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**Changes in Thinking and Pedagogical Content Knowledge
in Learning to Teach English as a Second Language**

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A Thesis by

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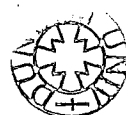
Submitted for the Degree of

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November 2000



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Abstract of thesis entitled “Changes in Pedagogical Content knowledge and Thinking in Learning to Teach English as a Second Language”

Submitted by Benjamin K.W. Li

for the degree of Doctor of Education

At the University of Durham in November, 2000

ABSTRACT

Purpose

This study examines how student teachers for whom English is a second language develop their professional knowledge in learning to teach ESL. The focus of the research is on their change in thinking and pedagogical content knowledge (PCK) during teacher education. PCK, as defined here, includes the following four domains: Knowledge of the subject content, knowledge of lesson planning, knowledge of instructional strategies and knowledge of the teaching context. The study also seeks to find out how student teachers’ pre-training beliefs and conceptions affect their attitudes towards professional preparation, and to identify the factors which influence their professional development.

Procedures

The subjects were eight student teachers taking English language teaching as one of their two major elective subjects in the full-time Certificate in Education (Secondary) Course in the Hong Kong Institute of Education. The full period of data collection covered two years – the length of the CE Course during 1996-1998. The

methods of data collection included a blend of qualitative techniques: semi-structured interviews, journals, classroom observations, pre-observation interviews, stimulated recall procedures, and field documents such as lesson plans. All together, five sets of data were collected at different stages of the CE Course to plot the changes in the eight student teachers' thinking and PCK.

In analysing the data, constant comparisons, coding and conceptual analysis of data were made as the aim of the research is to develop into a grounded theory (Glazer and Strauss, 1967) on the cognitive change of ESL student teachers during training.

Major Findings

In general, the student teachers' thinking, knowledge and practices did change during the course, and sometimes critically. The findings support the contention that student teachers' instructional actions are closely related to their conceptions of teaching. This study also suggests that, given appropriate contextual conditions, the student teachers who considered themselves linguistically deficient and whose knowledge on entry to the course was far from subject specific could be engaged in pedagogical thinking and learn ideas they did not bring to the teacher education programme. The study further suggests that the development of the student teachers' thinking and PCK appeared to be integral to their professional development. While such development is influenced by various factors, some are more effective than others in preparing them to be fully-fledged classroom teachers. Seeing it as an initial study along this line of inquiry in Hong Kong, the findings have added to the literature as to how and why the thinking and pedagogical content knowledge of student teachers change during training, and have provided clues to explain

discrepancies in teacher behaviour between teacher education and teaching years, from which implications were drawn for teacher education curriculum.

Although these findings show possible patterns of ESL student teachers' development during teacher education, they do not imply any linearity in the nature of the trend. However, they contribute to the ongoing endeavour to construction of a theory of student teachers' development.

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LIST OF ABBREVIATIONS

HKAL(UE) Exam	Hong Kong Advanced Level Use of English Examination
CE (Sec)	Certificate in Education (Secondary) Course, Hong Kong Institute of Education
CITE	Collaboration for the Improvement of Teacher Education
DfEE	Department of Education and Employment, UK
ELIPST	English Language Immersion Programme for Student Teachers
ITT	Initial Teaching Training
PCK	Pedagogical Content Knowledge
QTS	Qualified Teacher Status
TBL	Task-based Learning
TEFL	Teaching English as a Foreign Language
TESL	Teaching English as a Second Language
TOC	Target-oriented Curriculum
TP	Teaching Practice

CHAPTER ONE

INTRODUCTION

This chapter presents the background to the study, and outlines its scope by identifying the problem, defining the research questions, summarising the procedures and discussing the significance and limitations.

I. BACKGROUND TO THE STUDY

1. The Professional Perspective

Teaching English as a Second Language in Hong Kong has been undergoing considerable change in the last two decades. In the mid-eighties, there was a shift from the Oral-structural Approach to the Communicative Approach in ESL (English as a Second Language) classrooms. In recent years, the emphasis has been on task-based teaching and learning, with the implementation of the new Target-oriented Curriculum¹ by the Education Department (1994). This transition, which was a feature of the 1980s in countries such as Australia and the United Kingdom, is on-going in Hong Kong. Hong Kong ESL teachers are having to rethink classroom strategies. This poses a particular problem for student teachers who have limited understanding of what this involves. Moreover, the only experience they can fall back on is their own as pupils, and this has been rendered largely irrelevant by curriculum developments. In the transition from teacher training to full time teaching, these ESL student teachers undergo and indeed must undergo changes in their individual thinking about planning and conducting lessons as part of their wider process of socialisation into the school



environment. This then leads to questions on the ways in which student teachers develop their pedagogical knowledge.

Pedagogy is a major issue in the call for reform in teacher education (see e.g. Boyd, Boll, Brawner and Villaume, 1998; Diamond, 1991; Liston and Zeichner, 1991). In order to address the issue of pedagogy in greater detail, it is necessary to understand how student teachers learn to teach over the period of teacher education. Equally important is the move towards narrowing the gap between those who conduct the research and those who deliver teacher education. Research conducted by teacher educators should play a significant part in enhancing their professional development, as they are stimulated to reflect on their own practices in the course of the inquiry.

In the Hong Kong Institute of Education at which the researcher of this study serves as a teacher trainer, approaches to initial teacher education are based on the academic-competency tradition (Diamond, 1991; Liston and Zeichner, 1991). In the west, this tradition has been challenged by advocates of the developmentalist-progressive tradition of teacher education (Combs et al., 1974; Fuller, 1974), and more recently queried by the teacher education reform movement led by constructivists (Gopnik and Wellman, 1995; O'loighlin, 1992). On the other hand, contexts for teacher education vary throughout the world, as noted by Beccegato (1999), and various traditions and practices are adopted internationally. Although in most cases policies made on reform in teacher education are often a political matter grounded in the contextual realities of a society, it is important that the new policies are informed by research. Cross-contextual studies should provide useful insights. Associated with the academic-competency tradition, the teacher education programme in the Hong Kong Institute of Education provides one contextual basis for research on

learning to teach. One way in which research can inform pedagogy in this tradition of teacher education is by tracking students' change in pedagogical thinking and knowledge and how it is related to their classroom practice. This focus will be explained more thoroughly in Chapter Two in the review of related literature, and in Chapter Seven when the findings are related to the literature and implications for teacher education programme planning are proposed.

2. The Theoretical Perspective

It is also important to consider research on learning to teach from a theoretical perspective. One important avenue concerns the link between thoughts and action. Teachers, be they serving or training, use their pedagogical thinking skills to interpret the structures and significance of the content (Marks, 1990). This process involves two important dimensions: thinking skills, and content knowledge.

The study of teachers' thinking has received much attention in the literature on teaching (Calderhead, 1993; Clark and Peterson, 1986; Kwo, 1994). Teacher thinking skills in the classroom centre on the ability to use information to establish order and solve problems. They include comparing information presented in different contexts, levels or scales, recognising patterns, forming and documenting conclusions and developing generalisations (Eggen and Kauchak, 1988). Calderhead (1987a), Chen and Ennis (1995), Leinhardt and Smith (1985) and Marton (1986) have also argued that the ability to present the subject matter (pedagogic understanding) is an important aspect of teaching requiring investigation. It is an important element in a teacher's planning and conducting a lesson. The body of knowledge that enables particular

content to be taught is, in Shulman's (1987) terms, referred to as the necessary pedagogical content knowledge for teaching a subject. In brief, pedagogical content knowledge stresses useful ways of presenting the subject content to make it comprehensible to students.

Thinking and knowledge are not mutually exclusive (Eggen and Kauchak, 1988). They are two interrelated dimensions. Thinking skills and the knowledge base in which pedagogical content knowledge is subsumed are in dynamic equilibrium. Thinking skills interact with pedagogical content knowledge to facilitate the development of teaching and learning. In turn, this leads to a growth in teachers' expertise and their pedagogical knowledge base. The continual feedback from one to another is a feature of teachers' growing classroom competence.

While studies on teachers' thinking and their knowledge growth have concentrated on content and process, it is important to interpret these in the context of teaching for a better understanding of both. Verbal reports ought not to be the only source of information for understanding how teachers think. There is still much to be explored about teachers' classroom practices. In order to obtain a more thorough view of learning to teach, it is necessary to study in parallel both the observable and inner acts of teaching, and also to explore the relationship between the two.

Another major theoretical track with which this study is associated concerns teacher development. Since Fuller's proposal of a three-stage model of teacher development (1969), the focus of teacher education research has increasingly come to value the comparative studies of the cognitions underlying novice and expert teaching and the related theories on teachers' schemata, from which Berliner (1988) inferred a

five stage model. Based on what was reported in forty recent studies on learning to teach, Kagan (1992) further extended the model to an account of five components of novice teachers' behavioural and conceptual development. The Fuller-Berliner-Kagan model of teacher development seems promising for validation and further advancement through future studies.

The theoretical perspective of the study will be enlarged upon in Chapter Two, which focuses on the research orientation and related theoretical issues. Related to the concept of teacher development, several themes, namely the conceptualisations of teacher education, comparison of expert and novice teaching, and stages of expertise development, are discussed. Derived from the research literature is a knowledge base for teacher education, although there are critical aspects that different research orientations have to confront. Acknowledging the contributions of research from different orientations, further research becomes important not only to enrich the knowledge base for teacher education, but also to pursue different lines of inquiry for theoretical advancement. The need for this study is then identified specifically by addressing dimensions in the literature that should be strengthened. Chapters Four, Five and Six report results which led to some theoretical propositions. The synthesis of findings is reported in Chapter Seven, which links back to the corpus of research literature. The thesis concludes with observations about the need for integration between research and practice in teacher education.

II. SCOPE OF THE STUDY

1. Aims

Underpinning this study is the belief that if teachers' pedagogical thinking and content knowledge base for teaching is to be successfully built and the quality of teacher preparation programmes improved, an understanding of how teachers develop knowledge, and how their process of thinking changes, is essential for teacher educators. They can then conceive of and review the teacher education programme with reference to the nature and stage of the development of thinking and to the knowledge base of their students. The conception of pedagogical thinking and pedagogical content knowledge and the way these change as a student teacher progresses is therefore an important area of study.

2. The Problem and Research Questions

Although the purpose of the study is implied in the above discussion of professional and theoretical perspectives, there is a need to present the problem more explicitly. The specific research questions have arisen from a review of weaknesses in existing theoretical knowledge and deficiencies in completed research about teacher thinking, teachers' pedagogical knowledge and teacher development.

Initial research on teacher thinking has virtually been restricted to the model of teaching as decision-making. There has been little departure from this model, in which teacher thinking is grounded in scientific rationality. However, the appropriateness of this approach to describing teacher thinking has been considered

problematic by research (Marland, 1993). The question is whether decision-making as a process comprises a complete and accurate picture of teachers' thoughts. It appears that important teaching actions, both mentally and physically, take place apart from acts of decision-making. The focus of research has departed from decision making to a variety of ways to represent the processes of teachers' thinking (Marland, 1993). The validity of alternative models has yet to be assessed in the light of further studies.

While various insights have been generated from studies on the content of teachers' thoughts during the planning, interactive and evaluative phases of teaching, much of the attention has tended to fall on expert teachers and on novice-expert differences. Despite the inconclusive nature of the research, the work has at least revealed the extent and complexity of the expert teachers' knowledge in teaching, which has contributed to theories about the development of pedagogical expertise. Berliner (1988), inferring from comparative studies of the cognitions underlying novice and expert teaching, extended Fuller's work (1969) and proposed a five-stage model of teacher development with a focus on the cognition underlying instructional behaviour. Drawing on recent studies on learning to teach, Kagan (1992) further extended the model to an account of five components of novice teachers' behavioural and conceptual development. Further studies are yet to validate this line of theory on teacher development. In particular, the ways in which novices develop into expert teachers are inadequately understood.

With a belief that analyses of descriptive case studies should be fundamental to confirmatory studies before research can address issues of generalisation, this study focuses on the description of students undergoing conceptual change and their knowledge growth in a pre-service teacher education programme. The research

subjects were eight student teachers majoring in English language teaching under the direct supervision of the researcher at the Hong Kong Institute of Education. Specific research questions for the study were:

- How does the pedagogical content knowledge of student teachers change during training?
- How does the thinking of student teachers change during training?

Parallel to each question were the further questions:

- Under what influences do these changes occur?
- How does the change in the thinking and pedagogical content knowledge affect student teachers' instructional practice?
- What are the changes in the thinking skills and pedagogical content knowledge of ESL student teachers in terms of models of teacher development?

The design of the study is explained in more detail in Chapter Three. The main research questions are addressed separately in Chapters Four, Five and Six. Chapter Seven summarises the results and discusses them in the light of the literature.

3. Procedure

Basically a qualitative/interpretative type of research was used. Eight student teachers were followed through their two years of teacher training. A study of these eight student teachers was done through a complete set of data collected at various time intervals during training years - interview protocols, field documents, analysis of lesson plans, lesson observations, stimulated recalls, and journals, etc. It is

acknowledged that the findings were affected by the research setting, as well as the experience each student teacher encountered during teaching practice, including the supervisory attention given by the supervisor-researcher. The research setting was considered in the design, which is further discussed in Chapter Three.

Since the aim of the research is to develop into a grounded theory (Glazer and Strauss, 1967) about the nature of and influences on teachers' thinking, constant comparisons, coding and conceptual analysis of data on the thinking of ESL student teachers during training were made and theoretical propositions on the teachers' pedagogical knowledge base and thinking were grounded empirically from the descriptive basis of this study.

4. Significance

The study is important for the following reasons. First, research into student teachers' cognition has mainly been conducted in the discipline of science (Foss & Kleinsasser, 1996; Morine-Dersheimer et al., 1992; Novak and Musonda, 1991; Willson, Williams and Adamczyk, 1994). However, as far as teaching English as a second language is concerned, little literature exists in Hong Kong or elsewhere as to how and why the thinking and pedagogical content knowledge of student teachers change during training. More research needs to be conducted on how their process of thinking changes. The study is therefore an attempt to provide an understanding of the thought processes and pedagogical content knowledge base of the ESL student teachers in Hong Kong.

Information about student teachers' knowledge structure and comprehension processes is significant for understanding the instructional decisions that student teachers make and the plans they formulate. A picture of how student teachers comprehend the events that unfold the classroom environments can also provide a valuable intellectual context for understanding the character and outcomes of initial teacher preparation and staff development programmes (Calderhead, 1987b). The findings in the study may then provide clues to explain discrepancies in teacher behaviour between teacher education and teaching years. This has implications for the teacher education curriculum which can be tailored to the knowledge base and pattern of thinking of student teachers.

The study on cognitive change of student teachers during training in particular can foster understanding of the structure of their knowledge, how it is developed and how it informs classroom practice when they enter the teaching profession. Calderhead (1988) noted that such an understanding has important implications for the practice in teacher education and curriculum development in that,

It enables teacher educators and researchers to examine critically the current teacher education courses which equip student teachers not only with basic classroom competence but also the knowledge, skills and confidence to continue learning. (Calderhead, 1988, p.63)

The importance of study on student teachers' cognitive change, however, does not end with their own learning, as in Calderhead's comment. In view of their contribution to the teaching profession after their years of training, such an understanding of how teacher thinking and knowledge base changes certainly provides an impetus for looking into the curriculum of pre-service training programmes, both formal and hidden.

This study also responds to theories about stages of teacher development by presenting student teachers' traits during training and in teaching practice and their characteristic problems as novices. Although the analysis does not focus on the cultural dimensions, its Hong Kong setting provides an interesting background for further studies on cross-cultural similarities and differences in teacher development.

5. Limitations

The findings of this study are influenced by the cultural setting, the personal characteristics of the eight student teachers, and the contexts within the education system that teaching practice took place. The cultural setting should be considered in the interpretation. Despite the homogeneous Chinese ethnicity of the classroom population where teaching took place, Hong Kong is known as a location where East meets West. As pointed out by Postiglione and Lee (1997), Hong Kong remains very much shaped by traditional Chinese values, but has become increasingly westernised through trade, technology and the mass media. The context of this study is a western form of curriculum design with English elective student teachers. Furthermore, the majority of teaching staff in the English Department of the Hong Kong Institute of Education are either native speakers of English or have received at least part of their education in western countries. Therefore, while interpretations of the findings are limited to the specific cultural setting, this study can still be related to those reported in the western research literature.

It is also necessary to acknowledge methodological limitations. On the one hand, there are difficulties in that the interview data are based only on what the

student teacher can articulate and this itself is a construction anchored in a particular time and context. On the other hand, while the classroom practice of student teachers was captured by video-recording the lessons under observation, investigation of their pedagogical thoughts was conducted through introspective methods. The study was based on three fundamental assumptions:

- (a) The thought processes of student teachers are important determinants of their growth in pedagogical knowledge.
- (b) The sample of thoughts captured during interviews could reasonably be seen as representative of their thoughts throughout the teacher education programme.
- (c) The student teachers can verbally articulate their pedagogical thinking processes.

It must be recognised that these assumptions may not have been completely valid, though no evidence was found that imperfection would undermine the basis of the thesis. This matter is addressed further in Chapter Three, which presents the strategies used to maximise the validity of data. Chapter Seven further discusses the feasibility and limitation of the process of data-collection.

A further limitation concerns the separation of the roles between the researcher and the subjects. This study has followed a long-standing tradition of social research in which practitioners are treated as subjects. However, this tradition has been under attack by critics like Buchmann and Floden (1989) as offering legitimisation rather than liberation. Again the issue will be addressed further in Chapters Three and

Seven. Despite its limitations, this study contributes to a developing knowledge base of teachers' cognition and professional development.

¹ The new curriculum was first implemented in all the primary schools in Hong Kong in 1995 in all the secondary schools in 2001.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter sets out a conceptual framework for the study and the analysis of the research. The chapter begins with an in-depth discussion of teachers' thinking. It then reviews teachers' pedagogical content knowledge and teacher development. Finally, the orientation of this study is discussed in relation to the knowledge base for teacher education.

I. TEACHERS' THINKING

This section concentrates on teachers' thinking. The review begins with the paradigm that teaching is the integration of thought and action. Then the focus turns to the development of research on teacher thinking, and to discussion of a paradigm shift – the teacher as a technician to the teacher as a professional.

1. Teaching as the Integration of Thought and Action

“What teachers do is affected by what they think”

- Clark and Yinger (1987)

Over the past decade, an increasing body of research has challenged the accepted notion that teaching is simply conducting classroom activity (Clark and Peterson, 1986; Freeman, 1990; Richards, Li and Tang, 1995). The process-product

paradigm which once dominated educational research (Dunkin and Biddle, 1974) cannot accurately account for the complex and improvised nature of classroom interaction or for the role of the teacher within those interactions. In place of the process-product orientation, an alternative cognitive paradigm has developed which holds that classrooms have, for teachers, an "interior, mental landscape" (Freeman & Cazden, 1991, p.2) which is as crucial to understanding them as any study of their external and observable behaviours. In this paradigm, the teacher is seen to have a 'mental life' (Freeman & Cazden, 1991, p.2) which influences and directs what happens in the classroom. Teachers' perceptions and assumptions about the nature of classrooms and of learning are critical to their design and implementation of classroom activity.

Within this cognitive framework, teaching is seen as more than the exercise of specific ways of acting in classroom settings; it involves both action and the thinking which underlies and directs it. This new-found complexity affects the view of teacher education as well. When teaching is seen primarily as a set of processes, the effectiveness of which are judged by the learning outcomes which they produce, teacher education is defined as inculcating these forms of effective action in teachers. However, when teaching is seen as ways of acting and thinking, teacher education becomes more than learning to implement ways of doing things in classrooms; it involves the construction of teachers' views of teaching. As Richards and Nunan (1990, p.12) note in their introduction to a recent collection of papers on second language teacher education, there is "a recognition that effective teaching involves high level cognitive processes, which cannot be taught through teacher education directly." Often when a student teacher puts into practice a complex procedure he or

she has learned from the methodology course, the activity seems to become flat and routine. To a teacher educator or supervisor who may be observing the lesson, it can seem like the teacher has misunderstood the complexity of the activity. However, these explanations may only be behaviour-based, because the observers can only see what is happening, and have little access to the thinking which underlies it. They are often more interested in how they can help the teacher to improve what he or she is doing (Freeman, 1990).

If, however, teaching is seen as the integration of thought and action, these same observers may come to a different conclusion, namely that the teacher's flat and routinised implementation of the complex procedure represents a partially developed conception of that teaching practice. Just as a language learner's output goes through formal and conceptual stages before mastery, so too may a teacher's understanding of practice develop gradually over time as understanding involves both the cognitive and the behavioural dimensions. When teaching is seen as having a cognitive dimension, certain paradoxes – such as teachers' flat and routinised practice in the example mentioned earlier – can be accounted for. However, teacher education also becomes more complicated. Clearly, teachers' "mental lives" do not begin when they enter teacher education programmes; rather these will gradually develop as they navigate through the programmes and beyond, as will be discussed further in the following sections.

2. The Development of Research on Teachers' Thinking

As pointed out by Richards and Nunan (1990), "effective teaching involves high order cognitive processes". Thus to conceptualise a theory of effective teaching, the mental lives of teachers should be explored. At present, little is known about what constitutes effective teaching. Until recently, few studies, if any, have focussed on the systematic study of teaching processes that could provide a theoretical basis for deriving practices in teacher education (Bramald, Hardman and Leat, 1994). In the past few decades, in assessing teachers' effectiveness in teaching, most school heads, inspectors, teacher trainers have focused on those "observable" skills, such as teachers' use of questions, the design of assignments, tests and curricular, and the assessment of student performance (Ball and McDiarmid, 1990). In other words, they have over-emphasised the effectiveness of those general pedagogical methods which can readily be taught and assessed in teacher training programmes. However, it turns out that in this way, according to Shulman (1987), teaching will be trivialised, its complexities ignored. Richards observes:

...to prepare effective [language] teaching, it is necessary to have a theory of effective language teaching – a statement of the general principles that account for effective teaching, including a specification of the key variables in effective teaching and how they are interrelated...[that forms] the basis for the principles and content of [second language] teacher education. (Richards, 1990: p.4)

In other words, what is needed are teacher training programmes which can provide theories of effective teaching and which enables novices to acquire the skills of effective teachers. However, it is clear that not enough is known about structuring pre-service programmes. There is much to learn about preparing new teachers to professionally handle the complexities of unknown classrooms. Research questions

must go beyond content and structural issues in teacher education programme design to examine the underlying programme values, role relationships, and other factors that affect learning to teach (Kettle and Sellars, 1996). This means the cognitive changes in the pre-service and early teaching years should be explored. In what way a teacher education programme influences its candidates' thinking should also be found out so that they refine global pre-programme ideas about teaching and classrooms to specific knowledge of pupils' learning of particular concepts in particular contexts. In fact, research on teacher thinking can help us gain insight into our knowledge about the complexity of teaching, about what teachers know and of methods of inquiry and reflection on teacher thinking (Artiles, Mostert and Tankersley, 1994). Research on teacher thinking has therefore become an important topic in the educational literature in the last two decades. Its growth can be traced in a number of ways.

The early 1970s saw the end of behaviourist approaches to the study of teaching in which the focus on discrete categories of teaching behaviour was criticised as too narrow and selective (Calderhead, 1987a). It was around that time that some researchers started to study how curriculum is linked to or how curriculum change affects the practical activity of teaching (Clark and Yinger, 1987). Since then research on teacher thinking has been dominated by a cognitive psychology and information-processing approach, which provided on the one hand, information not only about teachers but also students' attitude and behaviour in and outside the classroom, and on the other, a framework and a methodology to examine formerly invisible facets of teaching (Clark and Lampert, 1986). At that stage, research in the mental lives of teachers has centred upon four major areas: teacher planning, judgement, interactive decision making, and implicit theories or perspectives (Clark and Yinger, 1987).

With the advent of cognitive psychology, the image of the teacher as “technician” has been gradually replaced by the image of the teacher as “decision maker” (Clark and Yinger, 1987). Models of the ways teachers plan or think interactively have been developed. Many researchers of teachers’ interactive thinking have sought to demonstrate close parallels between teachers’ thought processes and specific models of thinking, especially the decision-making model (Clark and Peterson, 1986).

Yet a new image of the teacher in the cognitive psychology era is as ‘professional’ (Clark and Yinger, 1987), which can more suitably describe the work of the teacher. This change can be seen as a break from the traditional model of teacher thinking which stresses “technical rationality” (Schon, 1983) to one that provides a more full and appropriately complex portrait of teaching as a profession in which the teacher is looked upon as a “professional practitioner” (Clark and Yinger, 1987). Therefore the new image of teacher has redirected the efforts of researchers on teacher thinking to explore “patterns of practice of knowledge that may be used as a basis for rethinking and reasserting teaching as a profession” (Clark and Yinger, 1987: p.97).

3. A Shift of the Research Paradigm - Teaching as a Profession and Teaching as Thinking

The recent discussion about teaching as a profession highlights several key characteristics of teaching which are quite similar to those found in many other professions, such as medicine, law and business management (Rowen, 1994, cited in Hargreaves, 1999). An understanding of the ways in which teachers act as

professionals would help the broadening of research in thinking about teacher cognition and conceptualisation of the role of teacher as professional practitioner.

One of the features of the professional activity of teaching, just like those found in the experts in other professions, is that teachers possess a domain of specialised knowledge acquired through teacher training and teaching experience (Calderhead, 1987b). They make full use of the knowledge such as classroom management, curriculum planning and teaching methods in their daily teaching work. In other words, the effective work of teachers is deeply professional in that it requires constant situational judgements which draw on a high level of competitiveness – complex and dynamic combinations of knowledge, values, skills, and personal dispositions, sensitivities and capabilities (Preston & Kennedy, 1995).

Another feature is that the problems teachers have to solve and the situations they encounter every day are similar to those found in many professions – unpredictable, ambiguous and practical (Clark and Yinger, 1987). These uncertain practical problems cannot be dealt with by the application of a rule, technique or procedure (Clark and Yinger, 1987) but instead, teachers have to rely upon their personal experience, their unique and idiosyncratic actions (Pennington, 1990) to exercise judgement and make interactive decisions.

Researchers in the area of teacher thinking have found that teachers employ a broad range of thinking skills in the pre-active and interactive stages of teaching (Wilson, Shulman and Richert, 1987). This is another feature that teaching shares with other professions. Moreover, teachers do plan in a variety of ways (Clark and Peterson, 1986), and these plans have direct influence upon the classroom. This

relates to a third characteristic of the professional activity of teachers. Research also indicates that experienced teachers do not plan in a straight forward and rational way but rather, teacher planning seems to proceed in a cyclical and interactive fashion (Yinger, 1979) until a workable plan comes out. Hence teacher planning is thought of as a set of complex psychological processes in which the teacher visualises the future, inventories of means and ends, and constructs a framework to guide his or her future action (Clark and Peterson 1986). The thought processes involved in teachers' planning are "unobservable", but whether the plan will be successful or not can be "observed" through teacher behaviour, student behaviour and their achievement scores (Clark and Peterson, 1986).

On the other hand, teachers are no less involved in thought processes in the interaction stage of their classroom teaching. In facing dilemmas and complex situations, they have to make prompt decisions which have important consequences for classroom order and effective teaching. That is why Copeland (1989) proposes the development of "clinical reasoning", those thought processes which precede purposeful teacher action in teacher education.

In addition to the professional characteristics mentioned above, there is another dimension which involves the skilful action that is adapted to its context (Calderhead, 1987a). Through repeated practice in his or her work, a professional can develop various kinds of expertise and special skills. Teachers are no exception. The expert knowledge of experienced teachers enables them to perceive problems in their work and to respond immediately and intuitively (Calderhead, 1987a). In fact, in a recent study on teacher thinking, expert teachers have been found to differ in extent and comprehensiveness from novice teachers in this conceptualisation and perception

of the situation (Schempp, Tan, Manross and Fincher, 1998). Schon (1983) uses the term “knowledge-in-action” to describe such kinds of unarticulated knowledge whereas Sockett (1987) considers it to be “tacit knowledge” in the sense that, although teachers can demonstrate it in action, they cannot explain it in words.

Between the expert and novice teachers there is a big gap of experience which is context bound. In his model of reason-in-action, a study of teacher reasoning and action, Sockett (1987) emphasises the relation between reason and action in teaching. According to him, the two meet in that forever changing and unpredictable context, the classroom, resulting in a better understanding of teacher behaviour, and contexts here being taken to refer to places where problems are framed and set from the phenomena we encounter (Schon, 1983). Therefore, in studying teacher cognition, we should never ignore the context where teacher thinking is done because it dramatically influences the very character of the skills deployed (Sockett, 1987).

Thus, teachers should be looked upon as professionals as defined by the nature of this behaviour – designing practical courses of action in complex situations (Calderhead, 1987a). Such a perspective also brings out the need to make explicit the implicit knowledge that teachers use in designing these courses of action in the classroom.

II. TEACHERS’ PEDAGOGICAL CONTENT KNOWLEDGE

Hence, the study of teacher thinking has gradually shifted from a common sense to a professional view of teaching. As noted in the preceding section, the success of a professional practitioner, in our case the teacher, relies heavily upon not

only his or her effort in planning but also the ability to manage complex situations and solve a variety of problems in the classroom. As classroom experience grows, the teacher can draw upon and orchestrate different bodies of knowledge which enable him or her to teach effectively (Clark and Yinger, 1987). Therefore it can be seen that teacher thinking is basically knowledge driven as their planning and decision making processes are governed by the underlying knowledge structures organised in larger measure by the tasks teachers encounter (Carter and Doyle, 1989).

1. Conceptualisation of Teachers' Knowledge Base

But what are the sources of teachers' knowledge? How do teachers conceptualise the knowledge? In the past two decades, a number of researchers have been much interested in studying the professional knowledge base of teaching from different perspectives. Here the term "knowledge base" is referred to as "the repertoire of skills, information, attitudes, etc., that teachers need to carry out their classroom responsibilities" (Valli and Tom, 1988, p.5). So far, different attempts have been made to identify the range of knowledge base teachers should have. How this knowledge is conceptualised varies. In the 1970's, it was believed that in responding to problems, teachers would refer to a personal perspective, an implicit theory, a conceptual system, or a belief system about teaching and learning (Yinger, 1979). To a certain extent, the knowledge seems to be based on some pre-training fixed conceptions which may influence what teacher trainees draw from in their future teaching experience. Since the early eighties, in exploring how such knowledge is

organised in a teacher's mind, researchers have turned to the study of the way schemata work.

