOLLOWING GOALS?**

**Response Scale: 1: None; 2: Little; 3: Fairly; 4: Great; 5: Very Great**

**TO PREPARE TEACHERS WHO:**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Are knowledgeable in subject or content areas   | 1 | 2 | 3 | 4 | 5 |
| 2. Can adapt to, and work within, existing the school system                                   | 1 | 2 | 3 | 4 | 5 |
| 3. Have effective interpersonal skills   | 1 | 2 | 3 | 4 | 5 |
| 4. Can integrate theory and practice   | 1 | 2 | 3 | 4 | 5 |
| 5. Have the perceptions and skills to implement changes in the schools                         | 1 | 2 | 3 | 4 | 5 |
| 6. Have skills in various teaching techniques  | 1 | 2 | 3 | 4 | 5 |
| 7. Deal effectively with the individual differences of students                                | 1 | 2 | 3 | 4 | 5 |
| 8. Have the ability to analyse critically the existing school system                           | 1 | 2 | 3 | 4 | 5 |
| 9. Have the ability to counsel students  | 1 | 2 | 3 | 4 | 5 |
| 10. Have the ability to undertake action research  | 1 | 2 | 3 | 4 | 5 |
| 11. Have the ability to undertake committee work   | 1 | 2 | 3 | 4 | 5 |
| 12. Have the ability to undertake administrative tasks   | 1 | 2 | 3 | 4 | 5 |
| 13. Have skills for instruction through audio-visual, printed or other self-teaching materials | 1 | 2 | 3 | 4 | 5 |
| 14. Have skills in role playing or other simulation exercises                                  | 1 | 2 | 3 | 4 | 5 |
| 15. Have skills of reflective teachers   | 1 | 2 | 3 | 4 | 5 |

**PART C:. PERCEPTIONS ON THE AMOUNT OF TIME SPENT ON  
DIFFERENT FORMS OF INQUIRY-ORIENTED**

**The following questions relate to several forms of inquiry-oriented. Please indicate your general practice with student teachers during their initial teacher training programme.**

**Respond Scale: 1: Never; 2: Seldom; 3: Regularly; 4: Often; 5: Always**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Conduct action research with trainees  | 1 | 2 | 3 | 4 | 5 |
| 2. Conduct micro ethnographic studies with trainees                                 | 1 | 2 | 3 | 4 | 5 |
| 3. Conduct observation studies with trainees  | 1 | 2 | 3 | 4 | 5 |
| 4. Encourage trainees to conduct evaluation<br>(write journal/dairies/learning log) | 1 | 2 | 3 | 4 | 5 |

**END OF THE QUESTIONNAIRE**

**PLEASE CHECK THAT YOU HAVE ANSWERED ALL THE  
QUESTIONS**

**THANK YOU VERY MUCH FOR YOUR HELP**



9. Experience as a Co-operating Teacher: 1 ( ) Less than 3 years  
 2 ( ) 3 - 5 years  
 5 ( ) More than 5 years

10. Name and address of current school:

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11. Your Student Teacher is From:

- 1 ( ) Institut Perguruan Darul Aman (IPDA)  
 2 ( ) Maktab Perguruan Kota Bharu (MPKB)  
 3 ( ) Maktab Perguruan Mohd Khalid (MPMK)

## **PART B : ASPECTS OF THE MENTOR'S WORK**

**Please indicate your perceptions of your needs as a mentor during student teacher teaching practice.**

**Response Scale: 1: Had Experience; 2: Feel Competent; 3: Need Training**

1. Organising students' subject teaching time table	1	2	3
2. Organising students' whole programme	1	2	3
3. Helping students with resources	1	2	3
4. Helping students with attachment to a tutor group	1	2	3
5. Helping students to meet other staff	1	2	3
6. Discussing lesson preparation with students	1	2	3
7. Helping students with teaching strategies	1	2	3
8. Helping students to set target	1	2	3
9. Helping students with classroom management	1	2	3
10. Helping students in understanding the diversity of pupils	1	2	3
11. Helping students with college assignments	1	2	3
12. Helping students with overall school policy	1	2	3

**Response Scale: 1: Had Experience; 2: Feel Competent; 3: Need Training**

13. Counselling students	1	2	3
14. Observing students teaching	1	2	3
15. Discussing lessons before observation	1	2	3
16. Discussing lessons after observation	1	2	3
17. Providing written feedback on observed lessons	1	2	3
18. Discussing overall progress with students	1	2	3
19. Team teaching with students	1	2	3
20. Being observed by students	1	2	3
21. Helping students to discuss lesson observed	1	2	3