A schema is construed as a set of past experiences (Clift, 1987) by which people's perception and interpretation of new experiences are guided. As far as expert English teachers are concerned, a schema includes prior study of language and other related contact areas, and perceptions of the teachers, learners and materials in the school in which the teacher has worked for some period of time (Clift, 1987). The role that schemata play in ordering knowledge and accounting for ambiguities in complex situations is extremely important (Carter and Doyle, 1989). Once formulated, a classroom schema enables a teacher to interpret instances of behaviour and predict possible states and directions of activity in a particular context (Warner, 1985). Previous studies have found that expert teachers have more elaborate, inter-connected and easily accessible cognitive schema (Livingston and Borko, 1989) than novice teachers. They have much to draw upon in planning and teaching work. Therefore they are more experienced in dealing with complex classroom situations. As for the learners, those who possess a well-developed schema (Berliner, 1987) can learn sufficiently on any topic about which much is known. Schema theory adds an important dimension to the understanding of how novice teachers learn to teach. Thus in pre-service teacher education, future teachers should be encouraged to construct schemata that re-organise prior experience and incorporate new pieces of information related to teaching and learning (Clift, 1987).

2. Definitions of Teachers' Pedagogical Content Knowledge

For the past few decades teacher education researchers have focused on the effectiveness of general pedagogical methods without regard for specific content material (Cochran, DeRuiter and King, 1993). This is due to the false belief that novices cannot fully concentrate on teaching their students until they learn how to maintain classroom order and cope with complexity. Another belief is that they already have sufficient subject content knowledge (Feiman-Nemser and Parker, 1990). However, recent studies strongly challenge such beliefs in which subject content knowledge and knowledge of pedagogy are treated as separate domains (Chen and Ennis, 1995; Cochran, DeRuiter and King, 1993; Fernandex-Balboa and Stiehl, 1995). Researchers are trying to figure out what teachers need to know in order to teach their subjects, and how the understanding of subject matter, together with other knowledge bases, produces knowledge which is able to guide practice in the classroom. According to them, teaching as professional action conducted in an ill-structured dynamic environment is conceptualised as a complex cognitive skill that rests on fundamental knowledge systems. The two knowledge systems they propose are those of lesson structure and subject matter.

In fact, researchers now realise that both subject content knowledge and pedagogical knowledge are vital to effective teaching and learning (Chen and Ennis, 1995; Feiman-Nemser and Parker, 1990; Foss and Kleinsasser, 1996; Reynolds, 1992; Shulman, 1987). Their studies focus mainly on what teachers know about their subject and how they choose to represent that subject matter during instruction. The findings reveal that, in order to develop an understanding in the students, teachers must have knowledge of the content. They must generate representation of the subject content

that will facilitate the development of understanding in their students (Wilson, Shulman & Richert, 1987). It was Shulman (1986) who first used the term pedagogical content knowledge to describe this way of thinking.

Pedagogical content knowledge (PCK) has been defined as a way of knowing what is unique to teachers whereby they take an aspect of subject matter and “transform their understanding of it into instruction that their students can comprehend” (Shulman, 1986, p.8). In other words, PCK includes “a particular amalgam of pedagogy and content [that] makes teachers different from [other] scholars in the field” (Gudmundsdottir, 1990, p.4) and distinguishes those who are mere subject matter ‘knowers’ from those who are subject matter ‘teachers’ (Berliner, 1987, p. 9-10). This amalgam is composed of:

...the most regularly taught topics in one’s subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations...[and] an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions and misconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons. (Shulman, 1986, p.9)

Furthermore, PCK is not a fixed body of knowledge but instead an ability that can be developed through reflection and application. Shulman (1987) portrays PCK as a cyclical process beginning with reasoning; then imparting, involving, and eliciting; and finally, after reflection, returning to reasoning again. Thus, the transition from being a subject content knower to a subject content teacher “involves a process of interpretation by which the content is examined for its structure and significance, then transformed as necessary to make it comprehensible and compelling to a particular group of learners in a particular set of circumstances” (Marks, 1990, p.7-8).

Expert teachers have this ability, and it enables them to recognise environmental, personal, and instructional patterns both quickly and accurately. These pattern recognition skills help reduce a teacher's cognitive-processing load, thereby speeding up accurate responses. In a way, it is akin to playing chess: "Sense is instantaneously made of a field, such as a chess board. Quick pattern recognition allows an expert chess player to spot areas of the board where difficulties may occur" (Berliner, 1987, p.11).

PCK is a complex skill, subject to various interpretations each of which stresses different components. Gudmundsdottir (1990), Smith and Neale (1989), and Tamir (1988) describe several components of PCK. Nevertheless, Grossman's (1990) categorisation of PCK components into knowledge about the subject content, curriculum, students, instructional strategies, and the learning context, appears to be the most encompassing to date, and will remain the main focus of this study.

Separately, each of Grossman's aforementioned components is of little use to the teacher. It is only when the teacher is able to integrate them all and apply them appropriately (at the right time, for the right students, in the right circumstances) that effective teaching will occur. In other words, it is not the separate existence, but rather the integration of all these PCK components that comprises good teaching. Interestingly, due to the integrative character of PCK, enhancing any of these components will also enhance PCK as a whole.

3. Studies on Teachers' PCK

PCK has been studied and discussed in different subject matter areas. In mathematics, Foss and Kleinsasser (1996) investigated pre-service teachers' views of mathematical and pedagogical content knowledge. The study reveals symbiotic relationships between their views of content knowledge and their instructional actions which remain problematic. With unwavering beliefs and practices, and without reconceptualising their roles as future elementary teachers, at the end of the semester the pre-service teachers emerge as poor duplicators of mathematics methods instead of initiators of learning. Walkwitz and Lee (1992) examined how PCK could facilitate effectiveness of teaching overhand throwing skill in physical education. In a teacher training programme, a group of teachers was provided with PCK information, while a control group received subject content knowledge information only. Their findings demonstrated that students taught by the teachers in the PCK training group gained better performance and understanding about the throwing pattern. In science education, Smith and Neale (1989) studied science teachers' use of PCK. Their findings suggest that not all teachers transform their subject knowledge into PCK during teaching. These studies imply that an effective teacher is expected to be able to transform the subject content knowledge to PCK so that he or she can make sound curriculum decisions in teaching. Wilson et al. (1987) suggest that because students are different in abilities, prior knowledge, and learning styles, teachers should be able to teach a concept in "150 different ways". In other words, the teacher should be able to transform the subject content knowledge into PCK in order to make relevant curriculum decisions to meet the challenge in different teaching settings.

III. TEACHER DEVELOPMENT

The literature review in the above two sections has been built around the research tradition on teachers' knowledge base and a paradigm shift towards teacher thinking and teaching as a profession. This section focuses on several themes related to the concept of teacher development in the search for theoretical advancement.

1. Conceptualisation of Teacher Education

There is no doubt that the mission of teacher education is to facilitate changes and development in the teachers. However, views are divided concerning how changes and development should take place. Different concepts of the development process give rise to different models of teacher education. These models, though with variation in content, are basically founded on two traditional assumptions of educational thought and practice, namely the academic-competency approach and progressive-personalistic approach as distinguished by Diamond (1991).

a) *The Academic-Competency Approach*

This approach is influenced by the "mimetic" tradition of education described by Jackson (1986), which considers learning an essentially imitative process. It has also adopted the behaviourist's perception of learning, according to which the educator is perceived as a "messenger" whose job is to pass down knowledge to the next generation (Back, 1999). With this in mind, knowledge is interpreted as something absolute, essential, detachable, totally objective, reproducible, and presented to rather than discovered by the learners. In the learning process, the

educator plays the role of knowledge owner, transmitter, mediator and assessor. He should be capable of motivating learner interest, employing correct methodologies and achieving expected learning outcomes. In sum, the educator is an active agent who shoulders full responsibility for learning. The role of the learner, on the other hand, is just a recipient and retainer of the knowledge passed down to him. His success in learning is measured by the amount of knowledge he has taken in from his teacher.

Besides academic knowledge, this approach of teacher education also emphasizes the acquisition of specific and observable teaching skills related to student learning. Examples are Listen and Zeichner's (1991) social-efficiency approach, Diamond's (1991) competency-based teacher education, and McNiff's (1993) line management model. In these models, competence is assessed by teachers' teaching performance in lessons through a variety of instruments like micro-teaching and classroom observation instead of their intellectual ability reflected in the course work, and good teaching performance refers to the demonstration of the ability to imitate the skills taught to them.

However, this kind of "knowledge and skill base" orientation receives criticism in that correlation between specific knowledge and teacher behaviours and pupil learning outcomes has not yet been established, and teaching is something so complex and unpredictable that research work cannot be easily done to provide proof of validity. The approach is based on the assumptions that teachers as learners are passive and inert, and that successful teaching is the necessary result of the acquisition of a stable and predictable set of knowledge and skills. Yet these assumptions are subject to queries. It is argued that teaching is an art, which should be far more than the acquisition of certain knowledge and skills. As McNamara (1984) admits, beyond

the basic knowledge and initial skills which a beginning teacher should master, there are no fixed procedures to achieve effective teaching.

(b) *The Progressive-Personalistic Approach*

Supporters of this approach, as opposed to the academic-competency approach, advocate a personalised development in individual learners as the aim of teacher education. The concept underlying is closely associated with Jackson's (1986) "transformative" view of education in contrast to the "mimetic" tradition. The change which takes place in student-teachers in the learning process should be qualitative rather than quantitative, bringing about self-transformation and insights into the teaching profession rather than merely increased knowledge and skills.

Such a concept is based on the constructivist's view of education. According to the constructivist, instead of being objective, knowledge is relative, fluctuating and context-dependent (Von Glasersfeld, 1995). It is not something "out there" to be transmitted to learners, but "constructed by learners as they attempt to make sense of their experiences" (Driscoll, 1994:360). Learners should therefore acquire knowledge through interpretation of themselves, their experiences and the world around them. To summarize, the constructivist views learning as a process of development in which the learner should progress to construct their own organisational principles through invention, problem solving, inquiries and communication with his physical and social environment (Fosnot, 1996).

This view of learning has clear implications on the role of teacher educators and student teachers in teacher education: the former must not be merely transmitters of knowledge, but also counsellors and supervisors (Heller and Gordon, 1992); and

the latter should not be just recipients of knowledge, but scholars and investigators (Back, 1999). It is also believed that without the experience of a personalised development in their own learning, teachers would not be able to provide a supportive and stimulating environment in their teaching, which is considered a necessary condition for pupil-centred education. Therefore, student teachers' personal discovery and individualised interpretation of meanings should be the main concern of teacher education (Combs et al., 1974; Fuller, 1974; Wass et al., 1974). Student teachers are no longer passive learners receiving what they are told and imitating norm behaviours in classroom, but active participants who progressively develop their own personal theories of teaching. Learning to teach is thus a continual process in which learners keep on interpreting experiences and seeking new meanings concerning the art of teaching (McNiff, 1993).

This approach of teacher education is criticised on theoretical grounds by proponents of the competency-based model of education as putting too much emphasis on the development of personal theories which may possibly result in eccentricity and idiosyncrasies. Back (1999) also suggests that the learner's inquiries are based on the things he already knows. The occurrence of questions implies the existence of a fundamental knowledge-structure in the learner's mind, which he acquires from an external agent and assimilates into his cognitive system. Thus the importance of acquired knowledge and the external agent who brings the knowledge, usually a teacher, should not be minimised in the learning process. Another point is if the learner is allowed total freedom in their choice of content while pursuing knowledge, he may be too much restricted by his own preoccupations and limitations. It should be the responsibility of the educator to open up and expand his world beyond

his frontiers. One last problem is some learners may not like the idea of learning as a process of discovery, which demands a high degree of intellectual effort. Learners who prefer more external guidance will find the process too harsh for them and may not be able to benefit the most from this way of learning.

It is noted that both the approaches described above have their own strengths and shortcomings. We may need to address the inadequacy of both theories and explore a compromise between them to establish a viable and practicable model to follow.

2. Comparison of Expert and Novice Teaching

Another theme in the study of teacher development is the differences between expert and novice teaching. A comparison between the teaching of experienced and beginning teachers will shed light on what kind of development in the student teacher should be expected and how such development can be achieved. This section is to explore the qualities which make the difference between the two types of teachers.

It is an established view that experts and novices, no matter which profession they are in, demonstrate differences in their knowledge, thinking and way of handling problems and difficulties. This kind of expert-novice differences also exists in the teaching profession. Research on this area shows that expert and novice teachers are different in two major aspects: their cognitive schemata and pedagogical content knowledge.

Experts' cognitive schemata are found to be more elaborate, extensive, complex and coherent. They can easily exploit their previous knowledge and draw out ideas from their experience when planning and teaching. There is always a large collection and a wide range of explanations, analogies, illustrations and examples available for use in their mental data bank of knowledge. As for novices, they cannot gain access to their schemata easily, which often need to be developed and modified in their planning process (Leinhardt and Green, 1986; Wilson, Shulman and Richert, 1987; Borko and Livingston, 1989; Richards, Li and Tang, 1998).

Another aspect of differences between experts and novices is the level of their pedagogical content knowledge (PCK). In a study conducted by Hashweh (1987) with six experienced teachers, it was observed that they were capable of identifying students' level, interests and preconceptions, managed to anticipate problems and difficulties, and cope with these with a variety of representations. In other words, they could adjust their teaching to fit students' needs. In contrast to these observations, studies on novice teachers show that unlike the experts, they are not aware of the need to take into consideration their pupils' ability, amount and level of knowledge acquired prior to the lesson, styles of learning, etc. when planning and organising classroom activities and deciding on teaching methodologies. They also tend to rely too much on the textbook without thinking of the possibility of making alterations or the production of tailor-made materials to suit students' needs. Moreover, their lessons seem to be lacking in a systematic and logical framework for presentation. In sum, expert teachers' PCK is considered more profound and fully developed, while that of novice teachers is superficial, sketchy and inadequate.

3. Stages of Expertise Development

The above analysis of expert-novice differences in the area of teaching gives rise to the following questions: How does a novice become an expert? How does the development occur? What are the stages novices have to go through to achieve development into experts? Studies have been done to address these questions and stage-theories have been developed.

Fuller (1969) proposes a three-stage model of teacher development, which describes a teacher's professional development in terms of the types of concerns he holds. The model outlines three broad areas of concerns: concerns about self, concerns about tasks, and concerns about impact, which arise in stages in a teacher's development (Fuller 1969; Fuller & Bown, 1975). It suggests that a beginning teacher's concerns are largely self-concerns, related to the teacher's own feeling of adequacy and survival in the classroom. Then at the second stage, the focus of his concerns shifts from self to tasks. The teacher begins to pay more attention to the teaching tasks required of them such as planning and preparation of lessons. At the last stage, the teacher becomes more concerned about the impact of their teaching on pupils' understanding and learning outcomes.

Berliner (1986, 1988, 1994) also infers from his studies another model of teacher development. Modifying the developmental model of Dreyfus and Dreyfus (1986), he proposes a five-stage theory of expertise development: novice, advanced beginner, competent, proficient and expert. According to Berliner's model, as summarised by Schempp et al. (1998), expertise development starts from the novice stage in which student teachers or fresh graduate teachers learn a set of context-free

principles, skills and procedures required for teaching in the classroom. At this stage, the novices tend to be rational and rigid, conforming to the set of classroom rules without allowing flexibility. When proceeding to the stage of advanced beginners, after one or two years' teaching, these teachers are capable of applying rules and principles in a more flexible manner, knowing when to abandon norms or usual practices. They can also accumulate knowledge and draw similarities across teaching contexts from prior classroom experience. Teachers may then reach the competent stage at about the fourth year in the profession. They are aware of the importance of student participation in classroom activities to achieve effective teaching and more ready to make pedagogical decisions regarding choice of materials, classroom organisation, setting priorities and error treatment to engage students in the teaching-learning process. In the fifth year teachers may move into the proficient stage when intuition and knowledge together begin to guide their teaching and a holistic perception of teaching situations is acquired. They can predict classroom events, are sensitive to student responses and able to make interactive decisions. Finally, teachers may progress to become experts after years of teaching. This final stage is characterised by seemingly effortless decisions and actions. Their teaching behaviour is intuitive, automatic and fluid.

Supported by her review of 40 studies of pre-service and beginning teachers, Kagan (1992) identifies five components which characterise the behavioural and conceptual development of novice teachers. First, the novices demonstrate an increase in metacognition. They have increased awareness of their own knowledge and beliefs about pupils and teaching, and the changes they have undergone in these aspects. Second, they gain more realistic conception about pupils as they acquire more

knowledge about them. This reconstruction of pupil images in turn helps to adjust their self-images as teachers. Third, there is a shift of the novices' attention from self to the design of instruction to pupil learning. After reconstructing their self-images as teachers, they focus more on their teaching tasks and learning outcomes. Fourth, novices begin to develop standardised procedures which integrate classroom teaching and management and become more automated. Finally, a growth in novices' skills in problem solving is observed. They are equipped with a wide range of skills to cope with problems in different teaching contexts. The skills they possess are seen to be more differentiated, context specific, and multi-dimensional.

Kagan's observations coincide with Fuller's model in their recognition of the stages of self-concerns, task concerns and impact concerns in teacher development. However, while Fuller and Bown (1975) consider the focus on self a hindrance to further development and therefore should be shortened, Kagan holds the view that this is a necessary and valuable process to go through before the novice can progress. In addition, Kagan's model has substantiated Fuller's model with a cognitive explanation and schema theory.

Kagan's model also corresponds with Berliner's model in the progression towards acquisition of standardised, automated routines, which as elaborated by Kagan, should integrate instruction and management, and the shift of focus to pupils and their learning performance. Lastly, the model is aligned with both Fuller's and Berliner's comments that sophisticated teaching performance as an expectation of contemporary pre-service teacher education programmes is unrealistic and inappropriate.

Sound as they are, the above stage theories are challenged by Grossman (1992), who is sceptical about certain issues arising from them. One query is Kagan's claim that student teachers will not be able to reflect on actions relating to teaching until procedural routines have been acquired. He argues that pre-service teachers were found in other studies to have the ability to reflect on moral and instructional issues before they had established classroom routines. Another query is Kagan's recommendation that procedural, not theoretical knowledge be the focus of teacher education programmes. He maintains that the beliefs and knowledge of pre-service teachers will be influenced by the theories they learn from the training course, and that the mastery of procedural routines does not seem to be a prerequisite to consideration of alternative approaches to teaching and learning. The last major query is the assumption that earlier stages are naturally followed by later stages. Grossman observes from studies excluded from Kagan's review that once classroom routines have been developed and found to be practicable, pre-service teachers may not progress to seek improvement. As Feiman-Nemser & Buchmann (1989) conclude, "By concentrating on the interactive side of classroom teaching, student teachers may learn to manage pupils and classrooms without learning to teach" (p.367 as cited in Grossman, 1992).

Grossman advocates that prospective teachers be directed to see the interdependence of management and educational goals, and that to cope with the increasingly pluralistic society, moral and ethical imperatives of teaching be the main concern of teacher education. With a view to challenging current practices, teacher education should try to strike a balance between the technical aspects of teaching and its intellectual and moral demands. The goal of teacher education should be

“preparing prospective teachers to ask worthwhile questions of their teaching, to continue to learn from their practice, to adopt innovative models of instruction, and to face the ethical dimensions of classroom teaching” (Grossman, 1992, p.176).

4. Teacher Training and Teacher Development

The effect of teacher training on teacher development is another issue for discussion. What kinds of changes occur in student teachers within the period of teaching training? Will they experience the same stages discussed in the previous section? What is the contribution of teacher education components and field experience to the novice’s development? Literature on learning to teach may give insights on this issue.

Calderhead’s (1987b) study observed that pre-service teachers progressed through three stages in their field experience: fitting-in, passing the test, and exploring. At the beginning of the teaching practice, student teachers suffered from anxieties about classroom management and pupils’ behaviour. They had to try hard to fit into the school environment and their role as teachers (Fuller & Bown, 1975; Alexander, Muir & Chant, 1992; McCullough & Minz, 1992; Guillaume & Rudney, 1993). After all these had become routines, they were more concerned about their performance in the assessment by their college tutors. Instead of achieving effective instruction, their ultimate concern was obtaining credit in the assessment. At the end of their field experience when they felt themselves to have control in their teaching, they began to explore different ways of classroom organisation.

The “fitting-in” and “passing the test” stages are considered natural and inevitable. Fuller and Bown (1975) regard this as student teachers’ survival needs, which must be fulfilled before they can shift their concern to teaching skills and pupil needs. Alexander, Muir and Chant (1992) think that being anxious to fit in is simply pragmatic, as student teachers need to meet the expectations of the school in order to gain acceptance and recognition. Calderhead and Robson (1991) also suggest that student teachers’ initial concerns be addressed and more support be provided to facilitate them to move beyond these concerns and reflect on their new role as teachers.

The suggestion on the need of personal support in teaching practice is echoed by Ben-Peretz and Rumney (1991), who point out that co-operating teachers are usually domineering and authoritative when giving comments to student teachers’ teaching. They advocate the adoption of incremental practicum in which student teachers can have interactive reflections with their co-operating teachers in structured, carefully planned and issue-specific conferences under a supportive and non-evaluative climate.

Another observation from Calderhead’s (1987b) study is the lack of supervision in student teachers’ exploring stage. It was found that pre-service teachers were generally incapable of carrying out detailed evaluation of their teaching, or recognising and analysing problems on their own. This implies the demand for a high degree of sensitivity in the supervising tutors and co-operating teachers to the kind of help student teachers need at this stage. More assistance in analysing and evaluating teaching practice should be given to facilitate their exploration, experiments and reflections of teaching.

Besides the effect of field experience, there are also studies on the impact of theories introduced in teacher education programmes. In their evaluation of a pre-service teaching programme, Collaboration for the Improvement of Teacher Education (CITE), which aimed at promoting student teachers' reflective thinking about curriculum, teaching methodologies and socio-political issues, Sparks-Langer et al. (1990) reported that above average student teachers were able to adapt the pedagogical principles they have acquired to a specific context. Two other studies on the same programme also found that student teachers demonstrated a greater ability in reflection when compared with other student teachers not in the programme. However, whether reflective pedagogical thinking can lead to improvement in teaching is still uncertain, as student teachers' course performance did not necessarily correspond with the scores they got in reflective thinking.

Eisenhart, Behm and Romagnano (1991) studied a programme based on Berliner's theory of developing expertise and White's rite of passage model and found it confusing and frustrating to the students. The objectives were extremely ambitious but there was no clear specification of the content and practices each stage of the model should include. In the end, student teachers demanded to be taught practical ideas relevant to their teaching and ignored other aspects of their course work. The conclusion is that a model which presents too much and too fast without adjusting to the developmental needs of the student teachers does not work. For the student teachers to leave the programme with confidence and a clear view of their role as teachers, a more explicit and consistent set of experiences should be introduced.

In line with this idea Drever and Cope (1999) reported results from a large-scale study of secondary training student teachers' limited use of theories and

knowledge acquired from their course work during their teaching practice. Student teachers tended to avoid criticising the dominant norms in their placement schools despite the urge to involve themselves in higher levels of reflection. Another reason for the student teachers' rejection of theories may be the unfulfilled expectation of a hypothetical solution that works in practice. Owing to the ambiguous and dynamic nature of education settings, student teachers are often left in disappointment with the "solution". Teacher educators should therefore be cautious about presenting education theories to prospective teachers as solutions to problems they might come across in their placement. The theories they teach need to be relevant to the learners' actual concerns, supportive of their practice, and treated as a collection of ideas and explanations to be used rather than "solutions".

IV. ORIENTATION OF THE STUDY

This section is a discussion on the significance of the study with orientation to the issues related to teacher education presented in the literature reviewed in the earlier sections.

1. An Overview of the Literature

Three main areas of studies on teacher education have been covered: teacher thinking, teachers' PCK and teacher development. The discussion on teacher thinking begins with an examination of teachers' thought processes and then a review of the development of research on this area. The review sees a shift in the focus of the

research to teaching as a profession. The findings that teaching shares the major characteristics of other professions lead to the rise of research interest in the cognition and the conceptualisation of the role of teachers as professional practitioners.

Literature on PCK mainly concerns the categorisation and operation of its components. While the issue of categorisation still remains controversial and unresolved, it is established that subject matter knowledge and knowledge of pedagogy are not isolated domains. All components of PCK have to be appropriately integrated for it to function well (Shulman, 1987).

Teacher development is examined under conceptualisations of teacher education, differences of novice and expert teaching, stages of expertise development and studies about learning to teach. Views are quite diverse and there is a need for more studies to strengthen the models proposed. The Fuller-Berliner-Kagan model may be a good reference for future experimentation and a starting point for revision of the development theory with further support and evidence from the existing situations.

2. Towards a Knowledge Base for Teacher Education

There are some concerns about the development of a knowledge base for teacher education arising from the literature.

(a) *Research and Practice*

What does research work contribute to the daily practice in the classroom? Kerlinger (1977), representing the rational-positivist view, deems that there may not be a direct link between research and practice. Research findings do not usually help

to cure practical problems encountered in teaching. They only help to develop theories to facilitate understanding of practitioners, which at most may result in improved practice. However, to Jacknicke and Rowell (1987), Kerlinger's view of research and practice is too empirical-analytic oriented. They draw our attention to some alternative approaches like those of the situational-interpretative, which have given valuable insights into how research can inform practice and identified different orientations for reforms in teaching and research.

Rudduck (1991) is also sceptical about the significance of academic research in producing meaningful and practicable knowledge that brings about changes in classroom practice. Lacking communication with the practitioners, researchers are criticized as retreating from the realities of teaching. According to Ruddock, changes can only be possible when teachers gain a sense of ownership towards the notion. They must be helped to cultivate the feeling that they are in control of these changes before they are expected to show commitment to the reforms. Once they have the confidence and feeling of security, they would be able to form a habit of critical inquiry into practice research and an open-minded attitude towards changes even if they seem to threaten their professional status. Hence, support in terms of structures and resources should be rendered to enhance teachers' readiness to accept changes as a result of research work on teaching. Similarly, Fullan (1993) advocates that every teacher should be a change agent. Change is something too complex and too important to leave to experts. Only with teachers' effort and commitment could an organisation capable of individual and collective inquiry and continuous renewal be possible.

To ease the tension between theories and practice, research on teacher education has seen a move towards broader concerns of teaching contexts beyond the

classroom, and studies conducted from practitioners' point of view. As Jackson (1986) suggests, the gap between polarities of beliefs may be more easily bridged at the individual level and in the context of a single classroom. To understand teacher development from individual teachers' perspectives, current research has then focused its interest on the teacher's professional knowledge.

(b) *Knowledge Base and Practice*

The literature described in the previous sections has revealed the problem of connection between teaching practice and course work in teacher education programmes. Student teachers are found unable to apply what they have learnt from their course work in their teaching, that is, to put theory into practice. For one thing, with the influence of the prevailing "mimetic" tradition, the existing knowledge base of teacher education seems to be extremely inadequate. Marland (1993) has concisely summarised the setbacks of this conventional conceptualisation of teacher education:

Such methods appear to have had little impact on student teachers in the sense that the conception about teaching, held by them at entry, apparently undergoes little or no change during the pre-service programme. These entry perspectives are usually an inheritance received uncritically during years of socialising experiences in classrooms. They have their origins in the past and in experiences of teacher candidates as learners in schools not as teachers – and in highly idiosyncratic and united experiences at that. It is likely, so the argument runs, that they will have been formed intuitively, uncritically and without adequate access to the culture of teaching. They are therefore likely to have limited generalisability and be of dubious value in present and future classroom contexts. (p.54)

For another, the expectation that student teachers can automatically link their acquired knowledge to action is unrealistic, as it fails to recognise the differences between subject content knowledge and action-related pedagogic knowledge. To equip learners with the skill to link knowledge to action, an alternative model of

content knowledge transformation in teaching should be adopted (Chen and Ennis, 1995). When passing down subject content knowledge, which refers to concepts, principles and skills within a particular subject discipline (Shulman, 1986), teacher educators need to ensure learner understanding by means of elaboration, a wide variety of representations and restructure of knowledge (Shulman, 1987). This transformation of knowledge into teachable forms to achieve effective teaching and learning has demonstrated the interrelationship of learning conceptions, metacognitive processes and pedagogic knowledge. Metacognitive processes are the key to the development of pedagogic knowledge, which should be an essential element in the experience of learning to teach. Student teachers should take an active part in their learning and try to generate pedagogic knowledge from different knowledge bases they have acquired.

In sum, for more successful and meaningful teacher education, there seems to be an urgent need for more intensive research in the field, a more integrated relationship between research and practice (Calderhead, 1991), knowledge and action.

3. Theoretical Significance of this Study

Research highlighted in the literature review has embodied different views of teacher education underlying different epistemological traditions, each of which has its contributions and limitations. This study is particularly interested in investigating some of the issues that call for further exploration.

To study teachers' professional knowledge and the phenomenon of good teaching, researchers may not have to rely on typical teachers or typical teacher

education programmes. Instead, the use of case studies will be of more value in helping to establish a stronger conceptualisation of the relationship between professional knowledge and professional preparation for teachers. This study is to explore the phenomenon of learning to teach with data collected through case studies in the context of the academic-competency convention of teacher education, contributing to existing conceptualisations of knowledge and practice in teacher education.

Another issue this study focuses on is the stages of teacher development. The review on expert-novice teaching and the Fuller-Berliner-Kagan model of teacher development have inspired the design of this study, which aims to further investigate the validity of the proposed linear process occurring in the experience of learning to teach and the possibility of revising it to cope with student teachers' needs in a more complicated world of reality.

Finally, this study is associated with the question of assessment concerning student teachers' professional development during teacher education. How to measure the extent of such development and whether to set benchmarks for the award of teacher training qualification have posed a problem in the field. Quality assurance by setting standards and code of practice for practitioners in the teaching profession has become a key concern.

To address the above dimensions in the literature that need to be strengthened, this study is characterised by the following features:

(a) *Focus on Student Teachers*

This study has student teachers as subjects investigating their images and knowledge of teaching, their development of beliefs, their responses to training and the training effects on them. It is hoped that the understanding of student teachers' developmental patterns can contribute to more effective training and a more realistic expectation of achieved progress during teacher education.

(b) *Relating Thinking to Action*

One observation about the making of effective teachers is cognition and the level of PCK. However, research on teacher thinking is often based on self-reports of teachers from interviews as the only source of data, which seem to be inadequate or even unreliable as what teachers say about their thinking may not really reflect how they think. Therefore, besides verbal reports, student teachers' classroom behaviour is also observed so that relationship between thinking and teaching can be established.

(c) *Local Context for Comparison*

While many studies have been done on teacher development in the western context, there seems to be a lack of local research in this area. This study, conducted with Hong Kong student teachers and in Hong Kong classrooms, provides a different cultural context for comparison and will contribute to a better understanding of knowledge changes during teacher education.

CHAPTER THREE

DESIGN AND PROCEDURES

I. INTRODUCTION

This chapter describes the design of the study and the methods used in the collection and analysis of data. The nature of the study is discussed in relation to the rationale behind the choice of subjects. The methods and actual schedule of data-collection are introduced, and finally the chapter reports on the procedure for data analysis.

II. THE DESIGN

1. Nature and Objectives of the Study

This study follows a qualitative/interpretative type of approach. It is an empirical inquiry that investigates a contemporary phenomenon within its real-life context in which multiple sources of evidence are used. In a natural setting where the researcher has access to data, the study explores the relationship between student teachers' thinking and their pedagogical content knowledge change.

The target subjects are student teachers, and the focus is on their changes in thinking and pedagogical content knowledge throughout the teacher education programme. An initial description of their pre-training conception of language teaching is necessary in order to provide the context from which their change in beliefs and conception during training can be interpreted more fully. As mentioned in

the introduction to this thesis, this particular area of inquiry is still in its infancy in Hong Kong. This study aims to extend understanding about teachers' thoughts and actions by generating procedures for the investigation. Thus a major objective is to set up a system to compare and analyse the professional knowledge change of student teachers during teacher education.

Following a presentation of basic findings concerning student teachers' development in their overt behaviour in teaching and in the way they think about it, the study proceeds with analysis of similarities and differences amongst individuals. The investigation will generate patterns and variations of change in student teachers' thinking and pedagogy in training and during teaching, and the relationship between thinking and pedagogy. It will further derive theoretical propositions for validation in subsequent studies.

2. Research Questions

There are three objectives in order to describe the change in pedagogical thinking skills and pedagogical content knowledge of ESL student teachers during college training, namely to:

- i) describe the change in the pedagogical content knowledge of ESL teachers during training;
- ii) describe the change in thinking of ESL student teachers during training;
- iii) identify factors which influence their thinking and hence explain the changes in the pedagogical content knowledge and thinking of student teachers

Three general research questions, linked to these objectives, suggest themselves as worthy of investigation.

- i) How does the pedagogical content knowledge of student teachers change during training? (Objective 1)

Subsidiary questions centre on comparing and contrasting the various aspects of their thinking at different times of their teacher education.

- What is the extent of the knowledge base of student teachers?
- What is the nature of the knowledge base?
- What are the effective teaching approaches used in presenting the subject matter to pupils?

- ii) How does student teachers' thinking change during training? (Objective 2)

- What is the complexity of student teachers' thinking?
- What are the differences in thinking of student teachers when they present the concepts needed in teaching a topic or presenting new language patterns at different phases of their training?
- How does the change in their thinking affect the kinds of teaching strategies they use in teaching?

- iii) Under what influences do these changes occur? (Objective 3)

- What occurs in the teacher preparation course that may influence teachers' thinking and their pedagogical content knowledge base?
- What new experiences and personal development may influence the thinking and the pedagogical content knowledge base of student teachers?

- What external stimuli or distracters may affect the development of their thinking and their pedagogical content knowledge base?

3. Research Subjects

Among those admitted to the full-time Certificate in Secondary Education course of the Hong Kong Institute of Education in 1996-98, 96 chose English as one of their two elective subjects. In the last thirty minutes of the first session of the Orientation Week, these 96 student teachers were briefly introduced to the project. Some of the ethical issues involved were discussed (see II:5 of this chapter, pp.56-57) before they were invited to participate in the project. The following day those who were interested in knowing more about the project came to the researcher's office in pairs or groups of three and all together, there were eleven of them. The project was then explained in detail to these small groups separately and the volunteers were encouraged to seek further clarification. Among those who came three young female student teachers from the same group were found to be extremely shy and not expressive at all. The discussion was virtually monosyllabic – with the researcher doing all the talking. Eventually this group was dropped and eight student teachers were strategically chosen for the study and were followed through the two years of college training. Data were collected at different phases following the contour of the programme to track the changes in the eight student teachers' thinking and pedagogical content knowledge.

As it is not the intention of the study to generalise the findings to a larger population, random sampling on a large scale was considered inappropriate. On the

other hand, in-depth study of one case (e.g. Louden, 1991), though insightful for the understanding of teaching from a holistic view of the teacher as a person, would not be able to address the research questions of this study which aim to explore general patterns and individual differences. This study therefore focuses on an intact group of student teachers undergoing training to teach in secondary schools. A range of eight individuals was considered to be of appropriate size, as being able to provide sufficient heterogeneity for comparison, but also manageable at the stage of data collection. With the description of their personal data (Table 1, p.54), and the context in the Hong Kong setting, the hypotheses derived from the population can be tested on comparable populations elsewhere. Rather than the sampling logic, this study follows the replication logic (Yin, 1984). Each individual case led to a whole study, in which convergent evidence is sought regarding the facts and conclusions for the case. The conclusions for each case are then considered to be the information needing replication by other individual cases. Both the individual cases and the multiple-case results are to be reported.

In selecting the eight subjects the principal criterion was their willingness to participate and their availability to meet with the researcher. Amazingly, the volunteers were of different age on entering the course. They came from different types of secondary schools located in different districts. The results attained in the subject of Use of English (UE) in Hong Kong Advanced Level Examination (HKAL) were also different.

As shown in Table 1, of the eight student teachers in the study, six were female and two were male. On entering the teacher training programme most of them had just finished their matriculation and so they were around twenty or twenty-one

years of age except the two older ones, Teachers Four and Five, who had had one or two years of working experience.

The available sample under investigation also contained a rich variety of school experiences and a range of ability in English. While Teachers One, Three, Five, Six and Eight had attended traditional grammar secondary schools either run or subsidised by the government before enrolling on the teacher training course, Teachers Two, Four and Seven had their secondary education in a technical, pre-vocational and commercial school respectively. These schools were located at different districts of Hong Kong. The scores these student teachers attained in UE at the HKAL Examination ranged from Grade A to Grade E.

Table 1: Personal Data of Research Subjects

Teacher Identity	Gender	Age	UE Score In HKAL	Type of Sec. Sch. Attended	District of Sch.
One	F	20	E	Govn't Sec. Sch.	Kowloon
Two	F	21	E	Technical Sch.	Hong Kong
Three	F	21	D	Subsidised Girls' Sch.	Hong Kong
Four	M	22	D	Pre-vocational Sch.	Kowloon
Five	F	23	A	Subsidised Sch.	Hong Kong
Six	F	20	E	Govn't Sec. Sch.	N.T.
Seven	M	20	D	Sch. Of Commerce	N.T.
Eight	F	21	E	Subsidised Sch.	N.T.

The research subjects provided a reasonable reflection of the whole population of student teachers in Hong Kong in the subject area of English Language, in terms of their language proficiency, age differences, background experiences and earlier specialty areas as studied for the certificate of teacher education. The findings were able to throw light on the target population in this sector.

4. Setting

The Certificate in Secondary Education Course offered by Hong Kong Institute of Education is an initial professional qualification for non-graduates intending to teach at junior forms of secondary schools. The qualification is obtained through two years of full-time study.

Over the two years, the student teachers have to fulfil requirements of various modules (see Appendix 1, p.220). After a heavy schedule over the first semester and the first half of the second semester of the first year, they are sent to schools for four weeks for the Supported Teaching Practice. The emphasis of this part of their field experience is on co-operation and partnership whereby a number of student teachers act as a team, observing one another, discussing teaching strategies and reflecting on their own and each other's experiences. Then they return to the campus and follow another intensive period of four weeks before the end of the second semester of the first year programme. The schedule for the second year is more or less the same as that of the first year. The student teachers attend coursework at the Institute for the first three quarters of the year before being allocated to schools for a six-week Block Teaching Practice. During this period they are given opportunities to conduct lessons, reflect upon their teaching, join in school functions, attend meetings and participate fully in school life. Finally they return to the Institute to consolidate their experience of the programme through completion of various assignments. Data for this study were collected at different stages throughout the two-year programme.

Descriptions of the English elective course for the full-time programme are presented in Appendix 2 (p.223). Course objectives and outlines were set in

accordance with the expectation of the English Language syllabus for junior forms of Hong Kong secondary schools. Course work and assessment were scheduled to fit in the structure of the timetable over the two years.

5. Ethical Issues

The researcher was responsible for the English elective course as the module tutor of some of the modules and the practicum supervisor of the research subjects. The role of the researcher who is also the tutor and the supervisor of the subjects may be problematic in terms of the interference with teaching the course, assessing the student teachers' work and supervising their teaching practice, as well as the validity of the data. Concern was also raised whether the student teachers might feel under pressure to remain in the research, whether they might argue that the time they spent on the research would detract them from their other academic commitments, whether they might feel that their participation would in some way affect the grades they received and whether other student teachers could possibly feel that they had missed out, or been in some way affected by not taking part in the project.

To overcome these problems measures were taken right from the very beginning of the data collection process. When the project was first introduced the whole group of 96 new comers were told that the different aspects of the research setting would likely be beneficial to their professional development, yet participation in the research project was voluntary. They were assured that those who chose to participate could opt out any time should they want to do so, and those not taking part would not be disadvantaged as additional help would be offered if necessary. At

different phases of the project, interviews with the eight subjects were arranged at times convenient to them so that disruption to their other academic commitments would be kept to the minimum. Arrangement was also made for a moderator to mark each of the assignments of the subjects though the formal practice of the Institute was to have three assignments moderated, one from each of top, average and low level of each class. The subjects were made aware that the alternative arrangement was made so as to ensure that their participation would not affect the grades they received. Concerning supervision, to maximise validity of research data, the supervisory conferences were strictly separated from the stimulated recall interviews.

III. DATA COLLECTION PROCEDURES

1. Research Approach

In this study a qualitative/interpretative type of research approach was used, following the views of Pelto and Pelto (1978) who commented that:

...the complexity of human thought and behaviour are extremely difficult to quantify in entirely rigorous ways. We anthropologists find that a personalised qualitative-descriptive research is essential to discovering what the fundamental questions (hence variables and hypothesis) really are even when we approach the field with theoretical ideas.

As described in the earlier section teachers' thought processes are dynamic, complex and highly related to the teaching context they are in. Given this, the researcher needs to actively interact with the teachers in order to get closer to their perspective. Thus a qualitative approach is used in this study. As Denzin and Lincoln (1994) noted,

Qualitative investigators think they can get closer to the actor's perspective...deploy a wider range of interconnected interpretative methods, always seeking better ways to make more understandable the worlds of experience that have been studied. (Denzin and Lincoln, 1994, p.5)

The full period of data collection covered two years – the length of the Certificate in Secondary Education Course during 1996-1998. The methods of data collection included a blend of qualitative techniques: semi-structured interviews, journals, classroom observations and stimulated recall procedures. The qualitative data gathered by these different complementary methods were designed to capture student teachers' knowledge about ESL teaching and to understand its influence on teaching. The stages and their relation to the structure of the Certificate in Secondary Education (CE) course are summarised in Table 2.

Table 2: A Summary of the Phases, Data and Structure of the Study

Stage	Data Collection Time & Methods	CE Programme
1. On Entry to the Course (Year 1)	First week of Semester 1 - Interviews	Orientation
2. First Campus-based Practicum (Year 1)	Three months into the course - Stimulated recall interviews Lesson plan analysis	ELT Methodology: The Communicative Approach Campus-based practicum sessions: Micro-teaching
3. First Field Experience (Year 1)	During field experience - Interviews; Journals; Document analysis; Lesson observations	Supported teaching practice
Summer Break		English Language Immersion Programme for Student Teachers (ELIPST)
4. Second Campus-based Practicum (Year 2)	Three months into Year 2 - Interviews	ELT Methodology: Task-based Learning
5. Second Field Experience (Year 2)	During field experience - Interviews; Journals; Document analysis; Lesson observations	Block teaching practice

2. **Methods of Data Collection**

(a) *Interviews*

Interviews were conducted on five separate occasions with each student teacher; the two done during the teaching practices in Year 1 and Year 2 were further divided into pre- and post-observation interviews. During the interviews Chinese, the student teachers' mother tongue, rather than English was used so as to probe into and facilitate verbal articulation of their pedagogical thinking processes. The interviews were approximately 45 minutes in length on the average. They were taped and then transcribed for analysis. The initial interview was conducted in the first week of the subjects' first year of the 2-year CE course and was essentially the "wide angle view" suggested by Erickson (1985). This interview served two major purposes – to explore the subjects' significant biographical data and to tap into the knowledge, experience, and value system underpinning their language teaching and learning theories (See Appendix 3, p.224). Subsequent interviews moved from this comprehensive level to "a more restricted focus". The second (See Appendix 4, p.225) and the fourth (See Appendix 7, p.228) interviews took place in the middle of the first and second year. These were intended to allow some assessment of the degree of influence the course had on the student teachers' pedagogical content knowledge development. In addition, these interviews served as a means of further elaborating and clarifying components of PCK.

Interviews were semi-structured and had broad foci following the manner of Spradley's "grand tour questions" (Spradley, 1979). Grand tour questions are used to elicit information about the "basic units in an informant's cultural knowledge" (p.60).

The exploration began with the metaphors written at the beginning of the year and building from the grand tour questions, "What is your view of teaching?" Themes which emerge from one set of data determine foci for subsequent interviews. The purpose of this was to kick start from those criteria which the subjects employed as they observed, interpreted, and described their own language learning experiences. It is a means of minimising the researcher's prejudice of what is important by seeking to be guided by what Fetterman (1984) describes as "the insiders viewpoint" or "the emic perspective".

(b) *Lesson Observation*

Lesson observation was conducted of each of the eight subjects to identify their knowledge and skills used in teaching. Before the lesson was observed the subjects were interviewed to find out why their plans took the form they did, what problems they had encountered in preparing them, and how these were resolved. An effort was made to minimise the disturbance to their instructional plans and environments. A variety of language skills including speaking, listening, reading, writing and integrated skills were chosen as the content knowledge base for the study since these were the units taught by the eight teachers. The lessons observed were video-recorded for post-lesson interviews and further analysis. Informed consent was obtained from each of the principals of the teaching practice schools (Appendix 8, p.229). Field notes were written by the researcher and transcribed for analysis.

(c) *Stimulated Recall Procedure*

Each subject was then interviewed again right after the lesson observed (Appendix 5, p.226). In the reflection interviews the videotaped recording of the

lesson was replayed and the subject was assisted to recall the covert mental activity which accompanied the overt behaviour. The technique of stimulated recall is predicated on the assumption that the subjects are able and willing to recall and articulate their thought processes, and to do so as accurately and completely as possible. According to Bloom who pioneered research in this area using stimulated recall (1953, cited in Tuckwell 1980), subjects may be enabled to relive an original situation with vividness and accuracy if they are presented with a large number of cues which occurred during the original situation. Thus the subjects of this study were shown the video recording of their teaching as they were asked to evaluate the effectiveness of their teaching, reflect on the curricular decisions made in teaching and elaborate on pedagogical knowledge including the concepts and skills that were not presented during their teaching.

(d) *Journals*

Another data source was the student teachers' reflective journals. Reflective writing, though not-assessed, is a requirement of the Practicum component of both Year 1 and Year 2. Here students are asked to do two things (Appendix 6, p.227). First, to think carefully about the work they do with a particular class and how the work develops over time. Second, to comment on any events or experiences which impact on their thinking about teaching. The journals are recorded on a weekly basis. The researcher was allowed access to the journals at the end of the teaching practice in Year 1 and Year 2. These journals provided an ongoing record of incidents which impacted on their pedagogic knowledge and provided an insight into the effectiveness of the teacher education programme they were undertaking.

IV. DATA ANALYSIS PROCEDURES

1. Methods of Data Analysis

The aim of the research is to develop into a grounded theory (Glazer and Strauss, 1967) about the nature of and influence on teachers' thinking. According to Strauss and Corbin (1994), a grounded theory approach emphasises the generation of theory from the data collected during the course of research. Constant comparisons, coding and conceptual analysis of data on the thinking of ESL student teachers during training will be made in order to develop a theory on the teachers' pedagogical knowledge base and thinking.

2. Stages of Data Analysis

The data collected were translated into English. In translating the scripts hesitations and repetitions (eg.. "er", "um", "you know") were removed in order to improve readability and clarify the points that the student teacher was making. Despite the exceptional practice care was taken to retain the original words.

In analysing the data the method of constant comparison (Glaser & Strauss, 1967) was used. This is an inductive process that occurs in several phases. First, data are reduced to units of information: "The smallest piece of information about something that can stand by itself" (Lincoln & Guba, 1985, p. 345). Next, patterns within these units are formed for each subject and across all subjects. Third, as units emerge, new dimensions are added to the data analysis by identifying common

elements, establishing relationships, and creating patterns. These elements, patterns, and relationships are organised in categories and subcategories.

To continue, networks are created. A network is “a map of the selected [categories and subcategories] which shows how they are related to one another” (Bliss, Monk & Ogborn, 1983, p.40). In other words, the categories are integrated by grouping and scanning similar units and detecting common characteristics and processes among these units. In this sense, the networks delimit the emerging data by comparing properties across categories and domains in order to test the integrity of their group membership. Afterwards, negative cases (those that seem not to follow the patterns and categories) are sought in order to disconfirm or support the original theory.

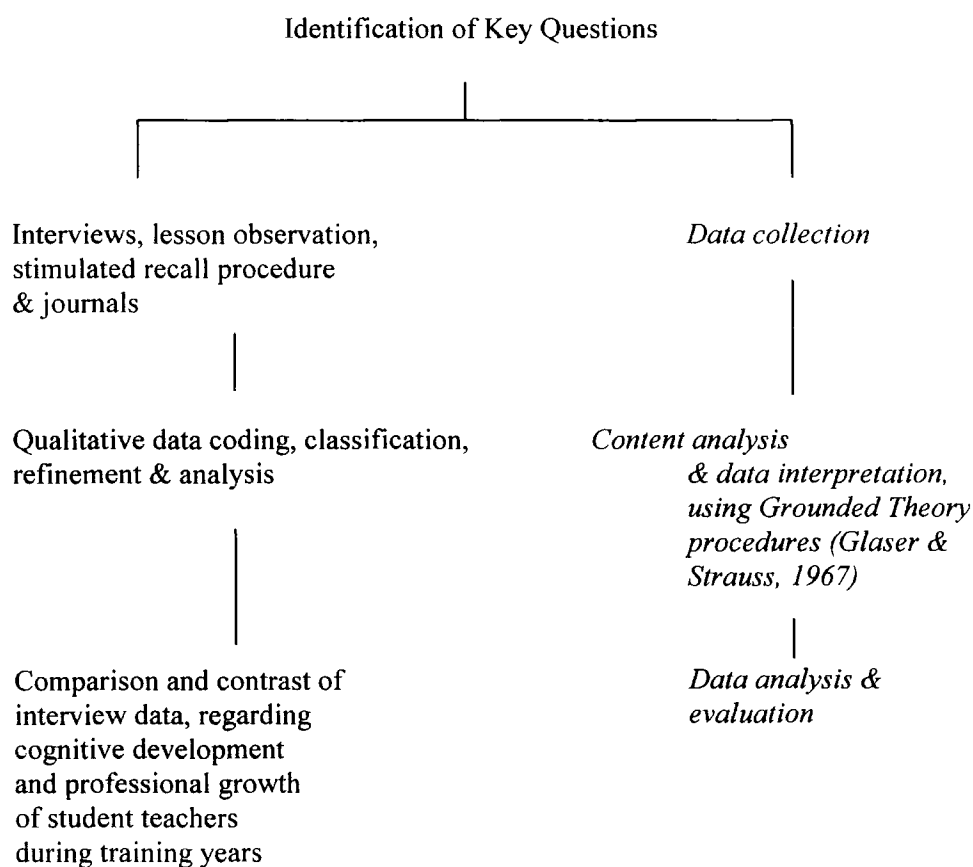
Finally, as new units, patterns, categories, and subcategories become scarce, the data are considered “saturated” (Lincoln & Guba, 1985), the data analysis ends, and the writing of the results begins using only those categories and domains that are verified as integral parts of the theory. This process from identifying units to forming networks is an ongoing cyclical process, one in which researchers must use their tacit knowledge and intuition (Lincoln & Guba, 1985) in searching for look-alike, feel-alike patterns. An overview of the research approach is presented in Table 3 (p.64).

V. SUMMARY

This chapter describes the design of the research, the methods adopted, and the procedures in collecting and analysing the data.

This study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context in which multiple sources of evidence are used. In a natural setting where the researcher has access to data, the study explores the student teachers' thinking and their development in pedagogical content knowledge. The research subjects were eight student teachers in the full-time Certificate in Secondary Education Course of the Hong Kong Institute of Education, taking English language teaching as one of their two electives under the direct supervision of the researcher.

Table 3: An Overview of the Research Approach



The study was designed in five phases to follow the contour of the pre-service course and thus to track the development of the eight student teachers' professional growth. Data consisted of transcribed interviews, journals, transcribed classroom recordings and documents (e.g. planning protocols, photocopies of classroom materials used during the lessons). It was collected over two years from September 1996, when the subjects first entered the course, to July 1998, when they completed the course. The analysis, following open coding and constant comparison, resulted in intensive case studies of each of the student teachers (Strauss, 1987) and an extensive comparison and development of cross-case themes.

CHAPTER FOUR

KNOWLEDGE CHANGE IN THE SUBJECT CONTENT

I. INTRODUCTION

Of the various PCK components categorised by Grossman (1990), this chapter reports on the changes in student teachers' knowledge of the subject content before, during and after their teacher education. In Shulman's (1986) content knowledge taxonomy, subject content knowledge refers to concepts, principles, and skills within a particular subject discipline. Key ideas, concepts, and skills in the subject content knowledge serve as "steel fibres" in the construction of the curriculum (Goodlad & Su, 1992). Thus this chapter describes how student teachers develop their subject content knowledge in teaching English as a second language. It focuses in particular on the change in the way they conceptualise English, learning English and teaching English during training. Because of the course's philosophical emphasis on communication in language learning as a pedagogical tool, particular emphasis is put on noting changes in their thinking about the communicativeness concept of learning as the course progressed. It is impossible in the space of this or the following chapters to show the richness of the data or the complexity of the analysis. What can best be done is to provide some examples in the form of quotations from interviews and classroom observations to illustrate the most relevant issues found at the different stages in the process of learning to be an English teacher.

This chapter begins with a summary of the student teachers' pre-training conceptions of the subject contents on entering the course. It then reports the findings

of the data collected over five points of the course. The chapter concludes with interpretation and discussion of the findings.

II. ON ENTRY TO THE COURSE

All eight student teachers had memories of their English learning experiences on which they built an initial conceptualisation of their profession. These recollections were based on their own learning experiences as well as on the way they were taught – apprenticeship of observation during their schooling years. Most of them learned from their teachers but a few also from other people they interacted with and assigned different meanings to their individual learning experiences. This is particularly relevant to some local students who, apart from learning English in formal contexts (school grammar based language teaching), were provided with opportunities to interact with native speakers of English in informal or naturalistic situations. The following excerpt shows how Teacher 3 saw these two experiences:

Learning the English language system is important. If you make a lot of grammatical mistakes, people will not be able to understand you. Therefore I think there should be grammar lessons for our students. But on the other hand, you can also learn English through social situations. Only when you are exposed more to real life situation could you be able to use English confidently. As for myself, my cousins from the States visit Hong Kong and stay with my family every summer. We communicate in English because they don't speak Chinese. Usually, I found my spoken English more fluent by the time they were about to return to the States. (Teacher 3: 1st int: 6/10/96)

Ball and McDiarmid also argue that understanding of subject content is acquired in different ways outside of schools; to assume that teachers' subject content preparation is confined to experiences of formal schooling would be to "ignore a major source of teachers' learning and ideas" (1990:446). Yet regardless of the

specific origin of student teachers' knowledge what is relevant is the content of this existing pre-training knowledge, which will be described next.

1. Content

The eight student teachers began their teacher education course with general ideas about the dynamics of teaching and learning and about the general aspects of teaching and teachers' roles, but their knowledge about teaching English as a second language was rather limited. Most knew English as having two different functions in the two contexts - classroom and natural. The pedagogical function of English as a subject in the school curriculum, which they were more familiar with, was seen as a formal system and as mainly the learning of the language system. But in the natural context, despite their limited exposure to it the eight understood English in a wider sense, mainly as a way of interpersonal communication involving meaning and spoken language. While the grammatical system of English was the focus when they talked about English in the classroom, meaning, fluency and a cultural component are the main components of English outside the classroom. Teacher 8 remembered the differences between the English language she learned at school and the language she needed in a natural interactive situation:

In Form 2 we had to do a project on finding out how tourists think of Hong Kong. To collect the necessary data we had to interview quite a number of tourists. During the interviews we found that the tourists were speaking so fast that we weren't able to follow. Besides, the English they were speaking was different from that of my teacher. Later on, when we listened to the recorded interviews again our teacher told us that the tourists were using a lot of short forms and speaking with different accents because they came from different countries. (Teacher 8: 1st int: 8/10/96)

Most of the student teachers understood the learning of English in relation to natural or classroom contexts. However, still overshadowed by their own unpleasant experience as pupils themselves, the picture they painted of the English classroom was far from a colourful one. To them, English is difficult to learn, as expressed by Teacher 4:

Back in my secondary school days, my classmates and I had to memorise a lot of structures and rules which we didn't have to in learning Chinese. We were not given enough opportunities to use them. I lost my patience in learning English. (Teacher 4: 1st int: 7/10/96)

The same feeling is highlighted by Teachers 1 and 7:

Students only get in touch with English in the classroom. You seldom have to use it in you daily life. My sister can speak English, but we never communicate in English at home. So, I think it's difficult for us to learn a language which is used only within the school, or to be exact, within the English classroom. (Teachers 1 & 7: 1st int: 9/10/96)

To most of these student teachers the English lessons they had as pupils were boring and not related to their daily life. The mastery of English language skills was too difficult a task to them. While nearly all could name a couple of the topics they had learned from Mathematics lessons, few were able to do so for English. The views of the following student teacher were negative in particular:

The English lessons from Form 1 to Form 7 were boring. The teacher kept on talking all the time. For most of the class time we were stuck in our seats. Whenever we had difficulty we were too scared to ask as we had been told to speak in English. The teacher expected that we had already learned all the basic grammatical structures but in fact it was not the case. The more we lacked confidence the more we were afraid of speaking up in the class. (Teacher 2: 1st int: 6/10/96)

Among the student teachers two who came from what were considered prestigious schools and were in English lessons taught by expatriate teachers do not share the same view. In fact, they had some happy time in learning English:

Let's take the approach of my English Literature teacher as an example. She's an Indian who doesn't speak Chinese. Her teaching was not confined to the classroom. From time to time, she took us to the Art Centre to watch some videos, plays and movies, followed by analysis of the viewed texts afterwards. We were also required to write journals reflecting our feelings and emotions towards the environment we were in. We could describe it by means of drawings, writing, or even newspaper clipping. And the examinations were not just "pencil and paper" ones. Our performance in doing plays and projects was also taken into account. (Teacher 5: 1st int: 8/10/96)

The Form 1 English lessons were impressive. There were lots of activities. Once the teacher turned the classroom into a restaurant. Some classmates played the roles of waiters and waitresses, others customers. There were lots of group work activities. But in Form 2, a large part of the class time of the English lessons was spent on doing mechanical practice. The main focus was on the learning of vocabulary and grammar structures. (Teacher 1: 1st int: 9/10/96)

As for the others, the spontaneous interactions which produce language in the world were not present in these students teachers' English classrooms. Their "apprenticeship of observation" seemed to have equipped them with norms of experience, conservative ways of practising as teachers which emphasize English as structures to be presented and practised in controlled interactions.