**PART C : CO-OPERATING TEACHERS' ATTITUDES TOWARDS INCENTIVE****Response Scale: 1: Strongly Disagree; 2: Disagree; 3: Somewhat; 4: Agree; 5: Strongly Agree**

1. Co-operating teachers should receive financial compensation for each student teacher supervised	1	2	3	4	5
2. A special status in teacher certification signified by a title such as 'clinical professor' would be a major incentive for being a co-operating teacher	1	2	3	4	5
3. Participation in the certification of new teachers is very rewarding	1	2	3	4	5
4. Provision of released time from classroom duties is a significant reward for supervising a student teacher	1	2	3	4	5
5. More input and control in the process of new teacher certification, such as official evaluation of the student teacher's performance, would reinforce my work as a co-operating teacher.	1	2	3	4	5
6. Greater public and educational recognition of my role as a co-operating teacher would be meaningful to me	1	2	3	4	5
7. Working with student teacher is a reward on its own considering their growth and the intellectual stimulation they provide	1	2	3	4	5

**Response Scale: 1: Strongly Disagree; 2: Disagree; 3: Somewhat;  
4: Agree; 5: Strongly Agree**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 8. Because of their contribution to the classroom and pupil growth, the presence of student teachers is a sufficient incentive for co-operating teachers                 | 1 | 2 | 3 | 4 | 5 |
| 9. As supervisor teachers and school leaders, co-operating teachers have an obligation to work with student teachers and further incentives are not required             | 1 | 2 | 3 | 4 | 5 |
| 10. There should be a professional association of co-operating teachers to provide support, organisation, and a voice for co-operating teachers in teacher certification | 1 | 2 | 3 | 4 | 5 |

**END OF THE QUESTIONNAIRE**

**PLEASE CHECK THAT YOU HAVE ANSWERED ALL THE  
QUESTIONS**

**THANK YOU VERY MUCH FOR YOUR HELP**

## APPENDIX 4

### QUESTIONNAIRE FOR NEWLY QUALIFIED TEACHERS PRINCIPLES AND PRACTICE IN REFLECTIVE TEACHING IN THE PRE-SERVICE TEACHER EDUCATION PROGRAMME OF MALAYSIAN TEACHER TRAINING COLLEGES

#### INTRODUCTION

The questions below cover a wide range of subjects, but each one can be answered simply by placing a tick (✓) or circling the number. In some cases you are asked to write answers. No special knowledge is needed to fill in the questionnaire, and I am sure that everyone will be able to give an opinion on all the questions.

#### PART A : GENERAL INFORMATION

1. Your Teacher Training College:

- 1 ( ) Institut Perguruan Darul Aman (IPDA)
- 2 ( ) Maktab Perguruan Kota Bharu (MPKB)
- 3 ( ) Maktab Perguruan Mohd Khalid (MPMK)
- 4 ( ) Others (Please Specify)

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2. Ethnic Background: 1 ( ) Malay 2 ( ) Chinese  
3 ( ) Indian 4 ( ) Other (Specify: \_\_\_\_\_)

3. Gender: 1 ( ) Male 2 ( ) Female

4. Area Option: 1 ( ) Languages 2 ( ) Maths/Sciences  
3 ( ) Humanities 4 ( ) Religion

5. Age: 1 ( ) Below 20 years old  
2 ( ) 21 - 25 years old  
3 ( ) Above 26 years old



6. Marital Status: 1 ( ) Married      2 ( ) Single
7. Highest Level of Education Attained: 1 ( ) SPM      2 ( ) STPM  
 3 ( ) Diploma      4 ( ) Degree
8. Initial Teacher Training for: 1 ( ) Primary School  
 2 ( ) Secondary School

9. Name and address of current school:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

10. Year of graduation from TTC: 1 ( ) 1993  
 2 ( ) 1994

**PART B : REFLECTIVE TEACHING SKILLS DURING TEACHING PRACTICE**

**Response Scale:**

**1: None; 2: Small; 3: Moderate; 4: Strong; 5: Very Strong**

**Cluster 1 : Retrospective and Predictive Thought**

- |   |                       |
|---|-----------------------|
| 1. In order to consider alterations in your future teaching approaches, to what degree were you encouraged to reflect upon your own teaching practices and their effects on the learners?<br>(reflective thought) | 1    2    3    4    5 |
| 2. To what degree were you encouraged to consider possible long-term effects concerning the methods or content of your lesson?  | 1    2    3    4    5 |
| 3. To what degree were your encouraged to consider and/or plan for individual differences such as the gender and ethnic background of your students?  | 1    2    3    4    5 |
| 4. To what degree were you taught how to evaluate your own teaching performance?  | 1    2    3    4    5 |