2. Learning and Teaching English

Regarding teaching the student teachers had some understanding of the general concepts about or attitudes towards teaching, but were not able to go deep into any of the instructional subject specific aspects including teaching content, materials, and activities. Yet they conceptualised teaching English mainly as bringing fun into the classroom, establishing successful relationships with the pupils, organising activities and selecting materials and content. Teacher 7 remarks that "learning English should be fun. But I don't think the English lessons I had during the past seven years were

fun". As most of them were not impressed by their own learning experience in the English classroom, their main concern was how to motivate students to learn and pay attention to the teacher, rather than recreating a natural process of language learning within the constraints of a classroom. They could point out which classroom activities were interesting, but failed to realise the importance of making the classroom as close as possible to what happens outside. Teacher 4 vividly describes the two experiences she had:

At junior secondary level I didn't like English lessons at all. But I survived and the English lessons at senior forms were much more enjoyable. Say, in writing lessons there were many pre-writing activities such as discussions and video viewing instead of just answering questions in the junior forms. In reading lessons many a time we didn't just complete comprehension exercises but were involved in group work activities such as commenting on the view points of the author. In oral lessons there were role-play and competitions instead of pronunciation drills. So whether the lessons are motivating or not depends to a large extent on the teacher. I know interesting activities do not help pupils build up their knowledge about the English language system, but at least they enjoy attending English lessons. (Teacher 4: 1st int: 7/10/96)

Thus these student teachers were explicit in pointing out the "shortfall" of their teachers' classroom practice. Rather than repeating their teachers' mistakes, adaptation of a different approach turned out to be one of the goals they would strive for:

In the coming teaching practice, I will pay attention to all the points I have just mentioned about my bitter learning experience. I hope I can motivate my pupils to learn. (Teacher 8: 1st int: 8/10/96)

I definitely will not follow the approach of my English teachers. I will introduce the grammatical system to my students clearly, explicitly and in an interesting way. (Teacher 2: 1st int: 6/10/96)

In contrast, Teacher 7 who had worked as a private tutor teaching English to a Form 1 remedial class over the previous summer seemed to be better informed of the reality of the English classroom:

My experience as a student in the English classroom was an unpleasant one. But I don't think I can do much to change it when I become a teacher. I know that to most students English lessons are boring. It is always good to bring fun into them. But in real practice, I know this isn't easy. I've worked in a private tuition school teaching Form 1 pupils in the last summer holidays. Even though I was a new teacher there my workload was so heavy that I wasn't able to find time to prepare my lessons well. I had to teach all the four skills in different lessons and there were so many different textbooks to go through and teaching materials to prepare, not to mention the piles of exercise books to mark. Designing interesting activities is easier said than done. (Teacher 7: 1st int: 9/10/96)

Relentlessly, most of the participants put the blame on their English teachers for failing to motivate them to learn English well, which resulted in their poor performance in the two public examinations. Passing on their suffering in English lessons to pupils was something they definitely would avoid doing. Not surprisingly, when asked what made an English lesson effective, all the participants considered the level of students' participation most important, which was central to the perception of their classroom approach in the coming teaching practice. Contrary to the rather lenient requirements provided by the rest of the group, the suggestion made by one participant regarding her criteria of an effective English classroom covers more aspects, as summarised in the following remarks:

I'll consider whether the students have learned something from the lesson, whether the lesson is stimulating, whether the teaching aids are attractive, whether the teacher's voice is loud enough, whether her instruction is clear, whether too much unfamiliar vocabulary is used. (Teacher 3: 1st int: 6/10/96)

The main focus of student teachers' suggested criteria fell on the general and "observable" aspects of a lesson, most of which were related to pupils' motivation in learning. Subject-specific criteria had yet to come up at this stage. Turning to what constitutes an effective English teacher, the participants had more to say, recalling the rather limited exemplary performances of those teachers by whom they were most

impressed. Two of the commonly agreed requirements they mentioned include the teachers having abundant subject content knowledge and a wide repertoire of teaching skills. Several others noted the importance of building up close relationship with students:

Qualifications are important since a teacher won't be able to teach if she doesn't have appropriate qualifications. She should also be able to make students understand, attend to their needs in and outside the classroom and most importantly, establish harmonious relationship with them. At least students dare to ask you when they have questions. (Teacher 8: 1st int: 8/10/96)

She should be experienced, knows the curriculum and subject content well, is knowledgeable, creative, stimulating, hard working, say, in marking assignments and test papers, and have appropriate qualifications. (Teacher 3: 1st int: 6/10/96)

Another aspect regarding the student teachers' criteria of effective English teachers turned out to be language competency, of which teachers' fluency in English was of great importance in particular. To them English teachers have to be fluent in English simply because they ought to set a good model to their students. But native speakers of English do not necessarily make themselves effective teachers:

It depends. But it may be difficult for NETs (native English teachers) to know the real problems local students encounter. After all, there are cultural and linguistic barriers. (Teacher 6: 1st int: 5/10/96)

A teacher who can speak English fluently can be more appealing to students. But it doesn't mean that all NETs are effective teachers. Most junior form students are scared of speaking to "Kweilos" (foreigners). (Teacher 2: 1st int: 6/10/96)

Among the participants two reported being taught by NETs in some parts of their secondary education and so were used to having English as the medium of instruction. The rest of the group had English lessons mainly taught by local teachers who inevitably might have resorted to using Chinese¹ in teaching. While the medium of instruction of the primary schools these participants attended is also Chinese, their

bitter experience of having to adapt to English as the teaching and learning medium on entering Form 1 was still fresh in their mind. This led to the controversial issue of whether the mother tongue should be used in English lessons and if it should, to what extent. On the whole the participants asserted the need to use certain amount of Chinese in teaching junior forms, such as in explaining the meaning of unfamiliar vocabulary and new grammatical structures, and that amount should be reduced gradually as students move up to senior forms:

Most students in general would like their English teachers to use more Chinese to teach. The English teacher who impressed me most was the one who taught me English at Form 2. The way she spoke was amusing. Whenever she found that we were at a loss of what she was talking, she would explain it again in Chinese. Her lessons were easy for us to understand. I remember the teaching approach of another English teacher was much less impressive. 100% of her lesson was conducted in English. For those of us who came from Chinese medium primary schools, the Form 1 English classroom was a nightmare. I think more Chinese should be used in the junior forms, in particular the Form 1 English classroom. (Teacher 1: 1st int: 9/10/96)

Among the major crises in learning how to teach, none was more commonly shared than the student teachers' linguistic incompetence. Their failure in mastering the English grammatical system well had not only resulted in their far from outstanding performance in public examinations, but also in their lack of confidence in teaching English, as evident in the negative comments Teacher 8 made on herself – "I won't make a good English teacher because I can't speak fluently and accurately in front of the class". Her view was echoed by Teacher 7 – "I was so lazy in school that I did not put effort in learning the English grammatical system. If I were placed in a Band 1² school in the coming teaching practice, I'm afraid the students could speak and write better than me". Apart from language competence other aspects of teaching such as teaching skills or classroom management which are common concerns of new student teachers in research findings elsewhere were also mentioned.

3. Summary

These are the major themes of the eight student teachers' conceptions of learning and teaching English as they entered the pre-service programme. A summary of their conceptions is presented in Table 4 (Appendix 9, p.230). The concepts which formed the content of the student teachers' pre-training knowledge are extremely valuable because they are the 'bridges' which can be used to link student teachers' knowledge with teacher educators' theories during teacher education. Although their ideas might not have been put forward in an academic discourse, they may serve as the very basis on which to make the connections between theory and practice which is crucial in their professional development. To establish the kind of contribution teacher education courses make to student teachers' development it would be important to know not only what was already there but also how this old knowledge and the new relate to each other and to practice, as will be described in the following sections.

III. THREE MONTHS INTO THE COURSE

The first three months of the course was mainly spent on course work on campus. Pedagogical knowledge in the teaching of language skills was introduced with attention to planning, teaching and evaluation, and so was the development of the English Language teaching approaches in the second language context. As the weeks went by the student teachers were guided to examine the three methodologies in teaching English, namely the Grammar-translation Approach, Audio-lingual Method and the Communicative Approach, through analysis, discussion and demonstration. Special emphasis was put on the Communicative Approach in language teaching

advocated by the Curriculum Planning Institute of the Hong Kong Education Department but owing to various constraints on its implementation in schools, this approach has not been closely followed. Right after the methods course a series of micro-teaching workshops was scheduled in which the student teachers could expand learner knowledge and apply what they had just learned.

1. Content

At this stage the student teachers' pre-training knowledge became a compound body of knowledge embedded in the method – the Communicative Approach - student teachers were trained to use in micro-teaching and later on in teaching practice which amalgamated a view of the English language, a view of how people learn English, a view of lesson planning, and a particular series of communicative language activities and delivery strategies.

From now on having a definite, clear method became the most important aspect of the student teachers' knowledge of teaching. During the interviews all the participants agreed that having a method meant having an appropriate lesson format, with clear stages and steps, and materials interesting to pupils. The confidence they experienced from having this method helped much in planning the lessons they would try out in micro-teaching. Though they confessed that they had to follow the method because it was the only one they knew, most were convinced of its practicality and feasibility in the local context:

I think having a method is useful. At least I have a format to follow when I plan my lessons. It enables me to survive. Of course I can have freedom in

designing activities. But putting the activities into logical sequence needs a method. (Teacher 6: 2nd int: 14/1/97)

2. Learning and Teaching English

The student teachers' pre-training knowledge of language performing a pedagogical function, with an emphasis on structures and forms and no real difference between the written and the spoken means of expression, seemed to have expanded to that of a range of language functions. From the way they planned their lessons for micro-teaching, there was some evidence that each student teacher aimed to move away from the traditional form of structural-based learning which they themselves had experienced towards a form of practice which more accurately approximated language as it is used in the world:

I think pair work practice is the most effective way for students to master telephone conversation. For the micro-teaching practice I am going to borrow five pairs of mobile phones and design different situations for appropriate telephone conversation. I'm sure my students will be interested in the task. This is something I learned from the methods course but was never done in the English classroom when I was a student. (Teacher 1: 2nd int: 15/1/97)

In all the eight student teachers the conceptualisation of learning English now focused on communicative classroom language learning, based on the methods tutor's facilitation of the learning process by the implementation of a method which emphasised not only the pupils being presented and knowing a range of language functions and skills but generating language in different contexts through communicative activities. Most of them found it difficult and yet interesting to relate their own learning processes (mainly on memorising vocabulary and language structures) to what they were introduced on the course:

I didn't expect there could be so many interesting activities in English lessons. When I was a student, most of the time the English teacher was yelling and shouting in front of the classroom. Now we have learned the "Presentation - Practice - Application" format. Apart from learning the new language structures, our pupils will be guided to practise using these structures and most importantly, they have to apply what they have just learned in simulated situations. I think it is the last stage that students enjoy most - learning through lots of communicative activities. (Teacher 6: 2nd int: 14/1/97)

In micro-teaching practice, most of the participants prepared their lesson plans in nearly the same format and performed their tasks in a similar way. However, the way they approached lessons might possibly have been imitating their course tutors' demonstrations and practices, and their own attempts not to take risk by going their own ways at such an early stage of the course.

3. Summary

The student teachers' knowledge of the subject content three months into the course is summarised in Table 5 (Appendix 9, p.231).

It seems that the student teachers were eager to take in new knowledge to fill their relatively blank "mental disk" during the first three months of their course work. They were convinced that the lesson routines learned from the methods course would be helpful in their design of effective lessons and for survival in the micro-teaching practice. To them the communicative games and activities presented by the methods tutor were particularly impressive, which they professed would bring much fun to their students - an objective they had wanted to achieve in teaching on entry to the course. Following the scenario described in the task instruction and without having to take into consideration the contextual differences of real life teaching, the participants

presented lessons in nearly the same routine and performed tasks in a similar way during micro-teaching. Most emerged as duplicators of the methods learned.

IV. THE FIRST TEACHING PRACTICE

In the Second and also the Final Semester of Year 1 four weeks of Supported Teaching Practice was scheduled. The topics presented before the Supported Teaching Practice gave student teachers some background for practice teaching.

Through the Supported Teaching Practice, the student teachers gained acquaintance with a classroom reality in which they could expand their knowledge as learners and apply the pedagogical knowledge and skills to which they had been initially exposed in the course. In this way, they developed their knowledge of teaching from practical experience.

Documenting the complex relationship between knowledge and action was not easy or clear at times. How the student teachers' practice was rooted in different knowledge sources will be discussed in the following sections.

1. Content

Student teachers used pre-training knowledge and the new teacher education knowledge in different ways during teaching practice. Although an analysis of the behaviour showed similar ways of dealing with the subject matter, in that they followed the same method learned from teacher education, the interviews conducted

on the way student teachers were teaching showed that student teachers' knowledge had not been made homogeneous, and during TP they maintained different views about teaching and learning English. Teacher 1's view of learning English, for example, still adhered to her pre-training knowledge rather than teacher education knowledge. She still conceived of language as underlying rules or patterns. During teaching practice she followed a structural approximation to language with some systemic knowledge and a limited level of communication.

I'm following the method learned from the course. You can tell from the format of the lesson plans I've prepared. But on the other hand, I still think pupils should have a firm grasp of the English grammatical system. Sometimes, I followed the course book in grammar lessons. For example, I spent the whole lesson teaching the use of 'may', 'must' and 'can' to my class last week. I 'told' them many times what the meaning of the words were and how to use them. (Teacher 1: 3rd int: 2/5/97)

Teacher 7, on the other hand, drew on more of the knowledge he had acquired during teacher education when he presented English language as structures and phrases and progressed from a didactic approach to providing opportunities for students to practise using English to communicate:

I still think pupils should learn the grammatical system. But I've also learned from the methods course that the prime function of a language is for communication, that we should focus more on enabling pupils to convey messages to one another rather than memorising rules. So I'll teach the target language patterns first, followed by pair work or group work activities. (Teacher 7: 3rd int: 1/5/97)

In contrary to Teacher 1's view, Teacher 3 felt guilty about favouring language as a rule-governed activity over contextualised phrases. She was convinced by what she learned from the methods course – language is a means of communication and that learning the ability to speak may lead to knowledge of the system:

I think fluency should go first. At least pupils can express themselves even though they make grammatical mistakes. As far as the grammatical structures

are concerned, if pupils can listen more to teachers' demonstrations and imitate them, they will gradually acquire the rules. If I keep re-using the target structures in class in appropriate situations, the pupils will get familiarised with them more easily. I don't think I need to teach the patterns explicitly. (Teacher 3: 3rd int: 8/5/97)

During teaching practice, the way the participants were teaching showed that their knowledge came from different sources. Some showed signs of making use of what they had learned from the course, though quite slowly and gradually. Others still stood by their pre-training knowledge – emphasising accuracy in learning and teaching English.

2. Learning and Teaching English

Regarding teaching, although most participants implemented the method quite satisfactorily, they showed a certain degree of resistance towards the modifications of their pre-training subject matter knowledge. The method they followed embodied the underlying principles of the Communicative Approach in teaching English, which begins with teacher's correct modelling in the "presentation" stage, followed by pupils' repetition in "practice", and ends with pupils' "application" of the language patterns they have just learned in appropriate situations through games and activities designed by the teacher. The role of the teacher was to model correct English, enable pupils to practise the newly learned patterns and use them in different simulated contexts. The participants, particularly those who were practising teaching in Band 4 or Band 5 schools, were rather torn between the ideas underlying what they did and what they really believed in and had experienced in teaching practice so far:

I think whether the Communicative Approach works depends on the ability of your pupils. No doubt pair work and group work communicative activities in the "application" stage are motivating. But if your pupils can't even tell the difference between a verb and an adjective, like me myself and my classmates when we were junior form pupils some years ago, I don't think they are really able to communicate in English on their own in groups or pairs. (Teacher 1: 3rd int: 2/5/97)

Teacher 1 was quite explicit about her own learning experience in a Band 5 school. Her view was shared by Teacher 8:

There was no problem in trying out the communicative activities I designed for micro-teaching practice last month. But now it's chaotic. Probably because the "pupils" are different. My classmates were wonderful "pupils". They were extremely co-operative when I was micro-teaching them. But my pupils in the TP school are weak and inattentive. To be honest, if no one comes to observe my lesson, I might scrap the "application" stage, and save more time for clearer explanation of the target patterns. (Teacher 8: 3rd int: 9/10/97)

According to the participants, whether the Communicative Approach works depends to a very large extent on the ability of the pupils. For those having their teaching practice in lower-band schools, the method they had learned from the course ran into trouble as the pupils were not capable of using English to do even fairly simple language tasks. They were by no means convinced that the Communicative Approach could reproduce the immersion process which characterises natural learning in the classroom. Among this group Teacher 8's view of the method was most negative:

What's wrong with the traditional way of teaching? At least students would sit there quietly listening to me. I don't see how pupils can communicate in pairs or groups if they don't even know where the subject and the verb should be put. I'm afraid they will be forced to speak in Chinese and cause disturbance to other groups. I do think I have to spend more time on explaining the basic structures to them. They aren't ready for conversing among themselves in English yet. (Teacher 8: 3rd int: 9/5/97)

Similar feelings were expressed by some other participants. In following the method - focusing attention on the form of English in the first half of the lesson and then switching to an extended level of communication in the second half, they experienced much difficulty in implementing it. "My pupils can't get used to doing pair work or group work activities. They said they had never had these before with their English teacher", Teacher 5 pointed out one of the major problems (3rd int: 29/4/97). They recognised that the multifunctional and meaning based approach to English was only possible outside the classroom:

In the last lesson, my pupils kept on asking me why they had to learn conversing on the phone in English. They were probably right. How often do they have to use English on the phone? Very rarely. It was OK for me to keep them in their seats when I presented the telephone dialogue to them and asked them to repeat after me in chorus, though not the whole class was following. But once they were asked to generate conversations in pair making use of the different situations provided, they refused to do it but were chatting about something else in Chinese. (Teacher 1: 3rd int: 2/5/97)

Teacher 5, for example, was resistant to what had been presented in the methods class. On entry to the course her vivid description reviewed how she had enjoyed the Form 6 English Literature lessons some of which were turned into art appreciation done in theatres and cinemas with follow-up discussions analysing the texts viewed. In this way, language to her was used as a tool for communication. But during teaching practice, Teacher 5 drew on the knowledge acquired from observation of her junior form teachers and in most lessons presented English as structures and phrases. She incorporated part of her pre-training knowledge when she directed pupils' attention to grammar rules. The next quotation shows her dissatisfaction with the kind of language she was expected to teach:

What we've learned from the methods course is helpful but I seldom follow the format we were introduced to in my teaching. I think the approach we learned is too ideal. I don't mean that what we've learned is not good but

maybe it doesn't suit my pupils. I've tried using Q & A (question and answer) in the last couple of lessons and found that it's more effective in checking whether the pupils understand the target structures presented to them or not. Q & A is easy to manage. At least everyone will have a chance to answer my questions. Those not having their turn to answer will wait quietly in their seats. My class is always in good order. (Teacher 5: 3rd int: 29/4/97)

Amazingly, the participants had much to share regarding effective English lessons. Compared with what was agreed on entry to the course, this time a variety of more in-depth criteria came up, most likely from the knowledge learned during course work and acquired through observation of their pupils, sharing with their peers, and actual experience in the classroom during teaching practice. There were beginning signs of an "insider's view". The level of pupil participation was still considered most important and so was high on the criteria list, followed by the following:

- whether pupils can follow and understand what the teacher says (T3, T4, T8)
- whether there are clear objectives (T3, T3, T5)
- whether the objectives are achieved (T3, T5)
- whether a variety of teaching techniques is employed (T6, T8)
- whether learning is taking place (T1, T7)
- whether the instructions given by the teacher are clear (T1, T7)
- whether the materials prepared for the lesson are appropriate (T6, T7)
- whether there is good class and time management (T3, T5)
- whether the teacher is confident enough (T4)
- whether there is good rapport between the teacher and the pupils (T2, T3, T5)
- whether everything laid down in the lesson plan is covered (Teachers 3, 5)

Yet "whether pupils are provided with appropriate situations to communicate and generate language" was virtually ignored. To some extent this reflects that their

rule-governed view of language had not been uprooted, and is more so when they were asked what constitutes an effective English teacher:

- able to deliver what she has planned for a lesson (T8)
- able to plan and prepare well for lessons (T1, T3, T6, T8)
- able to set clear lesson objectives for lessons (T1)
- able to let pupils know what her requirements of them are (T3)
- able to know whether pupils learn and develop (T3, T5)
- able to make full use of the class time to involve pupils in learning (T3, T5)
- able to go through pupils' assignments and give feedback (T3)
- good in English, both spoken and written (T4, T6, T7)
- teaching approach activity-oriented (T2, T7)
- confident in teaching (T7)
- good presentation skills in delivering subject content knowledge (T6, T7)
- classroom language used and teaching materials suit pupils' level (T2)
- friendly and encouraging (T1, T2)
- able to expose pupils to different language environments rather than sticking to the textbooks (T2, T3)
- possessing a sound knowledge base of the subject matter – the English language system (T1, T6)
- good relationship with pupils (T1, T2, T6, T7)

These requirements drew on the participants' pre-training knowledge and teacher education knowledge, and also what they had experienced in teaching practice so far. In addition to the remarks made on entering the course - possessing sound subject matter knowledge and a repertoire of teaching techniques, not surprisingly, the qualities suggested the participants this time represented a wider coverage of what were required for an effective teacher in and out of the classroom. Some of them were

set at a level far higher than what the student teachers themselves could possibly meet, yet from the interviews the participants were seemingly working hard, aiming towards achieving these qualities. All but two expressed increased confidence in teaching as a result of improvement in presentation skills and spoken English, and an expanded cluster of teaching techniques and most importantly, a method to teach. They were also appreciative of the practical experience got from the Supported Teaching Practice, in particular the opportunities provided for the evaluation of their teaching and reflective practice:

The teaching practice helps build up my field experience in teaching. I keep on reflecting on what I've done in the class. Sometimes when a certain activity doesn't work, I'll find out what's gone wrong and improve it. Such process is constructive for gaining my confidence. On the other hand, peer discussion is also useful, too. The four of us practising teaching in the same school always sit together and share our experience, though we teach different subjects. (Teacher 1: 3rd int: 5/5/97)

Such pleasant experience deserves the envy of two “unlucky” ones – Teachers 2 and 8 - whose bitter experience somewhat shattered their confidence in teaching. They were placed at lower-band schools where the pupils lacked motivation in learning, and so were involved in continuous struggle for maintaining class discipline. Teacher 2 found herself barely able to introduce one or two games when the pupils were in good mood. Teacher 8 simply gave up the method the third day into teaching practice and resorted to the traditional approach – recalling how she was taught in the old days.

However, the major “confidence crisis” – linguistic incompetence - was still in place. All eight participants expressed much concern about their limited success in pushing up their own English proficiency despite a year's hard work on the course. Some even put the blame on the course, asserting the likelihood of having secured a

place among effective teachers had they built up for themselves a concrete foundation in the English language system:

My English is still weak, if not weaker than when I first entered the course. I don't think the modules on English Studies and Functional Grammar are useful for improving my English. I still make a lot of grammatical mistakes in teaching and marking pupils' essays. You don't know how embarrassing it was when the co-operating teacher pointed them out to me. Sometimes, even my pupils would tell me the errors I made in my instruction. (Teacher 7: 3rd int: 6/5/97)

3. Summary

The student teachers' knowledge of the subject contents during the Supported Teaching Practice is summarised in Table 6 (Appendix 9, p.232).

The above quotations clearly show that pre-training knowledge was less apparent when the student teachers taught, than when they discussed their teaching. To a certain extent that depended on how receptive the pupils were towards learning English in "natural" language environments. So far teacher education had had considerable impact but had not yet significantly altered the knowledge that student teachers brought to the course regardless of the similarity with which they carried out their instruction during teaching practice.

V. THREE MONTHS INTO THE FINAL YEAR

Course work in the First Term of the Final Year focused on introducing students to the idea of Task-based learning (TBL), an approach which builds on an understanding of the nature of language learning as an active and purposeful activity,

rather than a rule-based one. The focus of this part of the course was an extension of the student teachers' understanding of English teaching techniques, resourcing, assessment and planning within a task-based approach, and on preparing the student teachers for TOC (Target-oriented Curriculum). It was expected that through an analysis of English language learning tasks, the student teachers could develop an understanding of how basic English teaching techniques of the four skills they had learned in Year 1 could be integrated and how they could contribute to task-based teaching.

Earlier over the summer break all the student teachers took part in ELIPST (English Language Immersion Programme for Student Teachers), an activity sponsored by the British Council. The programme introduced student teachers to the British way of life and culture. It provided them with a full-time, four-week immersion experience consisting of time-tabled lessons taught in a tertiary institute and accommodation with an English-speaking family. Within the time-tabled lessons there were focuses on speaking and listening skills, study and practice of the language, cultural and educational visits, and a project on a local or international topic which gave the participants a chance to focus on presentation skills. The student teachers were expected to collect language rich materials and use them in their pedagogy in teaching practice and full-time teaching later.

Both ELIPST and TBL aim at developing in the student teachers an understanding of learning and teaching English as more than the controlled practice of grammatical structures but a natural process whereby language acquisition rather than just language learning is taking place. This is in line with what the teacher education programme advocates.

The interviews were conducted three months into Year 2, right after the TBL module, and the findings are described below:

1. Content

Regarding ELIPST the participants reported they had enjoyed the programme. Staying with the host family, going to the pub, making cultural visits all brought them new insights into the British customs and traditions, and its way of life. In fact, a week into the programme most noted an increase in spontaneity in their spoken English, much different from their practice before the programme when everything they wanted to say would have to be translated in their mind from Chinese into English first:

Everything I came across was in English, the lessons, visits, nightlife, going to theatres, at “home”. Sometimes I even dreamt in English. Initiating conversations with “kweilos” wasn’t such an uneasy job for me anymore. (Teacher 1: 4th int: 14/1/98)

The experience itself was not without anxieties – homesickness, life style, food - but language-related anxiety was not the main factor in the lives of the student teachers during the immersion programme. Various coping strategies were mentioned but they ranked communication the most successful one:

The landlady’s husband is quite friendly and sometimes we had a chat in the living room downstairs. It’s not easy for me to follow what he said ‘cause he told me he’s got quite a strong Geordie accent. It’s an interesting experience to be exposed to different accents. (Teacher 4: 4th int: 15/1/98)

Sure, I felt homesick! Fortunately, the people I met there were extremely friendly. They would like to talk to you even though they don’t know you. I noticed that they tended to slow down when they were speaking to me, especially the host family. They never corrected my mistakes but would sometimes repeat my expression in a correct way. They would also come in when I couldn’t think of a word or a phrase. You know, I never knew what it

was all about if they were talking among themselves. (Teacher 6: 4th int: 19/1/98)

To most of the student teachers whose English was learned in formal contexts, the six-week immersion programme was probably an unprecedented experience since a considerable amount of time was spent on interacting with native speakers in informal/naturalistic situations.

The participants remarked that towards the end of the programme, they understood language in a much wider sense, mainly as interpersonal communication involving meaning but not rules. Evaluation feedback collected from the Centre tutors showed a remarkable improvement in student teachers' fluency in spoken English. Teacher 3 was one of those convinced of the idea of learning English in a natural context:

By the time the programme came to the end, my spoken English was at an all time fluent. I can tell even our Band 5 pupils would improve much if put there for a couple of months. (Teacher 3: 4th int: 12/1/98)

Her feeling was shared by Teacher 6 (4th int: 19/1/98), who reported having full confidence in her own spoken English upon her return from ELIPST. But in the interview three months after, she had already lost her spontaneity.

As for the time-tabled lessons, language teaching methodology was not the main focus, but rather, enhancement of English competence took up quite a large proportion of the class time. The materials offered by different Centres varied: from those aiming at expanding participants' vocabulary power to improving accuracy in pronunciation, and from revisiting tenses to the appreciation of language arts. All these were done through meaningful and motivating activities. The participants were

particularly interested in the assignment, for which they had to conduct a small-scale study in the form of a project on a local or international topic. Teacher 2 was still excited about it during the interview:

I did a video project on the Dance Festival organised by the City Council there every summer. To me exploring the history of the Festival in the library, interviewing dancers from different countries, people from the audience and those in the streets to find out how they felt about the Festival was all new experience to me. In one of the interviews, the mum of a family of three invited me to their home for lunch on the following Sunday. I've never learned English in that way. It's a great feeling! (Teacher 2: 4th int: 14/1/98)

Thus by the start of the new semester they all brought back to the campus a new level of conceptualisation about learning and teaching English in relation to natural contexts. In designing tasks for the TBL assignment, they made less use of their pre-training knowledge but more on the ELIPST experience and TBL concepts, as they attempted to involve pupils in different kinds of activities, using different kinds of materials and language, playing different roles and achieving different learning outcomes. But when asked how successful their plans would be if implemented, most expressed doubts about their feasibility and practicality in local language classrooms.

2. Learning and Teaching English

All the participants admitted that while ELIPST was still fresh in their minds, in working out the tasks, assumptions were made that their pupils should, to a certain extent, be provided with a learning environment similar to that of an English speaking country, and so the activities designed were meant to promote language used in natural interactive situations. The assumptions made were in line with the

characteristics of TBL, which emphasises real life tasks, integrated use of language skills, formative assessments, communication and application, and problem solving.

However, the participants were quick to point out the wide gap between the two learning environments:

The activities organised by the Centre were effective in enhancing our language competence. But I wonder how we can make use of them - cultural visits, staying with a landlady, going to theatres – in Hong Kong. (Teacher 4: 4th int: 15/1/98)

Some of the activities done during the time-tabled lessons were interesting, such as working out vocabulary families in pairs. I might consider making use of these activities with some modification in the coming teaching practice. But still it's a different story when you have to handle a big class of forty pupils. You know there were only twelve of us in the group when we were on the Immersion Programme. (Teacher 8: 4th int: 12/1/98)

Concerns about the impracticality in implementing TBL to local language classrooms were also raised. Among those who had reservations was Teacher 5:

I don't think the teachers are prepared for it. Designing their own language tasks for pupils and at the same time abandoning the course books they are using is too challenging a job for teachers. I'm also concerned about the lack of resources, and the absence of a language learning environment in Hong Kong. It's true that Hong Kong is a metropolitan city and there're lots of expatriates working and staying here. But how often do our pupils meet them and talk to them, very seldom I would say. (Teacher 5: 15/1/98)

Her view was echoed by Teacher 4:

Topic-based or project-based approach is not a bad idea but I don't think the teaching practice school will allow me to implement TBL. Spending two to three weeks on a single topic would never be acceptable to teaching practice schools. We have to stick to its time-table, which means different topics and different skills to be taught on different days. (Teacher 4: 4th int: 15/1/98)

3. Summary

The student teachers' knowledge of the subject contents three months into the Final Year is summarised in Table 7 (Appendix 9, p.233).

Three months after the student teachers' return from the United Kingdom, the range of language functions which they conceptualised from their exposure to the British culture during the Immersion Programme were gradually reduced to that of language performing a pedagogical function again. They now all understood more the benefits that learning a language in natural contexts could bring. Yet most of them found it difficult to relate the learning processes of ELIPST to the learning processes of Hong Kong. They now had a more cognitive view of language, with an emphasis on pupils' interest and motivation. But owing to various constraints, such as local language teachers' heavy workload, large class size, inadequate resources, having to stick to the existing curriculum of teaching practice schools, a decline in the English proficiency of Hong Kong pupils and most crucial of all, a lack of a favourable environment for acquiring English, in preparing for the second placement, the student teachers admitted the practical need for going back to the old way of manipulating pupils' learning from the outside, with an emphasis on structures and forms, at the expense of pupils' contribution to their learning process. Thus the shift to what seemed a behaviourist view of learning in the student teachers' pre-training knowledge to a more cognitive oriented position was short-lived.

VI. THE FINAL TEACHING PRACTICE

Course work in the Final Term of the Final Year focused on preparation for a 6-week period of Block Teaching Practice. The student teachers were prepared with skills in observation, analysis, and evaluation of live and video-recorded lessons. These skills were essential for peer coaching and self-reflection during the Block Teaching Practice, which demanded capability in problem-solving, communication and reflective practice.

During the Block Teaching Practice, alongside the further acquisition of learner knowledge and application of pedagogical knowledge and skills, again each student teacher was engaged in the expansion of teaching repertoires and meta-cognition through writing journals as part of the requirements of the practicum. The supervisory school visits provided support in classroom teaching.

1. Content

The interview protocols of the Block Teaching Practice showed that the classroom practices of the eight participants remained more or less the same as those of the previous field experience. Though ELIPST and TBL, which advocate natural learning in and out of the classroom, were able to cause much impact on changing the student teachers' thinking about English, and the learning and teaching of English, the two programmes had not significantly altered the way they approached their lessons. The large class size of local schools and the cultural differences limited the use of what had been brought back from ELIPST, while the skill-based curriculum of teaching practice schools also restricted the implementation of TBL.

2. Learning and Teaching English

Despite the homogenising effect of the “Institute method” on student teachers’ performance, the fact was that, during the Block Teaching practice, the student teachers still made use of different kinds of knowledge about the dynamics of teaching and learning English. To a considerable extent these variations were rooted in their pre-training knowledge. For example, since the Institute method governed the sequencing of the activities, the scope of manoeuvre the participants had within this method was in the choice of the activities to be implemented. For those unlucky ones who were placed in lower-band schools, their deep-rooted pre-training beliefs prevailed. They professed the need for low achievers to revisit the basic grammatical structures and re-focus on the basics such as vocabulary building rather than being thrown into the deep end of a pool – immersed in natural language environments.

Teacher 5 saw the problem:

I really want to teach in a lively way and make the classroom a communicative one. But the passage is so full of unfamiliar vocabulary to students. I have to explain the vocabulary items to the pupils one by one but this is boring. I designed some communicative games in the first week of teaching practice but now I’ve given up the idea. What games can pupils play if they don’t even understand the passage? After TP last year, I promised myself I wouldn’t teach in a “chalk and talk” way again. But now I’m afraid I have to eat my words. (Teacher 5: 5th int: 24/4/98)

Teacher 3, placed at a school with students of average level and less restrictions on her choice of curriculum and materials, was in the position in which she could continue to explore the happy time she had had in the English classroom back in her own school days. Several times in the teaching practice she achieved some success in introducing to her pupils language arts - songs and poems. More than ever, she saw how difficult it would be to reconcile her ideas about language and the limited

possibilities that a secondary class can offer. For example, at the same time that she emphasised the poetic function of language, she undermined the possibilities that secondary classrooms allow for the teaching of languages:

The more I teach the more I wonder how much an English teacher can do. While most of the other subjects are taught in Chinese, you can tell to what extent students will use English once they are out of the English classroom. Language activities outside the school are not that encouraged or supported as most schools consider pupils' safety too heavy a responsibility to bear. And there are the parents to handle. They want to see their kids doing homework after school, no matter how mechanical the exercises are. They think doing projects doesn't help their kids learn English well because not much emphasis is put on the learning of language structures. (Teacher 3: 5th int: 22/4/98)

As a way of bridging the differences between classroom and natural settings, and successfully reproducing a natural process in the classroom, during the Final Teaching Practice Teacher 3 tried to go through the topics in the textbook she had been asked to cover and whenever possible wandered off track by creating situations whereby her pupils could learn in a natural setting. Such strategy was also employed by Teacher 2 in her teaching. For the second time in two consecutive teaching practices, she was allocated the weakest class in a lower-band school. This time, she was given complete freedom in using whatever approaches she favoured as the co-operating teacher had already given up hope: "To these lazy pupils, different strategies would not make any difference. They won't even be interested in listening to the most simple grammatical rules, not to mention playing games". Teacher 2 decided to take a risk, something she had not even dreamed of doing in the First Teaching Practice. In her first encounter with the pupils, she put aside the grammar exercises prepared by the co-operating teacher, and turned the classroom into a more natural setting by introducing some fairly simple communicative activities related to topics they were interested in. The feeling she had towards her "breakthrough" was that "the pupils had

nothing to lose. They shut their ears to the boring grammatical structures but enjoyed talking about Michael Jordan and Beckham” (5th int: 27/4/98).

In contrast, Teacher 7 contemplated the last teaching practice with a reinforcement of the ideas based on his own learning experiences, particularly that more emphasis should be put on developing language competence – understanding grammar rules – rather than on the practice of using language in different contexts. What concerned him, on the other hand, was not so much the limiting possibilities the rule-based approach had over the pupils’ learning, but the supervisor’s possible negative comments to be made on his failure in making the classroom communicative.

To these pupils who are weak in English, time can be better spent on enabling them to have more understanding of the basics. My teacher didn’t put enough emphasis on the grammatical structures, so the class time was wasted on pair-work or group-work activities when few of my classmates were really interested in doing. I don’t want my pupils to follow my footsteps. But I’m also a bit worried about the “Institute requirement”. The method we learned from the course is OK but it can’t be used with low achievers. (Teacher 7: 5th int: 22/4/98)

When it came to criteria for effective English lessons, the long list of items compiled in the first placement was reduced to something more specific and inclusive this time. To the participants the general aspects such as teacher’s voice or time management were no longer as crucial as the learning outcomes of the lesson – level of achievement of lesson objectives and the extent of real life application of the language learned, the two main characteristics of the Communicative Approach. Possible reasons conducive to such change in thinking could be, firstly, the student teachers’ realisation, from experience acquired over the last twelve months, of the impracticality of confining effective lessons to the long list of criteria to be met and secondly, their gradual understanding of how the Communicative Approach works

better than other approaches in preparing pupils for communicating with others in the real world, though such understanding was not yet reflected in their classroom practice.

Similarly, shrinkage was also found in the number of expected qualities required for an effective English teacher this time. Despite the cut in number a few new and substantial qualities were added which more or less showed one aspect of their pedagogy knowledge change:

- able to identify materials which are teachable
- involved in on-going professional development
- be reflective in teaching
- able to create good learning environment

As the student teachers were about to become full-time qualified teachers, half of them confessed a need for more preparation for the job: “We need more time for bettering our own English competence. We consider this a pre-requisite for an effective English teacher”, remarked Teacher 7 (5th int: 22/4/98), who once again referred back to something rooted in their pre-training knowledge. In contrast, those who expressed confidence in teaching considered their improvement in pedagogy quite significant, as illustrated in the following quotation:

I’m more confident in teaching in my TP this year. I have grasped the techniques in designing and using worksheets, conducting pair work and group work activities, chasing up those who don’t hand in their assignments, and linking different stages of a lesson. (Teacher 7: 5th int: 24/4/98)

3. Summary

The student teachers' knowledge of the subject contents during the Block Teaching Practice is summarised in Table 8 (Appendix 9, p.234).

During teacher education, the student teachers have progressed differently despite their similar behaviour displayed during teaching practice.

VII. INTERPRETATION AND DISCUSSION

The data collected from the student teachers have been useful in understanding their knowledge growth and cognitive change in the subject content which form part of the PCK development and the process of learning to teach. In the interviews conducted over different points of the teacher education programme they reflected not only on their activities during the course but also on their own learning experiences in the English classroom. Such thinking processes have enabled them to embark on exploring the theoretical aspects of the teaching profession starting from pre-service teacher education. This supports the findings of Boyd et al. (1998) and Kwo (1994) that even student teachers have the ability to think and reflect.

These eight student teachers implemented during the two blocks of teaching practice the method learned from the teacher education course, yet there were signs of resistance to it. As pointed out in the literature review earlier lots of research has shown that the methods and pedagogy introduced to student teachers in teacher education courses have little influence on their classroom practice even during pre-service training (Sugrue, 1997; Tillema, 1997). Researchers have come up with

different reasons explaining why student teachers find teacher education knowledge not particularly relevant or practical. For example, in this study though the teacher education programme is meant to prepare the teaching candidates to work with pupils of different abilities, most of the student teachers were assigned to teaching low achievers. Moreover, the relevant strategies and techniques required, according to these practising teachers, were not adequately dealt with in the programme. A lack of confidence in their own English proficiency also appeared to have caused much frustration among the student teachers in not being able to comprehend the complexities of orchestrating a classroom and limit their knowledge growth to a surface level. Thus, beginning teachers may have to base their teaching goals and the way they teach on their years of observation of their own teachers' practices, though not all of which are considered effective (Barnes, 1989; Pennington, 1990; Lauriala, 1997). On the other hand, research has also identified practical experience in the classroom as an alternative source of student teachers' knowledge (Marland, 1998; Shulman, 1986, 1987). The results which emerged from the findings of this study are multi-faceted since during micro-teaching and teaching practice, and also in working their assignments, the participants made use of different sources of knowledge. The data collected suggested that much subject content knowledge change took place during the course. Most of the student teachers seemed to have changed their incoming beliefs about English, and also the teaching and learning of English. These changes were related to the way they examined content, identified various representations and organised activities during micro-teaching and teaching practice. Evidence of behaviour change induced by the teacher education programme was shown in the similar lesson routines adapted by all the eight student teachers with little consideration of the different contexts, content, or pupils. Thus, the pre-service



teacher education programme had been influential in developing the student teachers' subject content knowledge and shaping their performance during micro-teaching and teaching practice. On the other hand, although the method learned during teacher education contributed to the elaboration of content and generation of representations, the student teachers who restructured their thinking about the learning and teaching of English still incorporated some aspects of their pre-training beliefs into their teaching repertoires. Their changes in thinking, in other words, were accomplished without changing their basic identities.

Arguably, although results seem to show the student teachers' common shift from a more structural approach to an emphasis on communicativeness in teaching English, this may only be superficial behaviour, which the student teachers may give up once they know they are no longer required "to be assessed". Some of their views expressed in the last interview supported this idea. Moreover, the student teachers responded to the teaching method learned during the teacher education course in different ways. While some found the method to be their only way to approach teaching but still included some ideas from the pre-training knowledge (Teachers 1, 3, 7 & 8), a few virtually gave it up and followed their prior belief – a rule-based approach in teaching English (Teachers 4 & 5). Teachers 2 and 6, whose confidence in teaching had yet to develop up because they considered themselves "linguistically deficient", simply modelled and copied the methods tutor's classroom routines without mentally confronting the concepts embedded within them.

Despite the considerable impact of the teaching method on the student teachers' behaviour during teaching practice, they completed the course with different kinds of knowledge about English, and the learning and teaching of English. For

example, some of the participants were still worried about their limited improvement in English proficiency while others considered a sound pedagogy would make up for their “weaknesses”. To some extent these variations had much to do with their pre-training knowledge.

In summary, the findings indicate that various factors contribute to student teachers’ thinking and knowledge change in the subject content during pre-service programmes. To enhance their learning process, it is important to find out which factors are more influential and whether more emphasis should be put on them. Their knowledge change in lesson planning and delivery strategies in the classroom will be discussed in the next chapter.

¹ Understood in this study as Cantonese – the spoken form of the Chinese language commonly used in Hong Kong.

² Pupils in Hong Kong are categorised into five bands according to their academic performance on entry to Secondary 1. Band 1 pupils are considered high-achievers and Band 4 and Band 5 low-achievers. Schools are also labelled by the public according to the Secondary 1 student intake – those allocated mostly with Band 1 pupils are considered Band 1 schools and so on.

CHAPTER FIVE

KNOWLEDGE CHANGE IN LESSON PLANNING AND INSTRUCTIONAL STRATEGIES

I. INTRODUCTION

The knowledge growth of the student teachers in the subject content is discussed in detail in Chapter Four. But having a solid subject content knowledge base is not enough for a teacher, as subject content knowledge usually is not taught in its original form as stored in the teachers' memory. A knowledge transformation is considered necessary. During the transformation, the teacher may elaborate on the subject content knowledge, identify various representations for the concepts, and reshape the knowledge into a teachable form to maximise its comprehensibility for student learning (Shulman, 1987). Wilson et al. (1987) suggest that because pupils are different in abilities, prior knowledge, and learning styles, teachers should be able to teach a concept in "150 different ways" (p.104). In order for a teacher to be able to teach effectively, the teacher should "possess a representational repertoire that consists of metaphors, analogies, illustrations, activities, assignments, and examples that teachers used to transform the content for instruction" (Wilson et al., 1987, pp.119-120). This chapter reports on the knowledge growth of the student teachers in lesson planning and instructional strategies during teacher education. It begins with a summary of the student teachers' pre-training conceptions of lesson planning and instructional rationales on entering the course. It then reports the findings of the data collected over five points of the course, which include descriptions of the relationship between the student teachers' instructional rationales and their teaching actions. The chapter concludes with interpretation and discussion of the findings.

II. ON ENTRY TO THE COURSE

At the outset, it is natural that student teachers with no teaching experience would tend to view lesson planning and instructional strategies from the learners' angle, as they have come from many years of classroom experience as pupils. The interviews conducted in the first week of the programme more or less show their superficial conceptions of lesson planning and the limited range of instructional strategies used in the English classroom.

1. Lesson Planning

Regarding developing lesson plans all the student teachers professed a lack of knowledge of how to proceed, but understood the extent of inter-relatedness between the way a teacher develops his lesson plans and the instructional strategies he employs. According to them a professional teacher "is one who sits down and thinks through all the processes to get to that product which you want your pupils to do", and that effective teachers should develop lesson plans for every lesson. Teacher 4 made some interesting remarks:

I think being a teacher is different from being an actor who is free to say anything different from the script. You can't go into the classroom without any preparation. Lesson planning helps you organise your teaching. So I think a teacher should develop lesson plans for every lesson he is going to teach. Then he will be able to know what he has to do in that lesson. If he's familiar with the lesson, he will be able to use more strategies to teach. (Teacher 4: 1st int: 7/10/96)

On the contrary, none of the student teachers supported the idea of teachers being bound by any agreed method. Some of the reasons they provided were:

In my opinion, different teachers could adopt different lesson routines because the students are different. Maybe some pupils need to be motivated first and then followed by other strategies. (Teacher 4: 1st int: 7/10/96; Teacher 7: 1st int: 9/10/96)

We shouldn't stick to the same method, we should make necessary changes according to the situation. So different people should have different ways of teaching. It's up to the individual teachers to decide what the best method for a lesson should be. (Teacher 6: 1st int: 5/10/96)

From the two extracts it is obvious that prospective teachers do not come to teacher preparation feeling unprepared. From years of teacher-watching in elementary and secondary schools, they have many ideas about what teachers do. However, thinking about teaching from a pupil's perspective is not the same as looking at teaching in a pedagogically oriented way. A major challenge for teacher educators is to help prospective teachers make a complex conceptual shift from common-sense to professional views of teaching.

2. Instructional Rationales

The student teachers did not deny their total ignorance of how to develop lesson plans and of any "Methods" teachers use in conducting English lessons, not to mention setting lesson objectives. However, they were able, probably from observation of practices of their own teachers, to come up with a few instructional strategies they thought would be effective if employed. These included: (a) creating a positive learning environment, (b) questioning and giving oral feedback, (c) modifying language use, (d) assessing pupils' understanding level, and (e) organising groups of students. The following examples highlight some of these strategies.

All the participants considered the creation of a positive learning environment as a crucial part of their pedagogy. As mentioned in Chapter Four, most of them resented their own learning experiences in the English classroom. Though they vowed to bring fun to their pupils in teaching practice as full-time English teachers, they were not able to suggest any learning environments apart from pair work or group work activities.

Another strategy for maximising learning was questioning and giving oral feedback. The participants were not short of reasons why questioning was needed, such as checking pupil understanding and keeping pupils involved in the lesson, but failed to suggest any questioning techniques. On responding to pupils' answers, their main concern was "not to discourage pupils from putting their hands up again". They put equal emphasis on the content and the accuracy, knowing that grammatical errors were inevitable in pupils' answers.

I think the pupil would feel embarrassed and hurt if I told him right away that his answer is wrong. I would ask him to sit down first and then explain the mistake to the whole class. I think the pupil will know that he has given a wrong answer. (Teacher 3: 1st int: 6/10/96)

I will focus on the content more. Many pupils make grammatical mistakes in answering teachers' questions. I won't correct the grammatical mistakes one by one. This is time consuming. I'd prefer spending another lesson on the common grammatical mistakes pupils' made, if there're too many of them. (Teacher 8: 1st int: 8/10/96)

Another common strategy was to do with the teachers' language use. Some of the participants pointed out the importance of slowing down the speed of teacher talk. The message Teacher 7 got from teaching a Form 1 remedial class in a private institute prior to teacher education was clear - "if the teacher doesn't speak slower, the pupils will just shut their ears" (1st int: 9/10/96). On the other hand, for an English

lesson to be effective, most student teachers opined that Chinese had to be used, especially in teaching junior secondary pupils or low achievers:

I think an appropriate amount of Chinese should be used to suit the level of our pupils. Lower-band pupils definitely find it difficult to follow a lesson conducted in English. (Teacher 1: 1st Int: 9/10/96)

These student teachers also expressed the importance of assessing pupils' understanding level in the learning process. For successful teaching to occur, they emphasised, the teacher must be able to detect pupils' misunderstanding of the subject matter. Among the strategies the one which most of them resorted to was asking questions. Only those from Teacher 8 seemed to have a wider coverage:

From pupils' behaviour in the classroom and also their performance in the assignments. I can tell they can follow the lesson if they are keen to participate in the activities. I can also tell from their answers to my questions if they actually understand what I am talking about. (Teacher 8: 1st int: 8/10/96)

In addition, conducting pair work or small group activities was also a significant portion of their instructional rationales. Recalling from their own learning experience as pupils, most students favoured using grouping strategies to increase pupil involvement and participation, and to enable pupils to practise using English:

I think pupils will not be able to practise if no group work or pair work is conducted. Discipline may be a problem but we can think of other strategies to deal with it. (Teacher 2, 1st int: 6/10/96)

3. Summary

These are the conceptions of lesson planning and instructional rationales held by the student teachers as they began teacher education. Table 9 (Appendix 9, p.235) presents a summary of their perceptions most of which were rooted in their pre-

training knowledge – their own learning experiences. Data gathered from the interview protocols was clear - the student teachers have some ideas about teachers' use of instructional techniques but know little about how to plan English lessons. The range of instructional strategies suggested by these student teachers is quite narrow and their understanding of these strategies superficial.

Relationships between the student teachers' conceptions in lesson planning, their instructional rationales and actions in the classroom have yet to be established at such an early stage of teacher education.

III. THREE MONTHS INTO THE COURSE

In the first three months of the course, the student teachers were introduced to “a method” in the methodology module the emphasis of which was on the Communicative Approach in language teaching. To enable them to put theory into practice, micro-teaching workshops were arranged for which the student teachers had to plan lessons for teaching the four language skills and try them out in turns, with twenty minutes given for each skill, with their fellow student teachers as “pupils”. The interviews conducted focused more on their conceptions of lesson planning and instructional rationales than their classroom action, as the time given for each session of micro-teaching was too short and also the “pupils” did not resemble those in the real classroom. Thus the data collected included how teacher candidates approached the lessons, why the plans took the form they did, what instructional strategies they would use in conducting the lessons in micro-teaching, etc.

1. Lesson Planning

In approaching lessons, all the participants followed the format of the Communicative Approach learned from the methods class – Presentation, Practice and Application. The lesson routine began with the teacher presenting the target language structures and functions, followed by pupils practising the patterns in different ways, and concluded with pupils applying, through communicative games and activities, what they had just learnt in a variety of contexts provided by the teacher. Interestingly, the plans developed showed a total abandonment of the participants' advocacy on entry to the course – different formats should be used for different lessons, depending on the level of the pupils, the content to be taught and the teachers' own preferences. The words of Teacher 3 and Teacher 8 could perhaps reflect what all the participants had in mind:

Yes, teachers should use different formats for different lessons. But I can't think of any others except the method I've learned from the methods course. I think it works provided I can design some interesting and motivating games for my pupils. (Teacher 3: 2nd int: 16/1/97; Teacher 8: 2nd int: 15/1/97)

Thus in developing the lesson plans, the "Institute Method" was closely followed. Interestingly, the processes the student teachers adopted in working out the plans were also more or less the same. Most started by deciding which language structures or functions should be introduced to pupils. Then they looked for relevant activities for the different stages of the lesson before sitting down to write. Activities which do not fit in a particular stage nor coherent with the other parts of the plan would be dropped and replaced. At such an early stage designing original activities was still beyond the ability and knowledge of the student teachers. Inevitably, some chose to adopt the exemplar activities provided by the methods instructor, others

simply searched for suitable ones from course books or reference materials. Most of the planning time, as revealed in the participants' reports, was spent on looking for activities and "inserting" them into the different stages of the lessons with little or no modification. In choosing relevant activities the following criteria were set by the participants:

- whether the activity suits the level of the target pupils (Teachers 3, 4, 7, 8)
- whether it helps pupils practise the target language patterns (Teachers 3, 7, 8)
- whether it is too complicated to conduct, as that would cause management and disciplinary problems (Teachers 2, 3, 4, 6)
- whether it is interesting (Teachers 1, 5, 8)
- whether it involves pair work or group work practice (Teachers 2, 5)

To a very large extent the criteria set above were closely related to their major concern in planning, as reflected in the following excerpts:

I'm concerned about whether the activities can arouse the interests of the pupils - whether the beginning of the lesson can motivate the pupils, whether the game in the Application Stage is interesting to them or not. I keep on asking myself if I were one of the pupils, would I be interested in them? (Teacher 6: 2nd int: 14/1/97)

My concern is whether the activities would cause management problems. For example, in the original design the second activity in the Practice Stage requires the representative of each group to come out to the front of the class to find the answer cards. But I was afraid such arrangement might cause disciplinary problem. So I decided that the cards would be passed to the pupils instead. (Teacher 1: 2nd int: 15/1/97)

Though most of the objectives were clearly set, no mention was made about how the activities were related to the objectives of the lessons, and the extent these activities would enable pupils to achieve the objectives. Yet most participants were proactive in anticipating possible problems in plans to be implemented. These

included problems in classroom and time management, in motivating pupils and giving clear instructions, etc.

The student teachers' expressions of anxiety more or less revealed their confidence crises in implementing the plan. Alongside their acquisition of some new terms, ideas and theories in the first semester of their professional preparation, concern was raised about how these would be tied into their subsequent classroom actions. Some felt strongly that they were missing out on learning "the mechanics of actual teaching", as will be discussed in the next section.

2. Instructional Rationales

From the interviews, it was noted that the subjects' belief that getting pupils motivated was crucial for an effective lesson remained unchanged. A variety of motivational strategies were mentioned which were developed side by side following the sequence of the activities. Though most of the ideas came from the methods course, there were examples of well-adapted ones. In getting their lessons started, they would:

- make use of something pupils fancy – referring to their favourite singers or movie stars (T3, T8)
- play a game – "labyrinth" or "Simon Says" (T2, T4)
- create a situation – a tourist asking for direction (T 6)

In presenting topic contents or ideas, again a range of delivery strategies would be used. Examples included:

- chanting cartoon pictures to illustrate a dialogue (T4, T7, T8)
- showing pictures to introduce the names of different places in Hong Kong (T2, T6)
- using charts and word cards to supplement teaching the ideas of comparison (T3)
- using real objects (mobile phones) to present a telephone conversation (T1, T5)
- getting pupils familiarised with the target patterns by having these patterns presented to pupils as many times as possible supported by lots of examples (T1, T3)

Questioning and providing oral feedback remained two of the most common instructional strategies suggested by almost all the student teachers. In assessing pupils' responses to questions, their prior belief in giving equal weightings to content and accuracy remained unchanged.

A crucial but less-discussed topic by the participants was their incompetence in implementing alternative strategies. In the earlier discussion of pupil motivation and presentation of the subject content, it was noted how the participants came up with quite a number of strategies, based on the suggestions and examples provided by the methods tutor. But altering teaching plans requires monitoring pupils' understanding and motivation, and making in-class instructional decisions, the kind of skills which were beyond the grasp of the student teachers at this stage of their teacher education. It is evident from the following excerpts that concrete alternative strategies from the student teachers had yet to emerge:

- management and disciplinary problems –

I don't know what I should do. I may walk around the class to let pupils know that the teacher is there. (Teacher 8: 2nd int: 14/1/97)

I will let them know before class that they should listen to the teacher's instructions. Otherwise they will be punished. (Teacher 3: 2nd int: 16/1/97)

- problem in giving clear instructions

I don't know what I should do if pupils don't know what I'm talking about. Maybe I'll conduct supplementary lessons or maybe I'll use Chinese. (Teacher 6: 2nd int: 14/1/97)

My spoken English is weak. I don't know what I should do if I'm placed at a Band 1 school. I know I won't be able to give clear instructions. The pupils will laugh at me because they may speak better English than me. (Teacher 2: 2nd int: 13/1/97)

- problems in managing time

If there's too much time left, I'll give pupils more exercise to do. (Teacher 4: 2nd int: 14/1/97)

If there's too much time left, I'll ask the pupils if they have any questions. (Teacher 5: 2nd int: 16/1/97)

In assessing their pupils' understanding level in the learning process, as in the earlier discussion, the participants relied more on pupils' oral or written performances, rather than their own observation. They suggested several strategies, such as eliciting answers from pupils, checking answers on the completed worksheets, marking assignments, and finding out pupils' performance in pair work or group work tasks assigned to them. For example, Teacher 3's remark, "I would collect pupils' worksheets and mark them. I think their work can tell me accurately if they really understood what I said in the lesson", clearly shows the kind of concrete evidence that the student teachers were seeking, and their failure to recognise the limitations of remedial work should pupils' inadequate understanding of the subject matter be detected only after all the assignments were marked.

3. Summary

In their first attempt at lesson planning, most of the participants, if not all, chose to play safe. They followed the method closely, made use of the exemplar activities suggested by the methods tutor, and looked for relevant activities from various sources of materials. While one or two made an effort to elaborate on the materials obtained from various sources, the rest took the “short cut” by placing the activities directly extracted from reference materials, with little or no modification, into the different stages of the suggested lesson routines. Such practice was quite common among novice lesson planners and understandably, there was limited choice for them as the method was the only approach they were familiar with. To a certain extent, their change in conceptions, from “different lesson formats should be used in different lessons” held on entering the course to “adhering to the same format” as they were preparing for micro-teaching, could be considered as a general pattern of knowledge development in the process of learning to teach. The student teachers’ conceptions of lesson planning are summarised in Table 10 (Appendix 9, p.236).

Regarding instructional strategies, again the student teachers were skilful in making use of what was learned from course work. A number of strategies were employed for motivating pupils right from the beginning of a lesson and for delivery of subject content, as bringing fun into the classroom was their major concern (see Table 10, Appendix 9). However, when it came to unexpected situations for which coping strategies could not be directly extracted from the methods class, the student teachers were somewhat stuck at the middle. That may explain their failure in generating feasible alternative strategies for the dynamic and unpredictable language classroom. Obviously, at this stage the student teachers were skilful in imitating what

was passed on to them in the methods class but not yet able to construct appropriate strategies for effective implementation of the activities planned. Not surprisingly, some wanted to go into the classroom to watch teachers and pupils in action – learning to look at and to relate things – and to see actual teaching in relation to lesson plans, and an instructional programme beyond following the textbook.

IV. THE FIRST TEACHING PRACTICE

In the Supported Teaching Practice the student teachers underwent a 4-week practicum experience during which they were engaged in trialling of the pedagogical knowledge and skills learned from the course. Data collected at this stage include pre- and post-observation interview transcripts, reflective journals, field documents such as lesson plans, video recordings of the lessons observed, etc.

The student teachers were placed at different types of schools, with pupils of different abilities. Before the placement, some reported self-doubts in their own knowledge and competence and in their relationships with students. A few felt “panicky” as they were expected to do whole class teaching and their prior experience only extended to small group work – teaching fellow student teachers during micro-teaching workshops.

1. Lesson Planning

During the first field experience the practising teachers were required to develop lesson plans for each of the lessons they were going to teach. In preparing for

the lessons most reported working under various constraints – the relatively short time between being told which topics to cover and actual teaching; the subtle influence exerted by the Institute supervisor to model his current practices; the limited knowledge they had about the pupils; having to conform to the ideas of the co-operating teacher whom the student teachers thought was in charge. It was under all these multi-faceted influences and pressure that they began the teaching practice. Despite their belief in the importance of autonomy, the student teachers' limited skills and experience in lesson preparation virtually restricted them from promoting their autonomy. Yet there was evidence of knowledge development in certain aspects of their skills in lesson planning as they proceeded through the first placement.

The “Institute method” most used in the micro-teaching workshops earlier was still fresh in their mind. All but one had no problem in blurting out unthinkingly the different lesson routines for the teaching of different language skills in a communicative way, “Presentation>Practice>Application for grammar lessons, Pre->While->Post- for listening, reading and writing lessons. Some were also quick in listing what could be done within the framework of these routines and how different stages of each format could be linked up and developed smoothly, as succinctly pointed out by Teacher 6:

The Motivation Stage should be interesting so as to involve pupils in the lesson immediately. Ideally it should be related to what the teacher is going to present to the class next. In the Presentation Stage, the target language patterns should be presented with as many examples as possible so that pupils can be familiarised with the new patterns. Then pupils should be enabled to practise the new structures as far as possible through choral practice and drills. If they are ready then it's time for communicative games. Pupils like playing games most. (Teacher 6: 3rd int: 9/5/97)

Not all shared her view. Within days after the First Teaching Practice had begun, some of the student teachers already found themselves struggling with the routines. The problem mainly lay in making the classroom a communicative one. The method they followed advocates a meaning-based approach in teaching. To achieve this, pair work and group work games with information gap had been proved to be effective. However, their limited repertoire of teaching techniques, coupled with the tightly packed syllabus, pupils' low motivation in learning, the co-operating teachers' traditional practice, etc. all made it difficult, if not impossible, to implement the method. Those teaching in lower-band schools were most hard hit. The lesson plans shown to the Institute supervisor displayed the recommended formats. But as Teacher 4 pointed out,

My lesson plans were developed following the routines suggested by the methods tutor. But I found it difficult to follow them closely. Sometimes I had to cut them short, depending on the pace of the lesson. Conducting communicative games makes me exhausted. Imagine when most pupils in the class became restless. What you could do is to yell and shout. It seems as I were in the middle of a battlefield. Pupils aren't used to them. They said their teacher had never conducted this kind of activities before. (Teacher 4: 3rd int: 12/5/97)

Effective implementation of games and activities requires skills in the teacher's design and adaptation, knowledge of the interest and ability of the target pupils, techniques in giving simple and clear instructions as well as in making improvisation in class. All these were beyond the firm grasp of the participants, most of whom, during the first field experience, chose to follow the method and made use of games and activities directly extracted from resource materials without little or no modifications.

Despite her enviable biography – taught by native English speaking teachers – Teacher 5 was totally indifferent to the method, and her view was reflected in how she developed her lesson plans:

I simply follow the steps in the course book. I may not bother motivating pupils. What's the use of playing an audio or video tape for two minutes in the beginning of the lesson while you have to spend hours to prepare the material. As for the Communicative Approach introduced in the methods class, some have already slipped from my memory. I don't think we need to stick to any format in planning. What's wrong with following the steps in the course book? (Teacher 5: 3rd int: 29/4/97)

Having considered the difficulty in turning the language classroom into one which approximated the real world, some of the participants developed fairly soon a conception of the field experience as an assessment task. In planning their lessons, a series of “professional actions” considered worthy of credit in their assessment were identified, among which one common strategy was departing from what was considered by the Institute supervisor to be well developed lesson routines whenever the situation allowed. What they did was to focus again on the first two stages of the plan - presenting the new language patterns and conducting language drills, which were to them more manageable, leaving little time for the last stage on games and activities.

No sooner had the student teachers settled in their teaching practice than some began to understand why their own teachers' practice had been “far from impressive”, and that bringing fun to English lessons was something easier said than done.