**Response Scale:****1: None; 2: Small; 3: Moderate; 4: Strong; 5: Very Strong**

5. To what degree were you encouraged to make carefully outlined plans for your own teaching improvement? 1 2 3 4 5

6. To what degree were you taught how to generate new ideas for your classroom? 1 2 3 4 5

**Cluster 2 : Critical Inquiry**

7. To what degree were you encouraged to question the curriculum, its content and sequencing? 1 2 3 4 5

8. To what degree were you encouraged to critically question accepted methods and procedures for teaching? 1 2 3 4 5

9. To what degree were you encouraged to critically scrutinise the values you were promoting within your classroom? 1 2 3 4 5

10. To what degree were you encouraged to consider ethical and political principles underlying what and how you taught? 1 2 3 4 5

11. To what degree were you encouraged to model your teaching behaviours or style after your co-operating teacher? 1 2 3 4 5

12. To what degree were you encouraged to read professional education journals and to utilise that research in your own classroom? 1 2 3 4 5

**Cluster 3 : Problem-solving Skills**

13. To what degree were you encouraged to develop your own personal philosophy and theories of teaching and then test them in the classroom? 1 2 3 4 5

14. To what degree were you encouraged to solve your own classroom difficulties (academic and management)? 1 2 3 4 5

**Response Scale:**

**1: None; 2: Small; 3: Moderate; 4: Strong; 5: Very Strong**

15. To what degree were you taught how to devise solutions to your classroom problems?      1    2    3    4    5

16. To what degree did you learn to become flexible and adaptable during your student teaching experience?      1    2    3    4    5

**Cluster 4 : Acceptance and Use of Feedback**

17. To what degree were you encouraged to share your thinking concerning teaching (content, methods, management, etc.) with other faculty members, student teachers, or evaluators?      1    2    3    4    5

18. To what degree did you ask for feedback on your teaching performance?      1    2    3    4    5

19. To what degree did your co-operating teacher give you written feedback on your daily classroom performance?      1    2    3    4    5

20. To what degree did he/she give you oral feedback on your performance?      1    2    3    4    5

21. To what degree did you consider your co-operating teacher's feedback in changing critical areas of your teaching or classroom management?      1    2    3    4    5

22. To what degree were you encouraged to solicit feedback from pupils concerning the effectiveness of your instruction?      1    2    3    4    5

**END OF THE QUESTIONNAIRE**

**PLEASE CHECK THAT YOU HAVE ANSWERED ALL THE QUESTIONS**

**THANK YOU VERY MUCH FOR YOUR HELP**

## APPENDIX 5

### INTERVIEW QUESTIONS FOR TEACHER EDUCATORS (SUPERVISORS)

#### 1. PROGRAMME POLICY, MODEL, IMPLEMENTATION AND EVALUATION

##### 1. Policy:

- a. What are the explicit philosophy and stated objectives of your pre-service teacher education programme?
- b. How do these prepare prospective reflective teachers?
- (c. If necessary. What do you mean by reflective teachers?)

##### 2. Beginning of the programme:

- a. What are the approaches being used with student teachers to promote reflective teaching during the first year before teaching practice?  
( e.g. encourage reflective thinking, report writing etc.)

##### 3. Model:

- a. Is there any specific model(s) being used for initial teacher education to help prospective teachers learn how to be reflective practitioners?
- b. If yes, is the model reflected in the programmes' purposes, processes, outcomes and evaluation?

##### 4. Method:

- a. What are the methods (e.g. logbook/journal, action research, pupil survey, observation notes) being promoted to student teachers?
- b. If yes, please give an example  
(e.g. how action research is being conducted by student teachers)

##### 5. Teaching Practice:

- a. How does the first teaching practice stimulate student teachers' reflection?

- b. How does the final teaching practice stimulate student teachers' reflection?
- c. Is there any improvement in student teachers' teaching, especially during their final teaching practice?
- d. How do you evaluate the implementation of reflective teaching skills by your student teachers during their teaching practice?
- e. Is any particular instrument (e.g. check list) used during your observation?