Despite taking this “short cut” most student teachers maintained their prior conception of acknowledging the importance of preparing lesson plans for every lesson. On the one hand, they expressed great anxiety about the heavy workload

exerted on them during the teaching practice, yet none of the student teachers reacted negatively against the requirement to develop lesson plans for every lesson they had to teach. From the interview conversations it was obvious that their total acceptance of what was demanded of them had less to do with their passive tolerance of Institute requirements than getting themselves more familiarised with what they were going to teach. Teacher 6 was one of those who spent much time in preparing detailed lesson plans. She believed that she must “decide what am I gonna teach, why am I gonna teach it, then how am I gonna teach it”. Her belief was shared by Teacher 8, and in presenting her personal teaching file to the Institute supervisor, she added:

I won't be able to know what to do in the classroom without the lesson plan. In preparing for the lesson the teacher at least has to think, design and go through the different parts of the lesson. So chances of going off track will be minimised. (Teacher 8: 3rd int: 9/5/97)

During the First Field Experience, despite a few complaints about having to burn the mid-night oil when developing their lesson plans, the student teachers acknowledged the usefulness of being given a chance to test the adequacy of their plans and to discover the ubiquity of unforeseen events in teaching. They learned much about the relationship between planning and teaching.

2. Instructional Strategies

Data that emerged from pre- and post-observation interviews reviewed the schema change in the student teachers' instructional rationales as a result of the practical experience gained from the First Field Experience. From observing their peers' classroom practices, not only a wider variety of strategies for motivational,

instructional and delivery purposes, but also a few new alternative strategies for coping with unexpected classroom situations were revealed. Though the employment of these strategies was not always effective and in fact, there were occasions of inappropriate use of some of them, the field experience did lead them to a state of increased confidence in handling different classroom situations. Instructional strategies used by the participants during their placements included: (a) bringing fun into learning, (b) leading pupils in, (c) using diverse delivery systems, (d) enabling pupils to derive language rules, (e) questioning, (f) providing error feedback, (g) modifying classroom language, (h) assigning specific tasks in class, (i) assessing pupil understanding, (j) implementing alternative strategies to enhance understanding of motivation, (k) praising and giving away prizes (Table 11, Appendix 9, p.237). The following examples highlight some of these strategies.

As before the student teachers' belief in the importance of motivation in learning remained unchanged. The idea is to get pupils involved in the lesson right from the very beginning. To achieve this, audio and visual impact was found, as in their own school days, to be effective. Strategies mentioned included using audio visual aids, word cards, popular cartoon figures, playing songs and poems, etc. Other motivational strategies not previously employed ranged from using speech bubbles on the white board in presenting a dialogue, and cracking jokes to "break the ice" while pupils were quietly completing tasks on the board or cleaning it. No all of these strategies were effective, as Teacher 5 reflected in the post-observation interview:

In preparing for this lesson, I thought inviting pupils to do a role-play in front of the class would be motivating. I had prepared different masks for the different roles. But they simply refused to put them on, fearing that their classmates would laugh at them. (Teacher 6: 3rd int: 30/4/97)

The video taping techniques could be a valuable means of enabling student teachers to develop an understanding of their cognitive processes and the ability to verbalise and think through what they are doing. In reviewing the lessons recorded, the student teachers were able to identify the aspects for which improvement was needed. One suggestion was that in working out the strategies, considerations had to be made regarding the pupils' ability and the class culture. Also in the implementation of the strategies, the student teachers found themselves adhering too closely to the original ideas without taking into account pupils' responses and the unexpected classroom situations. Teacher 7 was a bit upset that his motivational strategy did not work:

A pupil found her expensive calculator missing earlier and those sitting around her were asked to see the disciplinary teachers to help with the investigation. They came to the class late as I was telling the pupils an exciting story. Poor me! They came knocking at the door one after the other, and the attention of the whole class was directed to them. What could I do? I had to continue the story because it leads to the next part. But no one was listening to me. When viewing the video recording of my teaching on the screen I looked like an idiot talking to myself. (Teacher 7: 3rd int: 6/5/97)

Despite the "mishaps" that Teachers 6 and 7 experienced, an increased use of a wider variety of motivational strategies was evident. Another strategy not previously used was enabling pupils to derive language rules. In introducing new language structures there were successful attempts in enabling pupils to generate language rules instead of presenting the whole package to them. Teacher 8 introduced the use of the possessive pronoun "one" by asking "of the five bags in the picture, which one do you like most". In teaching pupils how to give directions, Teacher 4 provided the first part "Go along Nathan Road, take the first turning to the left, ...", and elicited answers such as "McDonald's is opposite/next to/on the right of the supermarket" by checking the street map. While Teacher 8's pupils had no problem in coming up with the target

pronouns, those of Teacher 4 encountered some difficulty in using appropriate prepositional phrases to indicate the exact locations of the shops, and alternative strategies were needed.

Some new strategies were also found in the student teachers' practices in questioning and giving oral feedback. When asked what questioning system they would follow in eliciting answers from pupils, most said they would target on those who had put their hands up first, but were not able to tell what they could do if they found no hands in the air. Teacher 5 who spent most of the class time on checking answers was skilful in calling names:

Well, some pupils raise up their hands. Others show me they know the answer by means of eye signals or facial expressions. I tend to call the names of these pupils. To save time sometimes I simply follow the names on the attendance list, or even their seating plan. (Teacher 5. 3rd int: 29/4/97)

In responding to pupils' wrong answers this time the student teachers not only mentioned the importance of not making pupils feel embarrassed and discouraged but also came up with a list of encouraging phrases, probably learned from the methods course, such as "getting near", "good effort, try again", "thanks for trying, perhaps another one could help", etc.

Extended use was also found in another strategy whereby a sense of "connectiveness" between the pupils, the target language, and the "real world" was created. The student teachers attempted to establish relationships between pupils' prior knowledge and English. They often made use of examples from their own lives and those of their pupils. For example, in a writing lesson, Teacher 7 (3rd int: 6/5/97) shared his own travelling experience with the whole class as one of the pre-writing activities preparing pupils for their essay on "An Unforgettable Trip in the Summer

Holidays". In introducing language items related to things to do and food to eat, Teacher 1 (3rd int: 2/5/97) referred to both Chinese and western festivals celebrated in Hong Kong.

One aspect of the student teachers' entry perspectives that underwent critical change was language used in the classroom. In the first interview earlier most student teachers recalled how they as pupils themselves had enjoyed the happy time in some English lessons when Chinese was frequently used as the medium in teaching and learning. Using Chinese to teach English, especially in junior forms, was totally acceptable to them. Surprisingly, in their first teaching practice the use of Chinese was kept to the minimum, though some of them reported being challenged ever since the first day of teaching for using too much English in class. Teacher 5 describes in the interview:

At the beginning of the first lesson, my F.1 class asked me if I would speak in Chinese or not. They were obviously disappointed because I used English to teach in the whole lesson. But after the class, I talked to them in Chinese. In the lesson that followed, I resorted to using some Chinese in explaining something abstract and complicated to them. Sometimes, the pupils would ask me questions in Chinese, but I would use English to explain. It seems to me that such mode of communication works. (Teacher 5: 3rd int: 29/4/97)

Those teaching in lower-band schools found it hard to set a bottom line for how much Chinese to use. Their pupils complained a total switch to the English teaching medium might further drive them away from the English classroom as they had been used to mixed-code teaching. To convince pupils, something these student teachers began to believe in became a difficult if not an impossible job to them. Interestingly, some reported having spent nearly thirty minutes explaining to their pupils, not in the target language but in Chinese, the importance of maximising their exposure to English within the confinement of the classroom. From the practical point

of view most admitted there was not much they could do to alleviate pupils' anxiety apart from slowing down their speed in spoken English and repeating and clarifying the places where pupils seemed stuck:

Basically, I speak quite slowly. I try to simplify what I say by using simple words. Whenever I find that pupils seem puzzled, I will repeat what I have said again. (Teacher 2: 3rd int: 5/5/97)

Another important strategy for maximising learning was assigning in-class tasks that involve pupils practising the four language skills through communicative games and activities. During micro-teaching practice earlier in Semester 1, the student teachers had acquired some experience in trialling in-class tasks but this time, these tasks were on a much larger scale regarding the number of pupils involved and their “connectiveness” with the “real world”. The teaching candidates were also encouraged to evaluate the effectiveness of task implementation and identify areas upon which improvement would be needed. Examples of in-class tasks assigned this time included: setting up a dialogue with the partner, group discussion to solve a problem, exchanging information, board game, competition, etc. Most of these were done through pair work or small group activities. Despite different levels of difficulty in implementation, these teaching candidates gradually recognised the effectiveness of grouping strategies on pupil involvement and participation, and the learners' appropriate use of the newly learned language patterns if the “Institute Method” were to be followed.

The comments made in the student teachers' reflective journal were not short of episodes of embarrassing moments. Yet the experience they got from the teaching practice so far in assigning in-class tasks was invaluable. For example, in reflecting on

her experience in conducting the activity the previous day, Teacher 3 could not stop laughing at herself. She wrote:

They had learned how to change statements into negative ones in the early part of the lesson, but not how to ask. How could they start the dialogue if none in the pairs could use the questions words such “*Does* or *Will* to ask? Obviously there was not enough preparation and instruction before the task. (Teacher 3: 3rd int: 8/5/97)

Embedded in this example is the beginning sign of in-depth thought in relating experience to their own situations displayed in the student teachers’ reflecting writing. Many entries, however, still consisted of largely global statements with little critical analysis.

Through classroom experience the student teachers were also enabled to develop strategies in assessing pupils’ understanding level in the learning process. Compared with their earlier experience in micro-teaching practice, during teaching practice the student teachers reported having more confidence in relying on their own observation in the classroom in assessing pupil understanding and the extent of remedial work needed. Teachers 2 and 4 described briefly their newly developed strategies:

In assessing pupils’ understanding, I’ll look at their facial expression. They will nod their heads to show that they understand what you’re talking about, but look at their books first and then at you if they want you to repeat. I don’t expect they’ll put up their hands in class. The day before yesterday a group of girls came to see me during recess telling me they couldn’t follow my lesson earlier on that day. Gosh! I can’t figure out what I can do if after every lesson, pupils come to ask me to re-teach that part again. I really need to assess carefully pupils’ understanding in class. (Teacher 4: 3rd int: 12/5/97)

Improvement in the student teachers’ observation of pupils’ understanding level does not necessarily lead to better implementation of alternative strategies. Research has shown that effective alternative strategies require efficient information

processing, in-class improvisational skills and good decision making (Kwo, 1994; Richards & Lockhart, 1994). Expert teachers have proved to be more effective and experienced in making interactive decisions in coping with the dynamic language classroom. The interview data collected during the first placement seemed to verify this - when facing unexpected situations, most of the student teachers failed to make appropriate in-class decisions. Teacher 7 was held up by the following situation:

It was a problem-solving activity which required pupils to negotiate in groups and find out who the murderer was. Each member of a group was given an information sheet about who the suspects were, their whereabouts, what they were doing around the time when the murder took place. Pupils were then supposed to provide information to the other members in turns. I remember when the methods tutor introduced the game to us, we had some exciting time in finding out who the murderer was. But I did not expect that the pupils would simply show the information sheets to one another and read the information on the desks, without having to say a word. At that moment I didn't know what to do. I wasn't able to come up with any alternative strategies. (Teacher 7: 3rd int: 6/5/97)

A final point of agreement involved praising pupils and awarding them prizes. The general understanding among the student teachers was that positive reinforcement is as important, if not more important, as the other delivery strategies. They were found to be generous in praising their pupils in and out of the classroom, and in giving away prizes to winners in competitions and games.

Seeing and doing are the dominant modes of learning for the student teachers during the first year of professional study, the means by which they come to understand what they are being taught. The programme provides numerous opportunities (structured and spontaneous) for observation and practice, and most learn from both.

3. Summary

The data collected from pre- and post observation interviews, journals and field documents provided a legitimate way to observe the student teachers' knowledge development during teaching practice. Video recording facilitated their reflections on their teaching. Accordingly, they developed the skills in lesson planning and instructional strategies on their own initiatives in response to their understanding of the nature of the identified problems. The student teachers' knowledge of lesson planning and instructional activities during the Supported Teaching Practice is summarised in Table 11 (Appendix 9, p.237).

The student teachers were given lots of practice in preparing lesson plans during the first field experience. To these novice teachers the amount of time and effort required for the planning work was enormous. Some admitted having to stay up late, especially during the first week of school experience. Despite the hardship most held to the belief that a well-prepared plan would be more likely lead to an effective lesson and so teachers should prepare lesson plans for every lesson they taught.

None of the participants, except Teacher 5, denied the usefulness of the Institute method for survival during the teaching practice. They were still familiar with the lesson routines for the teaching of speaking, listening, reading and writing skills used in the micro-teaching workshops earlier. As most schools adopted a skill-based curriculum, when the teaching practice began, these lesson formats were frequently referred to when the student teachers were planning their lessons. However, the process of lesson planning was not without limitations and constraints. Some student teachers were not told what topics they had to cover until a week before the

actual teaching practice, leaving them little time for preparation. The limited knowledge given about the pupils they were going to teach also created difficulties for their planning work. The worst scenario, according to those teaching in lower-band schools, was when the supporting teacher did not favour the use of the “Institute Method” as the communicative language teaching was considered not workable with low achievers. Torn between whether to model the methods tutor’s classroom practices or conform to the suggestion of the co-operating teacher, coupled with the problems that had arisen and difficulties found in implementing the method, and their inadequate knowledge in generating alternative ideas, very soon these novice teachers found themselves struggling against the obstacles to conducting communicative activities, and focusing more on the approach which was basically structural-based, and to them more manageable.

Similar to their practice in lesson planning, in reviewing the data collected from the student teachers’ use of instructional strategies, it is possible to trace agreement of the findings, in which both general patterns and variations of their knowledge development are included.

The student teachers underwent considerable change in instructional rationales as evident in their interview protocols and classroom practice during teaching practice. The field experience provided them with a variety of contexts and situations which made authentic use of instructional strategies possible, and the reflection on its effectiveness helped expand the student teachers’ repertoire of teaching strategies. On the whole, the student teachers’ instructional rationales were consistent with their teaching actions as observed in the classroom. A wider variety of instructional strategies were implemented during teaching practice. Those that aimed at motivating

pupils were effectively used in particular, though many a time these strategies were seen as extra gifts which might not be related to the other parts of the lesson. Obviously, more in-class experience was needed before the student teachers could make efficient interactive decisions and implement appropriate instructional strategies. During the post-observation analysis of the video-recorded lessons, most student teachers were able to identify the problematic strategies and make suggestions for possible improvement.

V. THREE MONTHS INTO THE FINAL YEAR

Findings of this section are based on each individual participant's assignment on TBL. Interview transcriptions focusing on the student teachers' conceptual change in lesson planning and instructional strategies in response to their participation in ELIPST over the summer break and the TBL module they had taken earlier in Year 2 were also taken in account. Both ELIPST and TBL aim at developing in the student teachers an understanding of language learning as more than practising grammar rules but a natural process of language acquisition. Thus three months into the Final Year of teaching education, the student teachers were expected to achieve a new level of conceptualisation about the teaching of English in relation to natural contexts.

1. Lesson Planning

Towards the end of the TBL module, the student teachers were guided to prepare their assignment. In groups of three they chose a theme and designed tasks

which last for 5 to 8 lessons for a class at junior secondary level. As the student teachers were planning for the assignment, they made much use of the ELIPST experience and the TBL concepts. They were aware of the importance of providing pupils with a learning environment similar to that of an English speaking country, and so the tasks designed were geared to promoting language used in interactive situations.

The themes chosen to work on were closely related to pupils' daily life, such as "Youth Problems", "Pastimes for Teenagers", and "Environmental Issues", etc. In working out these tasks, consultation sessions were scheduled once a week for each group to discuss what they had prepared with the tutor. Following the characteristics of TBL, the tasks were designed in such a way that emphasis was put on the application of real life experience, integrated use of the four language skills, communication and problem solving. Activities and language support exercises were set at different levels to cater for pupils of mixed ability in the same class. In planning for the tasks and activities, Teacher 2 was among those who recalled their ELIPST experience. She was impressed by the Centre tutor's approach in enabling participants to extend their vocabulary power. She managed to convince her group to include some vocabulary building activities in their plan. Similarly, Teacher 3's group also made considerable use of the materials brought back from ELIPST, and were proud of themselves for having worked marvels:

The topic we've chosen is "Pastimes for Teenagers". The tasks pupils have to complete are designing posters, exploring the types of pastimes most popular among the teenagers in Hong Kong and finding out how young people can benefit from pastimes more. We've designed some activities for pupils to accomplish the tasks, such as board games, group discussions, interviewing schoolmates, administering a short questionnaire, analysis of the data collected, presentation of group findings, etc. These are activities I've never thought would work with pupils. The emphasis is not just on language

structures but something more meaningful. The idea comes from the project I did during the Immersion Programme in the U.K. I think pupils will enjoy doing this kind of tasks. (Teacher 3: 4th int: 12/1/98)

Teacher 3's view was shared by some other groups, though with reservations. Teacher 5, who was never in favour of the idea of language and language learning as meaningful communications and problem-solving, was struggling hard, together with the other two members of her group, to work out something based on ideas which they themselves did not buy. Given all the constraints imposed on local teachers, few were convinced that the cultural activities such as visiting the pub or going to theatres would work in our English language curriculum. However, with some modifications they did make use of the in-class activities they were introduced to in the time-tabled lessons during the Immersion Programme. In planning the materials for the theme - "Environmental Issues", this group chose to give more weighting to the language support exercises which they thought would be crucial for enabling pupils' to cope with the language demand in completing the tasks.

We've spent two weeks on working out the assignment. The workload is unexpectedly heavy. We followed closely the guidelines and the requirements of the assignment. But we don't think it practical for full-time classroom teachers to put so much time and effort into preparing materials which could only be used for six lessons. As for the materials, there was a moment when we thought whether comparing the environmental problems of Hong Kong and the UK would make a good task. But very soon the idea was dropped. Considering the limited English environment our pupils are exposed to in Hong Kong as well as their poor English ability, our group decided not to set complicated tasks but rather, we've spent more time on setting language support exercises which I think will be more useful for helping pupils learn English and do the tasks. (Teacher 5: 15/1/98)

The student teachers' different approaches towards planning their TBL assignment has reinforced some common-sense notions about teaching as a practical activity. Much of what they say echoes the sentiments of experienced teachers: an

individualistic stance towards teaching, reliance on first hand experience, a belief that good teaching is something you have to work out in your own classroom. Though the student teachers chose to follow the TBL characteristics in working out their assignments, their belief in actual teaching was: “no one can tell you what to do; it has to be your own idea.” Nor can someone tell “whether your idea is good” until “you try it out in teaching or actually see someone using it” (Teacher 4: 4th int: 15/1/98). This partly stems from the fact that teaching occurs in a particular context, which perhaps explains why the participants were sceptical regarding the feasibility of the TBL and ELIPST notions in the context of the English classroom in Hong Kong

2. Instructional Rationales

Data collected from the interviews showed significant changes in the student teachers’ instructional rationales. Compared with that of TBL, the impact of ELIPST on the student teachers’ conceptions of effective implementation of classroom strategies was far greater. Most could recall vividly how they enjoyed not only the outings and visits organised by the Centre but also the time-tabled sessions in most of the class time of which the participants were kept busy in tasks. Teacher 4 mentioned how he was immediately led in the very first minute of class:

The Centre tutor started each of her lessons with a short but exciting language game. I think this is a good motivational strategy. Well begun is half done! I noticed that the participants were seldom late to the class. (Teacher 1: 4th int: 14/1/98)

Teacher 3, on the other hand, was impressed by the way her Centre tutor approached reading lessons. She considered her own practice in reading lessons in the

last teaching practice a total failure, as feedback from her pupils was quite negative. She never attempted to hide her eagerness for trying out the strategies her tutor employed, among which she noted the following in particular: “Involve the readers in the characters of the story, don’t let them just be bystanders.”

While the main focus of the methods course was on exploring theories and approaches of language teaching, the Immersion programme offered the student teachers insight into effective classroom practice through observation of their tutors’ action in the time-tabled lessons. Interestingly, though most of the strategies worked well with them, these participants from Hong Kong expressed doubts as to what proportion of them would be feasible or would take effect in their classrooms back home. For example, one of the Centres followed a Theme-based Approach in the time-tabled lessons and the theme for the second week was “the Battle Between the Two Sexes”. In one of the in-class tasks requiring the student teachers to explore the extent to which men and women enjoy equal status in different countries, the strategy used by the Centre tutor caught the student teachers by surprise. The traditional practice of collecting information from books and newspaper articles, was replaced by the student teachers’ interviewing a group of foreign language students from Europe and Africa from the room next door to get the information they needed. They found the strategy authentic and motivating, but were sceptical about the availability of English speaking people for classroom interactive activities in Hong Kong.

3. Summary

In lesson planning, as usual the student teachers inclined to follow closely the new ideas introduced to them on the course. Though the term TBL was not new to them, few student teachers were able to go deeper into its characteristics until the First Semester of Year 2. Without having to actually implement the materials in the classroom, in planning for the tasks and activities they simply chose to adhere to the ideas and concepts of TBL presented to them in the module, and made use of the materials from the projects, tasks or activities they had come across in ELIPST by fitting the appropriate ones into their plan. Few student teachers attempted to challenge the underlying rationale of TBL, which is central to the Target-oriented Curriculum (TOC) to be implemented to all secondary schools in Hong Kong in 2001, as they had yet to gain experience in trying it out. But the message from the last teaching practice was clear. With the heavy workload demanded of teachers in preparing materials and the rather low English proficiency of junior secondary pupils, they would expect a certain amount of resistance to TBL when implemented.

In terms of instructional strategies, the impact on the student teachers of what they had observed from the Centre tutors' practices during ELIPST was considerable. On the one hand, none was convinced of the practicality of the cultural activities in the Hong Kong classroom but on the other hand, they appreciated greatly the opportunities provided for observing, acquiring and reflecting on the Centre tutors' practices and the instructional strategies they used in the time-tabled lessons. In previous interviews, none had denied the importance of strengthening their instructional strategies which were adversely affected by their poor classroom English. But apart from viewing video-recorded lessons the opportunities allowed for

observation of real lessons were limited. Their instructional rationales underwent tremendous change during ELIPST though owing to differences in culture, classroom context, resources available, and pupils' English proficiency, they expressed reservations about the scope for employing the strategies in the schools in Hong Kong.

The student teachers' knowledge of lesson planning and instructional strategies three months into the final year is summarised in Table 12 (Appendix 9, p.239).

VI. THE FINAL TEACHING PRACTICE

The 6-week Block Teaching Practice took place in the middle of the Second Semester of Year Two. Each of the student teachers was placed in a school different from that of the First Teaching Practice so as to be exposed to different teaching contexts in the two teaching practices. This time not only was the duration of the field experience longer, but the number of supervisory visits was also double that of the First Teaching Practice. Such arrangement aimed at maximising the benefits that the Final Teaching Practice could bring to the student teachers before their enrolment as full-time classroom teachers.

Data collected at this stage were the same as those of the First Teaching Practice – journals, pre- and post-observation interview transcripts, field documents such as lesson plans, and video recordings of the observed lessons, etc.

1. Lesson Planning

The impact of TBL and ELIPST on the student teachers' curriculum and planning strategies seemed to have come to a halt with the commencement of the Final Teaching Practice. As mentioned in Chapter 4 (see V:3, pp.93-94), the large class size of local schools and the cultural differences between Britain and Hong Kong made it difficult for the student teachers to make use of the ELIPST experience, while the curriculum practised by most schools, the resources available and the mode of assessment also imposed much restriction on the implementation of TBL. When asked to what extent the ideas of TBL and ELIPST were exploited, Teachers 3 made the following comments:

So far, I've only been able to make use of the photos taken during ELIPST to introduce to pupils my travelling experience in the UK. The other materials brought back seemed to be too culture bound, such as tongue twisters, biographies of the famous British people, and the video recording of the project I did on "Dance Festival". (Teacher 3: 5th int: 22/4/98)

Thus most of the student teachers settled in the teaching practice by following what they had been told to cover. A few who were given the freedom of making curriculum decisions also chose not to trial TBL, which to them meant more workload in lesson planning and something about which they lacked a firm grasp. Basically, the main concerns of the student teachers in working out their scheme of work were more or less the same as those of the first placement. Most attempted to solve the problem of "whether there is enough time to cover the content assigned to teach" by "dividing the total number of lessons by the number of topics to be covered" (Teacher 8: 5th int: 21/4/98). Only when this was settled would they consider other aspects such as "pupils' previous knowledge" (Teacher 1: 5th int: 29/4/98), "whether to follow a receptive to productive language skills pattern in planning the scheme of work"

(Teacher 7: 5th int: 22/4/98), and “the availability of materials” (Teacher 2: 5th int: 27/4/98), etc.

In planning their lessons, most referred again to their practices in the previous practicum by following the lesson formats of the teaching of different language skills learned from the methods course in Year 1. However, a few unlucky ones, such as Teachers 4 and 7, were once again caught at the middle as the supporting teacher “strongly encouraged” them to make full use of the activities in the course book and the exercises in the practice book.

The influence the Final Teaching Practice had on the student teachers seemed to have caused little change in the way they approached lessons. Practising under various constraints, nearly all found themselves struggling and attempts at trialling out new ideas were limited to a few. Among them Teacher 5 had never been convinced by the Communicative Approach over the last two years. The lessons she planned showed a strong flavour of the Structural-oriented Approach relying basically on the teacher’s explanation of the target structures and Q & A in assessing pupil understanding and checking answers of the completed exercises.

In terms of curriculum and lesson planning, evidence of significant change in their thinking and knowledge were far from frequent. Basically, their practices were more or less the same as those in the first placement.

2. Instructional Strategies

While development in the student teachers' capacity in curriculum and lesson planning seemed to be limited by the various constraints imposed on them, they were comparatively free to re-consider their former conception of instructional rationales and make decisions on the use of classroom strategies during the second placement. In addition to the motivational strategies effectively used in the previous teaching practice, the student teachers displayed an expansion of their instructional repertoire to consider a range of strategies, among which some were ideas brought back from the Immersion Programme.

As in previous practices, these student teachers were particularly concerned about pupil motivation, the beginning of lessons in particular. The techniques employed built on what had proved to be effective in the last teaching practice, ranging from the use of audio-visual teaching aids such as pictures, postcards, photographs, songs and real objects, to miming and using OHPs. They were also able to elaborate further on another component of motivational strategies. In instances when pupils lose motivation, these student teachers mentioned the following as ways of restoring it: (a) using humour, (b) changing the focus, and (c) using classroom situations. The following was Teacher 8's experience:

To me motivating pupils at the beginning of a lesson is not too difficult, but keeping their attention throughout the whole lesson seems to be an impossible task. What I usually do is from time to time, I try to crack simple jokes, or make use of the classroom situation to re-direct pupils' attention to something else for a while. For example, the other day a clerical staff came to my class and passed a memo to me. At that moment, I turned the lesson into a guessing game. The one who made a correct guess of what the memo was about would get a prize. Immediately, all the pupils were involved. But to be honest, not all these strategies worked. I am not good at cracking jokes and my spoken English is not impressive. Sometimes, pupils don't know what the joke I'm telling them is about. (Teacher 8: 5th int: 21/4/98)

Apart from monitoring pupil motivation, from the data collected the conceptual change taking place in these student teachers' ways of assessing pupil understanding and implementing alternative strategies was also noted. In the earlier discussions, in checking pupil understanding the student teachers gradually built up their confidence in reading their pupils' facial expressions and body language instead of having to depend on concrete evidence such as pupils' performance in assignments, but even so most were unable to implement appropriate alternative strategies on the spot. This time the comments made in their reflective journals indicate an expansion in their repertoire of strategies implemented during the Final Teaching Practice. For example, in assessing pupil understanding, Teacher 4 wrote:

The teacher should assess pupil understanding from more sources. The more situations pupils are put in the more reliable it is for the teacher to monitor their understanding and progress. (Teacher 3, 5th int: 22/4/98)

On the other hand, the student teachers were able to suggest a few alternative strategies: (a) starting all over, (b) repeating concepts, and (c) changing sequencing of activities.

I noticed that the pupils were too quiet and didn't respond much to my teaching. So I moved the activity "Interviewing People" earlier to the middle of the lesson in order to give them a chance to talk. I think this can help activate them. (Teacher 3: 5th int: 22/4/98)

The pupils' voice was so soft that those sitting at the back couldn't hear a word they said. I had to repeat their answers many times. (Teacher 2: 5th int: 27/4/98)

Analysis of the video-recorded lessons and the comments made by the Institute supervisor, to a certain extent, were found to be useful in promoting reflective practice among the student teachers. These student teachers noticed some development in their use of some of the delivery strategies. For example, in presenting new language

structures to pupils at the beginning of a lesson, they now realised the importance of repetition of the target structure in getting pupils familiarised with them. Before asking pupils to practise using new structures, they also noted the importance of having the target language items put or written on the blackboard for easy reference. But despite these strategies, full-scale reflective practice of the strategies implemented, in particular in identifying shortfalls and making appropriate improvement, had yet to develop in these student teachers.

3. Summary

The student teachers' knowledge of lesson planning and instructional strategies during the Block Teaching Practice is summarised in Table 13 (Appendix 9, p.240).

As evident in the lesson plans worked out and the interview protocols, the student teachers' knowledge and conceptual change in lesson planning during the Final Teaching Practice seemed to have slowed down. Most displayed a great leap forward in the First Teaching Practice – starting from scratch and then having a method to follow in preparing lesson plans. History was unable to repeat itself in the Final Year of teacher education this time. The traditional practices of the teaching practice schools and various physical constraints imposed on the student teachers in the last Field Experience provided them with limited theoretical exploration of TBL and ELIPST in lesson planning. Most resorted to modeling uncritically the lesson formats used in the previous teaching practice. Such practice further highlights the

influence which their own school biography had on the student teachers' professional development.

Compared with lesson planning the student teachers were more able to expound on many elements of their instructional rationales during the interviews and in the journals, many of which were effectively implemented in their classroom practices. Building on those successfully used in the previous teaching practice, they managed to expand their repertoire of motivational strategies and implement alternative motivational strategies when pupils were found to have lost motivation. There were also beginning signs of alteration of the lesson plans in response to the awareness of the class, though in most cases their effectiveness was hindered by the student teachers' poor classroom English.