**6. Evaluation:**

- a. How do you assure that an appropriate knowledge base is delivered in your programme?
- b. In what ways have you been successful in implementing your philosophy and objectives in your programme?
- c. How do follow-up data from your graduates reflect the success of your programme overall?
- d. How have appropriate departments assigned to the initial teacher programme and co-operating department in your college been involved in the development and systematic review of your programme?
- e. How is your programme co-ordinated with or complemented by general subject course work?
- f. How does your programme build upon continuous professional development of novice teachers?
- g. What area(s) of the programme might need changes or further development?

**7. Advantages:**

- a. In general, what are the advantages/experiences gained by student teachers from the promotion of reflective teaching?

**8. Teacher Educators' Practice:**

- a. If reflective teaching is good for student teachers, what about teacher educators?
- b. How do you implement it?  
What benefits can you gain from it?
- c. Have you completed any projects, or are you still involved in any which are related to reflective teaching?
- d. How important is reflective practice as a main criterion for teacher educators?

**9. Professional Knowledge Base:**

How do you emphasise the Professional Knowledge Base to your student teachers in order to encourage their reflective teaching?

- a. Content:  
How do you ensure that student teachers possess a deep understanding of the content (subject matter and curriculum) being taught?
- b. Student:  
How do you emphasise this to student teachers to help them understand the importance of pupil background (e.g. cultural, development, learning style etc.), in the choice of pedagogical approach?
- c. Pedagogy:  
How do you generate methods/theories applicable to any subject area?  
How do you highlight important concepts and ideas for students in a particular content area?
- d. Context:  
How do you consider the context in which the events are happening in your teaching to student teachers?
- e. Prior experience:  
How do you emphasise this to your student teachers as an equally important element of reflective teacher?
- f. Personal and social values:  
How do you emphasise to student teachers that personal and social value systems have a profound influence on teachers' day to day teaching decisions?

g. **Scripts:**

How do you emphasise to student teachers that they should focus more on critical issues while they are teaching?

How do you emphasise to student teachers that they should include reflective questions about themselves to analyse a situation and plan the next course of action?

## **2. ROLES AND RELATIONSHIPS IN TEACHING PRACTICE**

### **1. About you (the Supervisor) and the student teachers:**

1.1 How many students are you supervising during this teaching practice? How many visits will you make during the practice? How long is the practice?

1.2 How long will you spend with the students on each visit?

What do you do during each visit (observation of lesson/discussion of plans or outcomes)?

How are the lessons to be observed chosen? (By you/negotiation with the school/students)?

Do you have an agreed agenda for your visits, known to you and the students in advance?

Do you offer advice to the students, or do you take a neutral position, and allow the students to determine what they want to discuss with you?

What is your role during the lesson? (to intervene, never to intervene, make notes, observations, judgements?)

Is it part of your role to assist with the classroom relationship and matters of discipline?

1.3 How would you characterise your relationship with your students?

How would you like your students to view your visits?

### **2. About the teacher(s):**

2.1 How often does this school host your students?

Is there any liaison between you and the teacher(s) responsible before the practice?

- 2.2 How does the role of the teacher responsible differ from your own role?  
(In what ways do they complement each other?)

To what extent does the school influence/control the students' teaching methods?

Do the teachers responsible allow your students freedom to explore their own preferences in terms of teaching style and material?

Should the philosophy and attitudes of the teacher responsible correspond with your own?

How important is this?

- 2.3 Do you know the teacher responsible well? Are you familiar with their views on the teaching of your subject?

Are you in contact with the teacher responsible apart from during your visits to the school?

How do you think the teacher responsible consider your visits?

How would you like him/her to consider them?

### **3. About the pupils:**

- 3.1 What relationship do you want to have with the pupils in your students' classes? (e.g. do you want to be introduced?)

Whose learning is more important for you - the students' or the pupils'?

### **4. About the system:**

- 4.1 What are the main advantages of the present way of organising teaching practice?
- for you
  - for the students
  - for the schools.

What are the main disadvantages?

Is there any improvement you would like to see implemented?



## APPENDIX 6

### INTERVIEW QUESTIONS FOR CO-OPERATING TEACHERS (MENTORS)

#### 1. MENTORING ASSISTANCE TO STUDENT TEACHERS

- a. How do you assist student teachers to learn from others teaching?  
unpacking the planning  
guiding observation of the action  
modelling and prompting monitoring  
modelling and prompting reflection.
  
- b. How do you assist student teachers to learn through their own teaching attempts?  
assisting planning  
supporting the teaching activity  
assisting monitoring and feedback  
assisting analysis and reflection.
  
- c. How do you assist student teachers to learn through progressively collaborative teaching with others?  
progressive joint planning  
teaching as learning team  
monitoring teaching activity and its effects  
joint analysis and reflection.
  
- d. How do you assist student teachers to explore central ideas and broader issues?  
research on pupils  
reading and other inputs on teaching  
organise discussion on particular topic

#### 2. HELP PROBATIONARY TEACHERS DEVELOP A GROWTH PLAN

- a. Do you have an instructional conferencing with student teachers led by you as a mentor
- b. Do you organise collaborative problem solving activities?
- c. Do you allow student teachers to observe while you are teaching?
- d. Do you conduct conference/discussions between student teachers and you to reassess the growth plan and make appropriate changes.

- e. Do you have formal coaching sessions?
- f. Do you have mid and final evaluations of student teachers?
- g. Do you do progress reports with specific recommendation for growth of student teachers?

### **3. WHY CO-OPERATING TEACHERS ACCEPT STUDENT TEACHERS**

- a. How often do you volunteer to accept student teachers?
- b. Why do you volunteer to accept student teachers?
- c. Do you look upon student teachers as your peer?
- d. List some of the strengths which were the characteristic of those student teachers whom you thought were highly successful
- e. List any advice which you would like to impart to prospective student teachers in order to be reflective teachers

### **4. ROLES AND RELATIONSHIPS IN TEACHING PRACTICE**

#### **1. About You:**

##### **1.1 How often does this school host your students?**

How many students are you supervising on this teaching practice?

How long have you been supervising the students?

##### **1.2 How do you see your role as far as the students are concerned?**

How much freedom do you give the students in lesson preparation?

To what extent do you think the school influences the students' teaching methods?

Do you have a regular strategy for supervising students?

(When you are going to watch a student teach what do you do

- a) before the start of the lesson;
- b) during the lesson;
- c) after the lesson?)

Is it part of your role to assist with the classroom relationship and matters of discipline?

How often will you visit the students?

Why do you agree to supervise students?

What do you regard as most rewarding/problematic?

How do you feel when a student takes over a class?

- 1.3 How would you describe the ideal relationship between you and the students which would allow you to function in a mutually beneficial way?

**2. About the student teacher:**

- 2.1 What do you expect of the student at the beginning of:  
a) the first (short) teaching practice;  
b) the last (long) teaching practice?
- 2.2 How would you deal with any differences that emerge between your own view of the process of teaching and learning and those of the students?

**3. About the supervisor:**

- 3.1 How do you see the role of the College supervisor:  
a) in preparing students for teaching practice;  
b) in supervising them on teaching practice?
- Are there any responsibilities that you regard as specifically theirs?  
How does the role of a supervisor differ from your own role?
- 3.2 What sort of relationship would you most like to see between students and the supervisor?
- 3.3 What sort of relationship would you most like to have between you and the supervisor?

**4. About the pupils:**

- 4.1 How do the pupils perceive the students?
- 4.2 What sort of relationship would you like to see between the students and the pupils?
- 4.3 What information is given to the students about the pupils?  
What information is given to the pupils about the students?

**5. About the system:**

- 5.1 What interactions exist between you and the teacher training institution prior to and during the supervision of the students on the teaching practice?
- 5.2 What are the main advantages/disadvantages of the present way of organising the teaching practice?
- 5.3 Have you any suggestions as to how you would improve the preparation and supervision of the students?

## APPENDIX 7

### INTERVIEW QUESTIONS FOR STUDENT TEACHERS AND NEWLY QUALIFIED TEACHERS

#### 1. ABOUT PRE-SERVICE TEACHER EDUCATION

1. In general what have you learned during your teacher education?
2. What do you think was missing from your teacher education?
3. What do you understand about reflective teaching?
4. Do you consider the process of reflecting on yourself is important in your teaching?
5. Suppose you have finished a lesson that didn't go too well. What would you do afterwards?
6. How do the teacher educators want you to reflect on yourself?
7. Suppose that during a teaching practice, you had a class that didn't go well. What would you do afterwards?
8. Can you decide for yourself how you want to learn something? Or do you need a teacher educator to provide suggestions?
9. What would you like to learn, or learn to do better?
10. Which one do you consider very important in your daily lesson?  
Concerns about survival, Concerns about pupils, Concerns about teaching situations.
11. Do you consider that it is important for your pupils to learn by investigating and structuring things themselves.
12. Do you depend on your teacher educators when it comes to choosing learning goals?
13. Do you use certain standard questions(what, when, why, how) when structuring experiences?