Despite the similarities displayed in lesson planning and instructional rationales in the Final Teaching Practice, the student teachers progressed differently. Two of them were still in agreement with their teaching principles – a structural view of language teaching – and so did not see the importance of reflecting on the use of instructional strategies. On the whole, as the end of the course was drawing near, full-scale reflective practice of classroom strategies had yet to emerge.

VII. INTERPRETATION AND DISCUSSION

During the two years of teacher preparation, the student teachers' knowledge of lesson planning and delivering instructional strategies progressed at different paces. While some made some progress in the transition to reflective practice, others seemed slow in making this conceptual shift. Some of the differences between these teacher

candidates relate to their personal biographies prior to teacher education, which differ in content, instructional setting, modes of supervision, and general ideology. Others have much to do with teaching practicalities. Thus, the data collected highlight the influence of personal history, formal preparation and teaching contexts in helping or hindering their knowledge growth and the transition to professional thinking.

To most of the student teachers, the world of teaching and learning looks much different as they are about to leave the course. They now see the need to think strategically and to plan for teaching with a larger schema. They are able to make connections between the way they have been taught in the programme and the way they could plan and teach. They are forming pedagogical habits of mind and the ways of acting. They are trying to fit newly acquired notions about planning to particular situations of different teaching practice schools. In the process, they sometimes discover that these ideas do not work, as evident in their experience in applying the ideas of TBL and ELIPST in teaching. The two field experiences bring about their own realisation of a lack of specific professional knowledge.

Little has changed in a few of the student teachers' way of thinking about lesson planning and classroom practices during the course. Totally reflected in her approach in planning lessons and classroom instructions during the two teaching practices was Teacher 5's continuous belief in the effectiveness of the Structural Approach in enabling her pupils to master the basic English language system. The reliance on her pre-training conceptions contributes to a know-it-all attitude that shields her from change.

There is a clear message that the teacher education programme can teach student teachers what they need to know to be professional practitioners. But very often, theories and methods are presented as procedures to be followed in the field. Neither the limits of professional knowledge nor the endemic uncertainties of teaching get much attention during these two years. For example, at a time when the English proficiency of local pupils in Hong Kong is found to be declining rapidly and most secondary schools have switched from English to Chinese medium of instruction, the student teachers found themselves struggling in working against the existing structural –oriented practices of teaching practice schools when pushing forward the ideas of learning English in a natural context. By fostering unrealistic views about how educational theory and research can help teachers, the teacher education programme may unwittingly strengthen student teachers' tendency to reject formal knowledge and rely on first hand experience. Ironically, the programme has an overlay of communicative psychology of language teaching that reinforces this reliance on personal preference and experience, as that has direct influence on the student teachers' approaches in lesson planning and instructional strategies.

The teacher education programme emphasises text-based instruction and is a bit remote from teaching. There is some reliance on analysis of video-recorded lessons to make principles and ideas vivid. Yet these rehearsed lessons do not reflect the reality of the real life classroom. The micro-teaching practices in Year 1 and the TBL module in Year 2 provide an opportunity for the student teachers to do some instructional planning and trial teaching. As the student teachers have no idea about pupils' preconceptions, which are a major concern in the programme and in pedagogical thinking, and receive little help in figuring out what to make of what they

discover, the assignment becomes academic, something to complete for a grade. It may not be surprising that, in working out the assignments, most of the student teachers choose to follow the methods instructor's routines, or rely on their memories of school to make sense of doing instructional planning and micro-teaching.

Most of the student teachers share a weakness in their subject matter knowledge that has not yet been remedied by the programme. They all need to enhance their English proficiency and classroom language before effective implementation of instructional strategies could be achieved.

More assistance and encouragement from the co-operating teacher are needed to help the student teachers transfer some concepts they have learned in the programme to the classroom. Issues related to the teaching contexts will be discussed in detail in the next chapter.

CHAPTER SIX

KNOWLEDGE CHANGE IN THE TEACHING CONTEXT

I. INTRODUCTION

Another entry perspective of the student teachers that was challenged during the course was their knowledge of the teaching context. As discussed in Chapter 2 of this study, teaching candidates begin with loosely formulated philosophies of education that personally explain what teachers do and how children learn in classrooms (Sugrue, 1997). These perspectives help “make sense of the programme content, their roles as student teachers, their observations of classrooms at work, their translation of programme content into teaching/learning activities in classrooms” (Hollingsworth, 1989: p.162), and not least in their understanding of the different teaching contexts. While the teaching practice can provide teaching candidates with classroom reality during which application of the pedagogical knowledge and skills learned from the programme was made possible, to a certain extent a favourable placement context is likely to facilitate prospective teachers’ acquisition of the meaning of practice and enhance their pedagogical thinking. Yet there are contextual barriers that may cause difficulty to teaching practice, and restrict their level of engagement in reflective practice. This chapter reports on the student teachers’ knowledge growth in the teaching context. The data are based on their reported thoughts about their learning over teacher education. It begins with a brief description of the student teachers’ entry perspectives on the classroom context from years of observation as learners. It then reports on their understanding of the contexts of the

micro-teaching and two placements and how they respond to them. The chapter ends with some interpretations and conclusions of the findings.

II. ON ENTRY TO THE COURSE

Initially, it is natural that student teachers with no teaching experience tend to view teaching and learning English from the learner's angle, as they have come from many years of classroom experience as pupils. As reviewed in Chapter 4, most of the eight subjects were not motivated learners on entry. Their own unpleasant experience in the English classroom turned out to be disastrous to their achievement in public examinations. To most of them, except two, English was difficult to learn and English lessons were boring and a waste of time, with the teacher yelling and shouting for the whole lesson and the pupils listening passively or doing something else in their seats. It is not surprising that teaching was taken as a transmission of knowledge, and this was their initial conception of the classroom context in which teaching is taking place.

The student teachers' knowledge growth in the teaching context at different stages of teacher education is summarised in Table 14 (Appendix 9, p.241).

III. THE MICRO-TEACHING PRACTICE

The course highlighted an alternative conception of teaching which emphasised the facilitation of learning, making it an active and purposeful activity, and most participants were challenged to re-consider the former conception of teaching, and the traditional teaching context within and outside the English

classroom. Along the move towards a more meaning-based approach in teaching, the conception of teaching amongst these teaching candidates apparently became more complicated over time. Most realised the demand made on teaching if it is to facilitate communication in English rather than memorising grammatical rules. The classroom is no longer a place for talk and chalk and following whatever is said in the course book but with different settings in different lessons. During the Micro-teaching practice, they reported an expansion of their repertoire to include new conceptions about the teaching context.

Some illustration may help to show the change in conception of these teachers. On observing his peer's teaching during the Micro-teaching, Teacher 7 was much impressed with the idea of having the English classroom turned into a setting which resembles a real boutique.

I am impressed by the way some of our classmates prepared their lessons. They made use of a lot of teaching aids which I think are extremely motivating to pupils. Say, in presenting the target dialogue between a shop assistant and a customer, the "teacher" made use of at least ten beautiful dresses and a hanger stand. I wonder how she could carry all these to the campus. I think pupils will be more convinced to use English given the different authentic settings. (Teacher 7: 2nd int: 13/1/97)

While his previous English teachers might never have approached language lessons in this way, creating such a classroom context was a possibility he had never been aware of. Teacher 6's perceptions, in contrast, followed closely the essence of the course curriculum and were well related to content and pedagogy. Contrary to Teacher 7's remark of a shift in his prior conception of the classroom context, Teacher 6 was more identifiable as an integrated practitioner who drew immediate connections between the course and her mini-teaching practice. To her the aim of Micro-teaching was to provide student teachers for the first time with a context

whereby assessing the feasibility of the ideas learned from the course before putting it into actual practice in the coming field experience was made possible. She followed the method learned from the course with emphasis put on the Communicative Approach. She reported what they were doing was rehearsed and like acting on stage:

Looking back, the micro-teaching was my first attempt at teaching. I spent two weeks preparing for it. The lesson plan had been worked out long before it and marked by the methods instructor. To many of us, the maiden teaching seems like a play. The nervous ones like me tried our best to memorise the format and steps fearing that we might leave out one of the activities. Some recited the words they were going to say. Two went so far that they simply put the lesson plan on the teacher's desk and referred to them from time to time. (Teacher 6: 2nd int: 14/1/97)

With a different focus, Teacher 2 extended her concern for micro-teaching by incorporating evaluation as an essential part of the teaching process. While acknowledging the usefulness of mini-teaching in helping them prepare for the First Teaching Practice, she also pointed out the inadequacy regarding the teaching context:

We played dual roles, as pupils and teachers. But the "pupils" are too bright and self-motivated. Your instructions can be lousy but they still can understand you and communicate in groups. Besides, no motivational strategies are needed as some guys from the class enjoy making fun. And what is most amazing is that there is no disciplinary problem. Well, the classroom is far from real. (Teacher 2: 2nd int: 13/1/97)

Her view was echoed by her peers, who concluded the micro-teaching workshops neatly, with some insights into meaning-based lessons in appropriate classroom settings. Parallel to their emphasis on developing interactions among pupils was their attainment of a new level of conceptualisation of the teaching context, which focused mainly at the classroom level at this stage.

IV. THE FIRST TEACHING PRACTICE

Despite the differences in their reviews of learning over the First Semester of the course, most of the student teachers were quite critical of their previous conceptions of the English classroom, and hence, open to new alternatives. For these inexperienced teaching candidates, the First Teaching Practice made them aware of the complicated demands in teaching, not something they could understand when they were pupils. For example, Teacher 4's reflections were most vivid:

Back in my school days, I was quite ignorant of some of the practices of my teacher. I thought they would not know who were not paying attention in class or who were the bright ones. While we as pupils tended to walk slowly to class I wondered why the teachers had to rush from one class to another when the bell rang. We were always careless in doing our homework but now as a teacher I am much annoyed by the "couldn't care less" attitude of my pupils. (Teacher 4: 3rd int: 12/5/97)

Seeing alternatives through his reflection on his teaching, Teacher 4 made some fundamental changes in his conception of the teaching context. Yet most of the student teachers shared a prominent concern for survival in teaching practice. Their practice of meaning-based teaching was rather limited and *ad hoc*. It was likely that their attention was diverted to the mechanics of teaching procedures, as taken from the notes of the course. They were not yet ready to be engaged in pedagogical thinking for sorting teaching priorities. It seems that within such a short period of two to three months, the content to be learned from course work was too plentiful for them to select their priorities consciously. Yet they all made some progress.

The analysis also turns to the changes in their identification of problems and strategies from the teaching context both within and outside the English classroom during the First Field Experience. Judging from individual cases, it was difficult to

map the possible stages of learning. However, patterns become evident from comprehensive and repeated review of the data.

Classroom Management. Setting up the basic routines in teaching seemed to worry the new teachers most. Their main concerns before the School Experience were not pedagogically-related so much as how to deal with naughty pupils, how to cope with pupils who might challenge the new teacher on purpose, and even simply how to face unfamiliar faces. Most of them did not believe in a more authoritarian position. The pre-training beliefs shared among the participants seemed to be that if the pupils were too disciplined, they would be too scared to speak in English and to participate actively and the classroom would become a boring one. But interestingly, in actual practice there seemed to be a definite pattern in realising that such beliefs were not conducive to teaching. First, the awareness that endorsing a loose classroom environment was not working was soon raised among the student teachers. Then very quickly there was a shift to try to solve the problem by becoming too firm and strict. Still, nearly all the student teachers struggled to some extent with classroom control, gaining respect, and teaching lessons to pupils who were simultaneously engaged in other forms of dialogue or resorted to using Chinese, in particular during pair work and group work games. Those who were placed at lower-band schools began questioning their prior beliefs, and recognised their own teachers' need in giving up lively learning environments and teacher-pupil relationship in return for a better managed classroom and more disciplined pupils. Teacher 8 broke into tears as she described her situation:

I don't know what my role is. I don't know why I'm standing in front of the classroom when no one is listening to me. Why bother spending all the time preparing communicative games? They don't work with these pupils. I can't keep on yelling and shouting for 40 minutes in every lesson just to keep them quiet. I've talked to the co-operating teacher. She came and scolded the pupils

several times, but admitted there's little that she and her colleagues could do. Sometimes I hate going to school. (Teacher 8: 3rd int: 9/5/97)

Thus most of the participants found it hard to achieve a more balanced management style. They did not refrain from voicing their need for more support from the Institute supervisor and the co-operating teacher as the decision making so far in the teaching practice had been guided only by their own sense of themselves as critics of teaching.

Inadequate Support by the Institute Supervisor and the Co-operating Teacher.

In the First Teaching Experience, the guidance the student teachers received included at least two observations by the Institute supervisors and one by the co-operating teacher, and their post-lesson comments. However, much of their time on practice was spent without guidance. In facing problems, be they pedagogical or non-pedagogical ones, the student teachers would consider consulting the co-operating teacher for possible solutions, rather than the Institute supervisor who was usually busy with his or her supervision work. But in most cases, assistance given to the student teachers that was useful for problem solving and their transfer of knowledge to classroom practice was minimal. According to the participants, most co-operating teachers were more interested in whether the new teachers could follow what they had been scheduled to teach and whether things proceeded without going off track, rather than helping them conduct effective lessons. Teacher 2's journal entries showed the progression of the integration of her concern about the lack of support into her thinking:

Basically, the co-operating teacher is more concerned about whether I can cover what she has asked me to teach. If I'm behind schedule, I have to tell her as soon as possible. I have to follow the way she assigns homework to pupils. I have a feeling that she's more concerned about the discipline of the class rather than whether pupils learn. From my observation of her lesson, she

would ask pupils to underline the main points in the book and do some copying so as to keep them quiet. She would use every means to ensure all pupils submit their assignments. I have asked her to pass me any materials she found effective in teaching this topic but failed to receive any so far. (Teacher 2: 3rd int: 5/5/97)

Teacher 2 was among the few student teachers who were invited to observe the co-operating teachers' lessons. It was not surprising as the open classroom has never been a part of the culture among the English teachers in Hong Kong, more than half of whom, according to government statistics, are not subject trained. Coupled with this, the heavy marking load imposed on language teachers and the pupils' low motivation in learning English shattered their confidence in conducting demonstration lesson for analysis. Many of these "experienced teachers" still advocate teacher-centred learning for easier classroom management and a structural approach which requires less lesson preparation. Their pupils are used to a didactic approach of teaching whereby opportunities for meaningful communication in class are rare. No sooner had these student teachers settled in their First Teaching Practice than some found out that they were not encouraged to approach and conduct lessons that differed much from those of the co-operating teachers. Teacher 1 comments on her co-operating teacher's suggestion:

I've not been able to observe the co-operating teacher's lesson. She advised me to use more Chinese to teach because the pupils are weak. Besides, she said the pupils are not used to pair work or group work activities as she always has to rush and so has no time for conducting games and activities. I don't think the pupils are motivated to learn. Some pupils told me the co-operating teacher has to resort to disciplinary actions quite often to seek pupils' attention to the lesson. (Teacher 1: 3rd int: 2/5/97)

However, trust in the Institute supervisor and the method learned from the course convinced Teachers 1 & 3 to continue to try it their way. But having to convince their co-operating teachers that the Communicative Approach would work

with the pupils turned out to be a difficult task to them. The other student teachers whose pre-training beliefs were congruent with those of the co-operating teachers' conceptions found themselves torn between whether to model the method or comply only with the co-operating teacher's instructional demands. Eventually, driven by concerns with assessment some struggled along on the method but put more emphasis on language drills in their classroom practice. Their needs for integrated support for experimental work from co-operating teachers and supervisors was evident. Communicating programme expectations to co-operating teachers also appeared to be necessary for comprehensive understanding and application of the programme content.

Pupils' low English standard. The concerns for pupils and learning are also shared by all the subjects, though the responses to these concerns were quite different. Lots of instances can be drawn from their thoughts about learners' low standard. Teacher 8, for example, was concerned about learning, but felt rather helpless about the learners:

It's a bit unlucky that I'm given the naughtiest class in Form 1. I'm somewhat depressed when they are not willing to participate in the activities for which I have taken much time to prepare. So far, there hasn't been much teaching and learning going on. (Teacher 8, 3rd int: 9/5/97)

It seemed that her limited practice did not lead her to a state of confidence in coping with this concern. In contrast, Teacher 7, who had acquired some experience from teaching in a private institution prior to his enrolment in the teaching education programme, responded differently to the similar encounter. As he reported:

Compared with those in the private institution I taught last summer, this class is not that bad. They are just passive and don't want to put up their hands nor actively participate in activities. Sometimes I speak in English for the whole lesson, the pupils can still follow me. At least they remain in their seats whereas most of those I taught previously enjoyed moving around in the classroom. I am trying hard to motivate them. (Teacher 7, 3rd int: 6/5/97)

The conclusion “whether activities can be effectively conducted depends very much on the readiness of the pupils” was reached in Teacher 7’s later experience, and so to him, “motivation strategies are very important” (Teacher 7: 3rd int: 6/5/97). He was particularly pleased with the extent of improvement made by the pupils in his class, who were considered below average in the school, in response to his effort.

Other contextual barriers. The teaching candidates seemed to be daunted by numerous environmental problems, and they made little mention of coping strategies. For example, when she found that no over-head projector was available in the teaching practice school, Teacher 5 declined to look for alternative strategies but simply copied each of the words and graphics from the transparencies prepared onto the blackboard.

During the First Teaching Practice, only one out of the eight new teachers was given a seat in the staff room by her school, where she could have easy access to the co-operating teacher and other colleagues. Three were lucky enough to be placed in small offices converted from storerooms on another floor of the school building. Another three found their seats located in the corner at the back of the library of their respective schools, where they were frequently taken as strangers in the eyes of the pupils and had to tolerate discussions and social chats conducted next to them. Among the eight subjects the most unfortunate one had her handbag stolen the third day after she began her teaching practice as she, together with three practising teachers from other local universities, was placed in a dark corner under one of the main staircases of the school. Most participants reported a downgrading of their self-image and the feeling of being isolated from the other colleagues as a result of such arrangements, but wondered if anything could be done about them:

It's noisy here in the library. Pupils come and go when the bell rings. I wonder whether they would treat us as teachers. The staff room is on another floor. The co-operating teacher never comes to this place. Whenever I want to see her, she is busy with something else. Sometimes, I feel so isolated and helpless here. (Teacher 8: 3rd: 9/5/97)

While Teacher 8 was upset by the contextual barriers that in her eyes had hampered the channels for seeking help, others also expressed their concerns for their limited involvement in activities such as the English week, English panel meeting, setting of test or examination papers, etc. which could have widened their perspectives of the profession. However, few came up with any suggestion for changing such unfavourable situations.

The data on the student teachers' identification of contextual barriers and coping strategies reviewed their tendency to identify problems as arising from the environment rather than from their personal abilities. Furthermore, these student teachers reacted rather passively to environmental constraints, with little mention of power to provide solutions from within their selves. They were not yet ready to be critical of themselves with identification of personal weaknesses, or search within themselves for resources to initiate changes in the environment. While it seems there is really little that these student teachers can do to change the adverse condition, personal maturity may have a part to play.

V. THE FINAL YEAR OF THE COURSE

Between the two field experiences the student teachers' perspectives on teaching English were much widened as they were immersed in a language environment much different from that of Hong Kong - ELIPST. They acknowledged

the advantages of teaching in a context whereby the teacher could enjoy small group teaching, abundant resources including lots of authentic materials, motivating participants through cultural activities, discussion and group sharing, staying with host families who are native speakers of English, etc., but were fully aware of the impracticality in expecting that such context would be in place in Hong Kong. Most reported an expansion of their schemata but their understanding of the teaching context in the Hong Kong classroom was not uprooted because of the ELIPST experience.

By the Final Teaching Practice, once again the student teachers were bothered by non-pedagogical issues, such as classroom management, inadequate support from the supervisor and co-operating teacher, pupils' low English standard, limited access to resources and little collaboration with other colleagues in teaching practice schools, and an awareness of poor self-image, etc. Nevertheless, some began to identify some problems, both pedagogical and non-pedagogical ones, and mentioned what they could do about them. This shift in their sense of their own ability to cope with problems was a positive sign of their progress in learning to teach, largely attributable to the practical experience gained from the field experience. Most shared this pattern in the move towards the search for strategies from within the self. In particular, Teacher 1 seemed to have made considerable progress. During the First Placement, she was confronted with many problems, but had few strategies to cope. In contrast, her Final Placement was completed with a richer exploration of strategies which focused on improvement with her interaction with students.

It seems that I've been successful in building up good relationship with the pupils in the last three weeks. My pupils enjoy talking to me after school or during recess time. The other way of communication is through letters. Some pupils wrote letters to me when they had problems. Writing them back is time-

consuming but I enjoy maintaining this kind of relationship. (Teacher 1: 5th int: 29/4/98)

Amongst those with a more active response to problems, Teacher 8 came up with a few alternatives to tackle disciplinary cases. In both blocks of practica she was placed in a lower-band school. But this time, she no longer had to suffer from having to shed tears although she still found little support from the co-operating teacher:

I had heard a lot of negative comments on the school and pupils before TP started. So far I've talked to the social worker many times. She told me that the pupils in this school need love and concern more than books. They would resort to strange behaviour to seek teachers' attention. So I know I have to give them more encouragement and praise rather than penalty. The social worker is very helpful. She has arranged for me meetings with the problem pupils and their parents together and we had sincere chats. It seems to me that these pupils are not as hostile to me as before. (Teacher 8: 5th int: 21/4/98)

Teacher 3 also took the initiative to cope with her problem by directing her request to the co-operating teacher and principal of the teaching practice school. In contrast to the traditional practice of taking up all the English lessons of a class, she was required to teach only reading and writing skills to two classes of the same level. Thinking that the limited practice would restrict her professional development and affect her job opportunities, she decided to assert her rights, something she would not have done in the First Teaching Practice and few teaching candidates would dare to do. Though her request was not fully met owing to administrative constraints, she was allowed to trial the method on different language skills rather than only reading and writing in the two classes.

The data demonstrated that by the end of the two blocks of teaching practice, the student teachers had made some clear changes in the ways they identified and responded to contextual barriers. While the progress was considerable to some, the teaching practice could only provide a start for them to recognise that they could

develop their own abilities in dealing with problems. There was a long way to go beyond the course for further maturation, both personally and as a teacher.

VI. INTERPRETATION AND DISCUSSION

Emerging from their identification of contextual barriers and coping strategies was a main feature of the student teachers' knowledge growth in the teaching context: progress towards greater flexibility and adaptability. Whereas flexibility refers to their responses to problems, adaptability refers to their interaction with pupils.

In handling problem pupils, the kind of help Teacher 8 sought during the First Placement was confined to the supervisor and the co-operating teacher. Finding that they both were too "remote" to render instant advice, she broke down several times, recognising her inability in handling the problem alone. However, in tackling the same problem in the Second Placement, Teacher 8 seemed to have taken a more proactive role. Before the Final Teaching Practice, she approached the senior student teachers who had been placed at the same school a year ago in order to collect information about the pupils. Once the Teaching Practice commenced, instead of taking a wait and see attitude, she immediately identified the few trouble makers in class, had friendly chats with them by joining hands with whoever was available around – the co-operating teacher, school social worker, her fellow practising teachers, and even the parents. Her flexibility was shown in the way she sought help from different people, while being aware of the problem of their availability.

Adaptability can be located in the student teachers' better relationship with pupils. Teacher 1 reported her development of a warm rapport with pupils in the Final Field Experience, which she thought was conducive to better classroom atmosphere.

Not all were able to make considerable progress in becoming more flexible. Teacher 5's attitude of "go your own way" and "do whatever you want to do" largely remained unchanged. During the Final Field Experience, compared with other subjects, the responses she had in handling disagreement with the Institute supervisor, co-operating teacher and her peers were less elaborated. On the other hand, adaptability was not found to be more apparent in some subjects. For example, Teachers 4 & 5 were less observant of the differences amongst their pupils and chose to retreat into their own small offices after class. On the whole, at different points in their process of learning to teach, most student teachers seemed to demonstrate more flexibility and adaptability over time, though for some the progress was slow.

During Micro-teaching and the two blocks of teaching practice, most student teachers were able to elaborate their thinking about their own practice and of the teaching contexts they were in. They tended to come up with more problems than coping strategies. The question is not so much whether student teachers are able to think pedagogically, but rather the support or guidance in the course of learning to teach. The necessary support went beyond what the supervisor's classroom visits could offer. As mentioned in the reviews, the co-operating teacher was sometimes, but not always, a valuable source of support. A more established system of mentoring is therefore needed.

CHAPTER SEVEN

DISCUSSION AND CONCLUSIONS

This chapter presents the conclusions of the study. It begins by summarising and discussing the results in relation to the research questions. Then the chapter turns to contributions and limitations of the study. Finally, implications for research and practice are suggested. The thesis concludes with anticipation of a closer link between research and improved practice in teacher education.

I. SUMMARY AND DISCUSSION OF RESULTS

1. Interactions Among Student Teachers' Thinking and PCK Domains

The findings of the student teachers' PCK support those by Grossman (1990) in that these teaching candidates' major domains of PCK appeared to have amassed into knowledge about: subject content, curriculum and lesson planning, instructional strategies, and the teaching context. These domains seem to validate the contentions of Calderhead (1993), Feiman-Nemser and Buchmann (1986) and Freeman (1991) that student teachers' thinking plays an important role in their interpretation and evaluation of knowledge. Artiles et al. (1994) suggested that student teachers' cognitive processes influence the construction of their views and beliefs of teaching, and how they will represent subject matter knowledge to pupils. On the other hand, their conceptions of teaching may also be affected by various sources of knowledge base resulting in patterns of intellectual change. Hence thinking and knowledge are much inter-related. In this study, it appears that there are noticeable interactions among the student teachers' thinking and the four domain factors of PCK at different

points of the teacher education programme. To illustrate, the student teachers brought to teacher education their prior conceptions of subject content knowledge - that English to them was basically a set of grammar rules and so teaching English meant the transmission of these rules to pupils which made the learning of English an extremely boring experience. Changes in the student teachers' conceptions were noted before the two placements as they modified their thinking in closer alignment with that of the programme. These changes were evident in their practices in lesson planning and instructional strategies. Their thinking was again reconstructed during the two teaching practices as a result of continuous development in their knowledge about the teaching context.

The keys to successful integration of these PCK domains, and the factors that affect their success have yet to be found out. However, it appears that effective teaching shown in a few of the lessons observed is not due solely to the student teachers' knowledge about the domains of PCK independently. Rather, the student teachers also show some ability to integrate these domains. For example, in presenting new language patterns during teaching practice, some student teachers were able to take into account the particular characteristics and backgrounds of the pupils (knowledge mainly gained from the co-operating teacher, or through observations). They were also able to make use of their subject content knowledge in searching for examples and possible teaching aids that would best fit the language patterns to be introduced. Furthermore, despite the complexities some managed to conduct an analysis of the teaching context, which means evaluating the practicality of the pre-planned activities with regard to the contextual barriers of the teaching practice school. Eventually, from their limited repertoire of instructional strategies, the student teachers made decisions on the most appropriate means to facilitate understanding

among pupils. Therefore, the appropriate integration of the PCK domains may be most crucial to effective teaching, and that may sound remote to many of the student teachers.

It is important to note that, from this example, integration of the various domains of PCK should not be seen as a one-way process. On the contrary, alternative options should be considered simultaneously. In this regard, it is contended that in order to understand effective teaching, we should focus on the knowledge and thinking that guide their decisions and actions, rather than on what they actually do in the classroom.

2. Student Teachers' Thinking and PCK Change

As in the works of Chen and Ennis (1995) and Foss and Kleinsasser (1996), through the explication of the different domains of pedagogical content knowledge, the relationship between these entities begins to surface and a focus becomes clearer. Detailed descriptions of the student teachers' PCK change inform understanding of their intellectual growth and development in practice instruction. However, PCK change should not just be attributed to one single source of knowledge or experience. With evidence in the interviews, lesson observations, micro-teaching and practica, the student teachers appear not only to rely on the general philosophical orientation of the course but also their personal biographies and practical theories of teaching. Referring to the research questions of this study, the discussion here centres on how the thinking and PCK of student teachers change, and the relationship between conceptions and actions.

This study does not support the findings reported in recent research that it is difficult to change student teachers' conceptions and influence their development (Calderhead and Robson, 1991; Sugrue, 1997; Tillema, 1997). It is true that easy compatibility was not the case for many of the eight subjects. In fact, regardless of what they were presented with during their methods course, most began and ended with similar perceptions and beliefs about English as a set of rules and also English teaching and learning as a rule-governed activity. However, patterns of intellectual change and knowledge development were noticed among the student teachers throughout the two years of teacher education. They did not just rely on personal or prior experiences, as cited in Kagan's (1992) review, but also on the teacher education curriculum that influenced their current thinking about PCK. One major reason could be their superficial subject specific knowledge about teaching English prior to the teacher education programme. From years of observation of their own teachers at work, these student teachers may have some ideas about the general aspects of teaching and teachers' roles. But their pre-training knowledge is far from subject specific (about the subject matter *English* and also about ways of learning and teaching it). Most reported that the boring English classroom had turned them into demotivated learners and gradually a negative picture of it was developed. In the Advanced Level Use of English Examination, all the participants, except Teacher 5, failed to score a credit or higher grade which was, in the past, considered a pre-requisite for English student teachers.

Regarding their English teachers' construction of instructional strategies, lesson design, and language activities, there was little that these student teachers were interested in as pupils and not much to recall as they began teacher education. Thus their loosely developed cognitive "scripts" (Hollingsworth, 1989) on entry to the

course appear to have lots of mental “space” to think about English teaching and learning and the programme’s philosophical notion - Communicative Language Teaching - and to acquire new knowledge. To most of the participants, their “disappointing” results in the AL Examination mean that as far as linguistic competence is concerned, they are not up to what is required for an English teacher, and so most are not convinced that they themselves would some day become competent English teachers. The lack of confidence in pursuing teacher education has resulted in variations and complexity in the student teachers’ thinking about the programme notions of the communicative language learning classroom. For instance, some chose to model the methods tutor’s practices and routines in their subsequent teaching without confronting the concepts embedded in them, nor taking into consideration the background and characteristics of the pupils as evident in the planning design and choice of activities. Others were prematurely convinced that their integration of the programme’s central philosophy into their teaching could not compensate for the need of those lower-band pupils who, like them, were linguistically deficient. The learning process did not turn into effective teaching in the practicum as few adapted them for their own lesson routines and conducted self-constructed activities.