14. Do you think you can develop your job satisfaction?
15. Are you the sort of person who reflects on himself?  
How about the subjects?, Why do they interest you?
16. Are you the sort of person who has strong feelings of personal security and self-efficiency?
17. In your opinion, what are the characteristics of good teaching?
18. In conclusion, what are the characteristics of teachers who are reflective practitioners?

## **2. ACTION RESEARCH/CLASSROOM RESEARCH PROJECT**

1. Have you ever heard the term 'action research/classroom research'?  
If Yes: from what sources did you hear such term?
2. Do you know what action research is all about?
3. Do you have any experience doing action research.  
If, Yes, please explain.
4. Do you closely observe and carefully document anything regarding your teaching and your pupils?  
Do you keep records of your practice, and your own and your pupils' reactions to your practice: in a journal,  
through pupil surveys  
in observation notes (compiled by supervisors or co-operating teachers)  
through audio recording (of specific classroom events)
5. Do you feel that you have learned valuable lessons about teaching through action research (e.g. sympathetic attitudes, strengthening the skills of critical analysis, broadening the specific understanding)?
6. What is your comment about action research at the end of your ITE programme?
7. What are the immediate benefits you have gained from the action research?  
(e.g. being more aware of your own practices, the gaps between your belief and your practices, of what your pupils were actually learning and thinking)

8. What are the impacts of action research that have appeared on the relationship between you and your supervisor?  
(e.g. topic of conversation (teaching techniques, hidden abilities, etc.), change of input from student teacher and supervisor)

**3. ROLES AND RELATIONSHIPS IN TEACHING PRACTICE**  
(For student teachers only)

**1. About the Supervisor:**

- 1.1 Do you have the same supervisor as last term?  
Are there any differences in the way you have been supervised this term?
- 1.2 How do you see the role of a supervisor?
- 1.3 What expectations did you have of your supervisor **before** the second practice?
- 1.4 What happens when your supervisor visits you?
- 1.5 In what ways have you found him/her helpful?
- 1.6 How do you deal with any differences that emerge between your own views of the process of teaching and learning and those of your supervisor?

**2. About the co-operating teacher(s) responsible for the student teachers:**

- 2.1 What has the teacher done in helping you to prepare lessons, in visiting your classes and in discussing them with you?
- 2.2 How does the teacher react when your supervisor visits you?
- 2.3 Have you been made to feel 'one of the staff'?  
Have you been encouraged to join departmental meetings, school visits after school activities?  
What access did you have to stock and resources?
- 2.4 How would you describe the ways in which a good teacher helps a student to learn the job?

**3. About the pupils:**

- 3.1 What is your view about the classes in this school as far as behaviour, commitment to work, and any other aspects are concerned?
- 3.2 How do the pupils react to you as a temporary teacher?
- 3.3 What about this particular class? What do they (the pupils) think of you? What expectations do they have of you?
- 3.4 You meet students both in and out of lessons. Are there any differences in the ways they relate to you?
- 3.5 How far have you been able to get to know pupils as **individuals** in this practice?  
Does this matter?  
Could the school/department do anything to help you get to know them better?

**4. About the system:**

- 4.1 How do you react to the system of teaching practices you have experienced? How successful for **you** was the paired arrangement on first teaching practice?  
Will this strengthen or reduce your confidence at the beginning of the second teaching practice?
- 4.2 Did you feel properly prepared for your first teaching practice? What differences have you experienced so far in your second teaching practice?
- 4.3 What is your view of the methods/approach in the school you are in now? Does the school department discuss methodological issues/curriculum development?  
Do you join in these discussions?

**5 About You:**

- 5.1 What did you expect of yourself:
  - a) during the first teaching practice?;
  - b) during the second teaching practice?



5.2 Do you feel more enthusiastic or less enthusiastic now about teaching:  
a) in general;  
b) in your own methods and area(s)?

5.3 What changes would you recommend to pre-service teacher education planners about preparation and arrangements for teaching practice?

**4. REFLECTIVE ANALYSIS QUESTIONS  
(For Student Teachers Only)**

- a. What were the essential strengths of the lessons that you have taught?
- b. What, if anything, would you change about the lessons?
- c. Do you think the lessons were successful? Why?
- d. Which conditions were important to the outline of the lessons?
- e. What, if any, unanticipated learning outcomes resulted from the lessons?
- f. Can you think of another way you might have taught these lessons?
- g. Can you think of any alternative pedagogical approaches to teaching the lessons which might improve the learning process?
- h. Do you think the content covered was important to your pupils? Why?
- i. Did any moral or ethical concerns occur as a result of the lessons?
- j. Do you make use of systematic methods of collecting data about your current practice that may be helpful?

## APPENDIX 8

### CRITICAL REFLECTION BY ASKING QUESTIONS ABOUT TEACHING

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Concern	Questions
The current lesson	<ul style="list-style-type: none"><li>• Did this lesson go well? Were the learning activities envisaged successfully implemented? What did the pupils learn in the lesson? How can I be sure such learning occurred? Did the lesson and learning reflect my intended aims?</li><li>• What changes can I usefully make before giving a similar lesson to another class?</li><li>• Are there any immediate actions I should take following this lesson (e.g. did any pupil appear to indicate some special educational needs)?</li><li>• Am I satisfied with my general planning of this lesson, and its presentation and monitoring? Did the lesson sustain pupils' attention and interest, and did it appear to be intellectually and pedagogical sound?</li><li>• Did any problem occur in the lesson that I should take note of?</li><li>• How can I consolidate the learning which occurred and relate it to future demands and applications?</li><li>• How did this lesson fit in with the teaching in the department and school, and with curriculum developments concerning teaching in this area?</li><li>• What form or structure do my lessons have?</li><li>• How do I communicate goals to my pupils</li><li>• How effectively do I utilise learning opportunities within a lesson?</li><li>•</li></ul>
The future lesson	<ul style="list-style-type: none"><li>• What have I learnt about this class, or particular pupils, that might influence future lessons with this class?</li><li>• What have I learn about this topic or subject matter that might influence future lessons?</li><li>•</li></ul>
Pupil	<ul style="list-style-type: none"><li>• Did any pupil or group of pupils fail to benefit (e.g. able pupils, average pupils, less able pupils, female pupils, a pupil who missed previous lessons, a disruptive pupil)? If so, could this have been avoided?</li><li>• What beliefs do my pupils hold about learning and teaching?</li><li>• How do these beliefs influence their approach to learning?</li><li>• What learning styles and strategies do my pupils favour?</li><li>•</li></ul>

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Concern	Questions
Teachers' beliefs	<ul style="list-style-type: none"> <li>• What are my beliefs about teaching and learning, and how do these beliefs influence my teaching?</li> <li>• Where do these beliefs come from?</li> <li>• What kind of teacher am I?</li> <li>•</li> </ul>
Classroom investigation	<ul style="list-style-type: none"> <li>• How can I collect information about my own teaching?</li> <li>•</li> </ul>
Decision making	<ul style="list-style-type: none"> <li>• What kind of planning decisions do I make use of?</li> <li>• What kind of on-the-spot decisions do I make while I teach?</li> <li>• What criteria do I use to evaluate my teaching?</li> <li>•</li> </ul>
Teachers' roles	<ul style="list-style-type: none"> <li>• What is my role as a teacher?</li> <li>• How does this role contribute to my teaching style?</li> <li>• How do my pupils perceive my role as a teacher?</li> <li>•</li> </ul>
Interaction	<ul style="list-style-type: none"> <li>• What kinds of interaction occur in my classroom?</li> <li>• What interaction styles do my pupils favour?</li> <li>• What kind of grouping arrangements do I use and how effective are they?</li> <li>•</li> </ul>
Activities	<ul style="list-style-type: none"> <li>• What kind of activities do I employ?</li> <li>• What is the purpose of these activities?</li> <li>•</li> </ul>
Language	<ul style="list-style-type: none"> <li>• What patterns of language use occur when I teach?</li> <li>• How do I modify my language to facilitate teaching and learning?</li> <li>• What opportunities do pupils have for authentic language in my lesson?</li> </ul>

(Adapted from Kyriacou 1986: 126, Richard and Lockhart, 1994: 1)