Another aspect of their prior belief that had contributed to significant knowledge development was related to their instructional rationales and actions. As mentioned earlier, prior to teacher education most of the student teachers had conceptualised English basically as a set of grammar rules; for them, the main focus of English lessons was on building up pupils’ knowledge about these rules. But their own educational experiences showed that English lessons for which emphasis was put on memorising and telling rules were, on the one hand, useful in building up pupils’

subject matter knowledge about English, but on the other hand, de-motivating to pupils. Hence they kept on reminding themselves of the importance of bringing fun to their pupils. Such conceptual change was manifested in their instructional strategies. For example, their conception of pupils having fun while learning English had led them to select games for micro-teaching and practicum activities which allowed pupils to enjoy the activities. Their instruction strategies employed were also intended to arouse pupils' interest and motivation.

On the other hand, the impact of the teacher education programme on shaping the student teachers' knowledge growth was considerable, though the level of reception varied. By the end of the micro-teaching practice, every participant had some understanding of the meaning-based approach and were familiar with the lesson formats governed by the method. The extent of their knowledge about the programme's communicative language teaching concept, influenced by the pre-training beliefs, can be illustrated again by contrasting the changes in thinking among Teachers 5, 6 and 7.

As in studies cited earlier, student teachers sometimes eagerly profess agreement with the meaning-based view of English learning and teaching, but ignore the complexities of implementation (Bright & Vacc, cited in Foss and Kleinsasser, 1996). The student teachers in this study are no exception. For example, in designing his lesson plans during the First Teaching Practice, Teacher 7 followed the lesson routines of the method closely, without taking much account of the characteristics and background of his pupils. He introduced interesting games in the lessons which aimed at bringing fun to the classroom, but not necessarily providing an environment in which children would acquire the target language skills. In other words, the activities

might not be able to enable pupils to achieve the objectives nor be coherent with the other parts of the lesson. Such practice gave him a memory and routine level understanding of the concept. Teacher 6's integration of the programme's central philosophy with the pupils' level, needs and interests into her teaching gave her a more comprehensive understanding that became apparent in her activities, some of which were self-designed. Though she had not totally restructured her thinking, the degree of change at least represented a fine-tuning (Rumelhart & Norman, 1976) of her pre-training conceptions. Few student teachers matched Teacher 5 who showed little change in her thinking and pedagogical knowledge base as she still retained evidence of her own pre-training views of a rule-based approach in teaching and learning English, which was reflected in her lesson planning and instructional actions both in the micro-teaching and the two teaching practices. To some extent her high level of English competence has consolidated her view that pupils should have a firm grasp of the English language system and this directly affects her instructional plans. To her the impact of teacher education remains minimal.

Despite variations in the student teachers' level of acceptance of the programme philosophy, this study also shows that understanding subject content knowledge and pedagogy is a necessary but not sufficient condition for learning to teach. Regardless of the extent of subject content knowledge, every student teacher who fails to take into account the teaching context also fails to achieve effective teaching. During the first placement, most of the student teachers adopted an approach similar to that of Teacher 7's. The practicum experiences are designed to stimulate reflection on PCK. However, owing to the problems arising from the work context and the teaching candidates' limited coping capabilities, few student teachers were brave enough to develop their own styles. The first placement appeared to consist of

mere exercises in fulfilling another course requirement by directing the lesson routines and activities, almost never pointing out the connections between the routines and the communicative learning and teaching concepts which were supposed to merge.

Supporting evidence of the impact of the teaching context was also found in the second placement. Upon their return from ELIPST most of the student teachers, if not all, had undergone critical restructuring of their thinking about the programme notion of a meaning-based communicative-oriented approach in language teaching. The TBL module taken in the First Semester of Year 2 also brought them new knowledge about teaching and learning English through integration of the four skills. In designing tasks for the TBL assignment, most of the student teachers' work reflected an amalgamation of the ideas taken from ELIPST and the characteristics of TBL. But during the Final Teaching Practice, few of the student teachers were placed in a favourable teaching context in which the concepts of TBL and ELIPST were supported. Most encountered contextual barriers such as pupils' low English ability and lack of motivation for developing communicative competence, a skill-based curriculum focusing on the teaching and learning of the four discrete language skills, co-operating teachers' ignorance of programme expectations and philosophy, poor resourcing, etc. All these limited the student teachers' employment and development of the ideas of TBL, ELIPST and the Communicative Approach in their teaching and also somewhat overloaded their engagement in pedagogical thinking and reflective practice. Few came up with coping strategies. Most thought they could reduce contextual complexities by choosing not to challenge the existing practices of the co-operating teachers and the conservative school models. A few organised their thinking in specific ways to overcome the complexities of orchestrating a communicative classroom though they had to struggle hard in preparing self-constructed materials.

Though on leaving the course, student teachers still adhered to their pre-training belief in the importance of a sound mastery of the language system in learning English, some conclusions can be drawn from the findings. The student teachers' thinking, knowledge and practices did change during the methods course. The findings of this study do not support the findings reported in recent research (Calderhead and Robson, 1991; Knowles, 1992; Sugrue, 1997; Tillema, 1997) that student teachers' conceptions remain unchanged during teaching education. The teaching candidates' thinking and PCK did change, and sometimes critically at different points of the course. On the other hand, the findings support the contention that student teachers' instructional actions are closely related to their conceptions of teaching. Analogous to conclusions in Hollingsworth's (1989) study of a reading course, this study suggests that given appropriate contextual conditions, the student teachers who considered themselves "linguistically incompetent" and whose knowledge on entry to the course was far from subject specific could be engaged in pedagogical thinking and learn ideas that they nevertheless did not bring into the teacher education programme. This study further suggests that the development of the student teachers' thinking and PCK appeared to be integral to their professional development. While such development is influenced by various factors, some are more effective than others in preparing them to be fully-fledged classroom teachers, as will be discussed in the next section.

3. Factors Influencing Professional Development

As discussed in earlier sections of this study, there were a number of inter-related factors which exerted an impact on the professional development of the student teachers:

(a) *Influence of pre-training conceptions*

Pre-training conceptions influence the way in which student teachers perceive the experiences they encounter during teacher education (Calderhead and Robson, 1991; Knowles, 1992; Sparks-Langer & Colton, 1991; Sugrue, 1997; Tillema, 1997). While this study did not systematically explore each student teacher's pre-training conceptions, they were clearly revealed to be influential in shaping their professional development. Most students had not enjoyed a pleasant English learning experience. They had failed to get a good score in the subject of English Language in public examinations. On entry to the course they considered themselves weak in English and felt that they were thus not competent enough to be English teachers. To them learning English meant internalising the English language system and so English teachers had to focus on teaching English grammar.

Such pre-training conception has made a considerable contribution to the student teachers' thinking and PCK development. For example, it was evident that owing to their negative educational experience, the participants brought limited subject specific knowledge to the course. That left them lots of free "mental space" to take in and think about pedagogical-related issues. But on leaving the course, their incoming beliefs that pupils should be taught the English rules explicitly resurfaced. Thus these student teachers who kept on restructuring their thinking and learning new knowledge about English learning and teaching also incorporated unique facets of

their pre-training beliefs into their teaching repertoires. Their changes in thinking, in other words, took place without changing the way they performed in the classroom.

(b) *Influence of teacher education*

As reviewed in the literature, the effect of teacher education on student teachers has been controversial. While many hold the view that this is an important factor, writers such as Lortie (1975) claim that teacher education courses have little impact on teachers. Other writers (Hollingsworth, 1989; Kwo, 1996) would dispute this view.

The programme curriculum of the Certificate in Education Course at Hong Kong Institute of Education appears to have impacted on the student teachers' thinking and PCK. They were particularly influenced by concepts introduced in the methods module which, according to Teacher 2, "enables us to survive in the coming teaching practices" (2nd int: 13/1/97). Most admitted their total ignorance of English teaching methodology on entry to the course and so when asked to comment on their lesson planning and teaching experience during micro-teaching, Teacher 1 responded instantly: "I'm convinced that the method and teaching techniques I have learned from the methods class would work" (2nd int: 14/1/97).

However, some student teachers accepted the programme with reservations. They expressed concerns about their inadequate preparation for the First Teaching Practice after only three months of course work. To them the situation did not seem to be better in the Second Year mainly due to a lack of micro-teaching practice before the Final Teaching Practice and opportunities for revisiting the methods they had learned in Year 1. Most favoured a spiral rather than a linear curriculum in preparing for the two field experiences. Apart from this, nearly all expressed their concern for

the limited coaching provided by the course tutors about teaching low achievers. In fact, by the end of the course none of the eight participants felt they had had enough experience or instruction to successfully work with low-achieving pupils. All these indicate the urgent need for revision of programme content.

(c) *Influence of the teaching practice*

Yes, I've learned much from TP. I can really feel how to run a lesson and manage it well. I evaluate each of the lessons taught and try to find out ways to improve it. This is useful for improving my experience. (Teacher 3: 3rd int: 8/5/97)

The TP helps build up my field experience in teaching. I keep on reflecting what I've done in the class. Sometimes when a certain activity didn't work, I'd find out what had gone wrong and improve it. Such process is constructive for building up my confidence. (Teacher 2: 3rd int: 5/5/97)

These interview excerpts more or less show the student teachers' belief in the value of the teaching practice in the teacher education programme. They are in line with the view in the literature that the impact of teaching practice on student teachers could be tremendous. In concluding his performance in the First Teaching Practice, Teacher 7 reports, "After doing my teaching practice, I realise that I am not competent enough as an English teacher. There is still so much to learn." (Teacher 7: 3rd int: 6/5/97)

The interview extracts have also shown student teachers' continuous engagement in pedagogical thinking during teaching practice, the level and the frequency of which were not found in their campus work. Lesson planning seems to have been a catalyst which facilitates this cognitive process during which the teaching candidates reflect on their practices in the last lesson, which informs future actions. Self-reflection also enables student teachers to pursue knowledge about teaching from practical experience. Thus PCK is reviewed.

However, the student teachers' reports also showed that many of the theoretical frameworks taught in the course work were not directly related to the needs of their classroom practice. Typical examples include the course tutors' failure to provide sufficient coaching about teaching lower-band pupils and management of disruptive classes. To the student teachers the notion of "applying theory in practice" could be one which has the quality of "science", so that when confronted with a problem during teaching practice, they would expect theory to provide a solution. But owing to the ambiguity of the language classroom, successful action depends to a large extent on the specific contextual factors. In many occasions they found the "solutions" did not work. Their experiences led them to reject certain pieces of theory. As suggested by Drever and Cope (1999), course tutors should be cautious about making any promises that pedagogical theories could help student teachers cope with their placement. Theories should not be presented as either comprehensive or complete, but as a collection of ideas, some of which student teachers might find useful in making sense of the placement.

Of interest to the researcher were the positive effects of collegiality amongst student teachers and the benefits in learning they gained from one another during teaching practice. Peer help was especially significant for these inexperienced teachers. But as pointed out by Teacher 2, had one or two of the peers been teaching the same subject, they would have had more sharing and reflections on the subject specific issues of teaching practice:

Peer discussion is also helpful in building up my confidence in teaching. The four of us having TP at the same school always share our experience. But as we are teaching different subjects, what we usually talk about is general stuff. I think it would be useful if practising teachers of the same elective would be placed at the same school. (Teacher 2: 5th int: 27/4/98)

(d) *Influence of the Institute Supervising Tutor*

There is a well-established consensus in the literature about the considerable influence of the Institute supervisor on student teachers' development. This study indicates the strong influence of the supervisor, who also played the role as the methods tutor of the eight subjects and investigator of the study. The sensitivity arising from the multiple roles will be discussed in the later section of this chapter. Inevitably, there was both unconscious and conscious moulding of the subjects' classroom practice to model that of their supervising teacher.

Being supervised by one who is at the same time the methods tutor is not a typical arrangement at the Hong Kong Institute of Education. Owing to the large number of both pre-service and in-service courses and the complexity arising from the administrative work of allocation of supervision visits, in most cases the visits are made by an Institute supervisor who has not been teaching the student teacher or whom, in the worst scenario, the student teacher does not know. The small number of visits, two over the period of four weeks in the First Teaching Practice and six weeks in the Second Placement, limits the level of support the supervising tutor can render. Apart from helping student teachers hone their basic technical skills, there is little that the supervising teacher can do to enable them to explore more facets of the teaching practice. In facing problems it is rare that student teachers will first seek help from the supervisor who is so remote and busy with other supervision visits. Inevitably, the lesson the supervisor observes is sometimes seen as an assessment. Under these circumstances the student teachers' professional development could be hampered.

(e) *Influence of the co-operating teacher*

Research has highlighted the limited effect of teaching practice. Mistretta (1987) found that student teachers felt at risk while making decisions. They felt that the co-operating teachers were much more experienced, and knew the work context well, and so student teachers felt they had to conform to their cooperating teachers' ideas. Owing to their limited skills in decision making during lesson planning and teaching, the student teachers were not confident enough in promoting their own autonomy. The influence of the co-operating teacher has been addressed in such studies as those conducted by Kwo (1996) and Nicholson (1999). They all point out that student teachers need integrated support from co-operating teachers and Institute supervisors to engage in pedagogical thinking. However, teaching practice as currently structured in most programmes provides little support and encouragement for reflection. Quotes from the student teachers presented in Chapter Six (IV & V, pp.149-158) demonstrate the problems in getting the appropriate level of support from the co-operating teacher. While most co-operating teachers in this study adopted a "laissez-faire" attitude, giving student teachers absolute freedom in making decisions, a few insisted on the student teachers' assigning a large amount of mechanical grammar exercises to pupils as homework every day.

Most student teachers reported limited opportunities for interacting with the co-operating teacher during teaching practice. Few were invited to observe the experienced teachers' lessons. Discussions were rare and the focus was mainly on non-pedagogical issues such as disciplinary cases. There was little evidence to suggest that the co-operating teachers were encouraging the student teachers to think about and explore a wider variety of teaching strategies. Most co-operating teachers were

found to be ignorant of the teacher education programme's philosophy. Those who were not subject trained had few ideas of the latest trends and approaches to English teaching methodology. All these highlight the need for co-operating teachers to receive increased support and encouragement in order to critically analyse the student teachers' teaching.

(f) *Influence of the teaching practice school*

The work context of the teaching practice school also plays a crucial role in shaping student teachers' PCK. This includes the academic level of the pupils, in particular their English competence, the teaching resources available, and the attitude of the principal and academic staff towards practising teachers. A favourable teaching context will certainly help enhance student teachers' reflective practice, widen their scope of teaching and encourage experimentation in implementing programme principles which form the basis of the student teachers' PCK about teaching. However, nearly half of the participants seemed to be daunted by the environmental constraints in one aspect or another (see IV & V of Chapter Six, pp.149-158). These ranged from being allocated the weakest class of a certain level to teach, limited teaching resources, not being placed in a proper room after class, limited opportunities for both pedagogical and non-pedagogical related jobs, such as setting test and examination papers, and attending English panel meetings, etc. All these raise concerns about conditions for engaging student teachers in pedagogical thinking and PCK growth, and call for increased "Institute-school" collaboration and restructuring of the teaching practice schools' perception of the role they play in maximising the benefits that field experience can bring to the student teachers.

4. **Validity of Data**

In this study, the student teachers' reports of their thinking were actually those experienced in the original situation – their own educational biographies, teacher education and field experiences. Thus the validity of the data can be inferred in several ways.

The discussion starts with how trustworthy the subjects were in reporting. Regarding this the conditions to maximise the validity of the data were specified in the design of the data collection procedures. The conditions included establishing good relationship with the subjects, assurance of unbiased interpretation of their reported thoughts, and an interview procedure which encouraged elaboration of the verbal reports. Despite the conditions set some subjects were found to be less expressive than others in reporting their thoughts. Such rather tacit behaviour seemed to reflect differences in character traits rather than an act of resistance to the arrangements. In fact, the richness in the subjects' reports provides much evidence of their willingness to operate within the structures of the research setting.

On the other hand, establishing the validity of introspective data seems far from simple. This study has followed the tradition of social research in which practitioners are treated as subjects. The findings are generated from procedures of data-collection which abided by the set conditions in order to maximise the validity of the reported thoughts. But the patterns identified and meanings interpreted by the researcher may be seen as inadequate. If the problem regarding validity were legitimate, the researcher would need to establish a closer rapport with the subjects. However, the richness of the data and the willingness of participants to provide

information, even when that information was implicitly critical of the methods course conducted by the researcher, suggest the validity of the data.

II. CONTRIBUTIONS AND LIMITATIONS OF THE STUDY

The discussion of this study is now further extended to considerations of its contributions and limitations. This section focuses on methodological issues and the related research literature.

1. Methodology

An aspect of the methodological contribution this study has made is the development of a procedure that can track the chronological changes in the thinking and PCK of student teachers during teacher education. In turn this procedure helps inform the design and structure of the teacher education curriculum. While the majority of studies of student teachers, as noted by Freeman and Cazden (1991), have failed to describe the process of professional development from student teachers' perspectives, and quantitative research confines the scope of the research frame by focusing on those aspects the researcher determines to be important, this study follows a qualitative approach that investigates the aspects which the participants identify as being relevant at particular times. The use of interviews, together with field documents and observational records, has been shown to be effective in exploring student teachers' thinking and PCK change, particularly by providing evidence that teaching is more than observable behaviour. The semi-structured interview, apart from its limitations, has satisfactorily performed its function of

getting the eight subjects to talk about their work in different stages of the teacher education programme. The field documents and recorded observations of their classroom action have provided valid data for analysing their teaching individually. The stimulated recall procedure has also been proved to be a useful tool for evaluating their classroom practice and in extending understanding of their thinking and the ability to verbalise and think through what they are doing (Kwo, 1996), thus enhancing understanding of their instructional practice.

Based on a natural setting, this study has generated rich data about student teachers' processes of learning to teach English as a second language. How to exhaust possibilities in analysis has turned out to be a major concern of the study. The data collected have not only responded to the set research questions, but also invited further questions concerning the reasons which formed the bases of the findings. In turn this required further data collection on student teachers' interpretation of the findings, possibly resulting in a cyclical process which would somewhat have side-tracked the main focus of the study. Seeing it as an initial study along this line of inquiry in Hong Kong, the analysis has put forward a broad view, but left much scope for further depth in analysis.

2. Development in the Literature

This study has generated findings which extend current knowledge, and fill part of the gap in the literature in the need for descriptive studies of student teachers' thinking in relation to their PCK, and their professional development. This section has three parts: instruments for research on teacher development, extended conception of teacher development, and finally, new contributions.

(a) *Instruments for Research on Teacher Development*

As discussed in the last section (see I:1 of this chapter, pp.160-162), the blend of qualitative data collection procedures such as interviews and stimulated recall procedure have been shown to be useful tools for establishing channels for understanding of student teachers' thinking and change in PCK. In exploring the general patterns of learning to teach, contributions of the research tools, with which the partisan research efforts are associated, should be acknowledged. Partisan research could take a variety of forms, the most basic of which, according to Liston and Zeichner (1991), requires a close collaboration between the researchers and practitioners in the focus on shared problems. The process develops with the researchers identifying their own educational beliefs and values, and explaining in what way their research addresses these issues within a particular research paradigm that teachers who share similar understanding face.

Thus partisan research efforts emphasise joint reflection, and the tools identified for which include story-telling, diary writing, teacher interviews, and participant observation (Connelly and Clandinin, 1988). As pointed out by Diamond (1991), in eliciting teachers' verbal reports of their private thoughts and their reflection upon narrative perspectives, their self-consciousness in the generation and interpretation of data should be emphasised. Such tools have been fully used in this study. Using interview and participant observation as the major tools, this study emphasised that understanding is in principle incomplete and continues to grow with each interpreter's encounter with new experience.

(b) *Extended Conception of Teacher Development*

Partisan research tends to be closely associated with teaching as thinking and action, reflective practice, and humanistic approaches to teacher development. Thus a teaching life comes to consist of a continuous progression of experiment which induces change, in this sense construed as a holistic process of successive transformation through individual teachers' personal reflections and self-understanding (Diamond, 1991).

Other dimensions of the holistic perspective seem to go beyond the personal domain. As pointed out by Hargreaves and Fullan (1992), a major criticism of humanistic approaches to teacher development is that such approaches put too much emphasis on personal responsibility for change and draw attention away from the context in which teachers work and how it impacts on teachers' professional development. Such criticism points to the need within teacher development for a complementary focus on the work context of teaching as a condition of development work. This requires the extension of the conception of teacher development beyond the personal domain.

Emerging in the discussion of reflective teaching and teacher development are the notions of work contexts and Institute-school collaboration. In order to enhance reflective teaching in both schools and teacher education institutions, Liston and Zeichner (1990) argued, the thinking and actions of prospective teachers, teachers, and teacher educators must be aimed both inward and outward. They strongly criticised much of the current literature on teacher thinking and action research which virtually ignores the institutional and cultural barriers which hinder reflective teaching practice. Their view was echoed by Freeman and Johnson (1998), who argued for a

reconceptualisation of the knowledge-base of language teacher education which includes “forms of knowledge representation that document teacher learning within the social, cultural, and institutional contexts in which it occurs” (p.397).

To bring about institutional and cultural changes, Liston and Zeichner (1990) stressed the importance of collaborations among the stake-holders: social practices, reflective teaching and action research are dependent upon interactions with others. They argue that, in many ways, it is the collaborative character of reflective teaching that gives it power and offers hope for changes in the environment. Professional collaboration was also considered as a major issue in Hargreaves’ (1999) description of the complexity of teachers’ work and context in the postmodern world, and he asserted the need not just to make teacher collaboration work, but to address what it is for, and what is beyond it. Recent discussions about teacher development seem to broaden the concern for teacher development. With this broadening, the humanistic perspective extends teacher development beyond the personal domain into political and cultural realities. In this study, the student teachers’ PCK about the teaching context was explored in depth.

(c) *Contributions to the Literature*

Grounded upon teaching effectiveness and curriculum research, the focus of most earlier studies on teacher thinking has been on teachers’ internal mental processes, which have been assumed to be able to explain what is taking place in the classroom. Being accused by Day (1991a) as too narrow and excessively cognitive, such initial conceptual focus has gradually been replaced by “new” concepts such as planning, reflection, personal theory, practical and pedagogical knowledge. This broader view of teacher thinking has prompted a move from an emphasis on teachers’

cognition to a holistic view of the teacher as a person rather than a segmented object. Teachers are no longer considered as observable performers of isolated skills, as many earlier studies had assumed (see I:2 of Chapter Two, pp.17-19). Being more pluralistic in orientation towards exploring student teachers' cognitive processes, this study has included important domains of student teachers' lives, such as their past histories, their conception and beliefs in teaching, and their different contextual realities in learning to teach, which resulted in facets of their professional development being captured in finer detail. While these episodes of change contribute to the literature on learning to teach, the findings are responsive to the Fuller-Berliner-Kagan line of inquiry.

Except Teacher 5 all the subjects appear to be progressing through the stages of professional development proposed by Fuller (1969). Fuller described a teacher's professional development in terms of the types of concerns a teacher holds. His model outlines three broad areas of concern: Concerns about Self, Concerns about Task, and Concerns about Impact, and proposes that these arise in stages in a teacher's development (Fuller, 1969; Fuller & Bown, 1975). The model proposes that a beginning teacher's concerns are largely "self-concerns", related to the teacher's own feeling of adequacy and "survival" in the classroom. In this study, these concerns were reflected in the student teachers' anxiety about whether their pupils' English would be better than their own were they to be placed at a higher-band school, and how their pupils would see them when they found that the new teachers' "open office" was in one corner of the school library. "Task concerns" focus on the teaching situation and are primarily related to the task of teaching. As discussed in earlier sections, the student teachers' concern increased in preparing for teaching before and during the two field experiences. They attempted to work out tasks and activities

which they hoped would best benefit pupils' learning. Fuller's model places "impact concerns" as the final level of a teacher's concerns, and these are primarily about the teachers' impact on the pupils they teach, in other words about the learning outcomes for children. During the final teaching practice, the student teachers were more skilful in assessing pupils' understanding and coming up with alternative strategies. From the interviews and journals, they began mentioning the importance of reflective practice which focused on the impact of their teaching in terms of the learning outcomes of their pupils.

The findings also show the student teachers' continuous concern for justification of the teaching steps of the lesson, and their tendency to adhere to the method and the planned routines and avoid experimentation which may mean taking risk. This is much related to Berliner's (1988) depiction of novice teachers in his model of teacher development: classroom teaching performance is rational and relatively inflexible, and requires purposeful concentration. Thus, this study provides strong evidence to confirm the nature of teaching at this stage. Teaching practice was a time in which student teachers felt insecure, and the risks involved in departure from the agreed method and detaching from the planned routines could be considerable with regard to time loss and classroom management. Therefore adherence to the format of the method in planning and the planned routines in teaching could reduce the load both in making planning decisions and also new decisions in interactive thinking. In fact, interview transcripts and journals revealed that when not under supervision, those participants who advocated the rule-based approach still adhered closely to the first two stages of the planned routines - presentation and practice of target language patterns, but would drop the last stage - communicative games and

activities - which they found difficult to manage and not in line with the co-operating teachers' existing practice.

On the other hand, despite adherence to the method in planning and the routines of teaching, the process in learning to teach also included an increase in concern about pupils' work, as suggested in the student teachers' stages of progress in Fuller's model above. On these occasions, the student teachers paid more attention to pupils' understanding and performance, with increased thoughts about problems and reactions to them. However, their limited PCK and classroom experience still hindered their generation of new decisions or alternative strategies for problem-solving. Having failed in achieving their intentions, they resumed their practices of adhering to the routines. Although data in this study do not clearly address other stages of Fuller or Berliner's model, they do match two components of Kagan's (1992) depiction of the development of novice teachers: an increase in metacognition in teaching, and a shift in attention from self to the design of instruction for pupil learning. This study responds positively to theories about stages of teacher development by presenting characteristic problems and developmental patterns of student teachers as novices.

3. Limitations of the Study

Gaining access to teachers' minds has always been a challenge to researchers on teacher thinking. This study has generated rich data, but also left much to be explored about the nature of student teachers' knowledge base and complexity of thinking. As an initial study in Hong Kong exploring student teachers' patterns of development in learning to teach ESL, it seemed appropriate, in analysing qualitative

data, to follow the cognitive conceptual framework and make constant comparison so as to develop into a grounded theory. However, in considering more alternatives associated with the data collection procedure, there is a need to address the limitations of the research tools. A major characteristic and limitation of the research into student teachers' thinking and belief systems, because of its biographical nature, has been the consistently small numbers in the research samples from which to draw conclusions, and little information given on how the samples were chosen. While the issues of validity of the study (see I:4 of this chapter, pp.176-177) and the choice of its sample (see II:3, pp.52-54, and II:5, pp.56-57, of Chapter Three,) have been addressed in the earlier sections of this study, the potential weakness of this research, derived mainly from the small sample of eight subjects, still remains. On the one hand, one may argue that the small sample size is necessitated by the intensive nature of the biographical approach, but it cannot be denied that the findings may have provided only limited evidence on what actually took place on the teacher education programme. On the other hand, the fact that the data are based only on what the student teachers can articulate have also posed difficulties to the data collection process. One major problem lies in the dual role of the supervisor-researcher that the researcher played. This could lead to several scenarios. The first being that the reported thoughts could be products of the supervisor's guidance, and thus validity comes into question. Alternatively, the student teachers might not receive as adequate a level of supervision as those who did not participate in the research. Worse still, the other student teachers could possibly feel that the grades they received would in some way be affected by their not taking part in the project. Though the concerns for these ethical issues were carefully considered (see II:5 of Chapter Three, pp.56-57), the findings indicate that a positive rapport whereby the subject is left to express thoughts

freely and actively depends, to some extent, on individual student teachers. Most of the student teachers were active in making their thinking explicit. However, one or two of them, probably owing to their personality traits and the one-to-one setting, were relatively taciturn - providing short answers guided by the interview questions. It appears that promoting joint discourse is helpful in making the tacit explicit.

In his study on teachers' cognitive development, Freeman (1991) reported change as a product of shared discourse. Shared discourse not only contributes to increasing the complexity of the teachers' thinking about their teaching, but also enables them to see conflicts amongst theories which guide their action. Such conflicts can be productive when they strike at matters of central concern to the person. In articulating their ways of thinking in the shared discourse, student teachers gain greater control over their classroom practice and are thus more able to shape it to their own objectives. In the light of Freeman's discussion, this study would have gained more insights if the data-set had been extended to include discussions among the peers and how the student teachers reacted to the findings derived from the journals and interviews. Considering the limited scope of this study, future research efforts should utilise various sampling procedures flexibly and move further towards an even more naturalistic stance which permits shifted focus and data-driven research questions.

III. IMPLICATIONS FOR RESEARCH AND PRACTICE

Based on the discussion of the results in the context of the literature, this thesis is now ready to discuss implications for future studies and teacher education. The

conclusion is then drawn by addressing the importance of integrating research and training.

1. **Proposals for Future Studies**

This study has not only generated some theoretical propositions, but also indicated a promising line of research on student teachers' development. Validation of the propositions will extend knowledge about how teacher thinking and PCK change affect the development of teaching skills. By considering the recent literature on learning to teach, proposals for future studies are discussed in terms of the methodological, longitudinal and cultural domains.

(a) *The Methodological Domain*

While findings of this study resulted from the design specified in Chapter Three, through the implementation of the study, methodological alternatives are recognised. The following discussion will focus on alternative procedures in collection and analysis of data.

Although this study has led to some theoretical propositions, it is recognised that a different sample could have produced different evidence, and in turn different results. Future studies should seek to further explore alternative samples. Among important questions are whether the nature of the training model, school type, subject discipline and level of pupils are significant factors affecting the general patterns of student teachers' development. Answers can only be gained through comparison of results in cross-programme, cross-school and cross-curricular samples.

To address the limitation of small sample size discussed previously (see II:3 of this chapter, p.185), one possibility is to combine both quantitative and qualitative techniques as advocated by Caracelli and Greene (1993). A questionnaire can be used to identify changes in individual's thinking about teaching and learning from a large sample, and an analysis of the results of the quantitative data can be used to identify a small sample for interviews. In this way, while coding and quantification of data provided an objective way of sorting the possible patterns, the raw data can also be examined qualitatively through observational notes.

(b) *The Longitudinal Domain*

Focusing on the teacher training period, this study has contributed to research on teacher development in the initial stage. In order to have a full view of teacher development, it is necessary to investigate longitudinally. In addition to research on novice-expert differences and the initial stages of learning to teach, attention ought to be drawn to questions about how novices become experts, and what are the conditions that lead to expert teaching. Research should also be needed to find out the characteristics of teachers in their acquisition of expertise. Calderhead (1988) questioned the validity of differentiating expert and novice teachers in terms of the number of years of teaching experience, as expert-novice differences remained even after years of teaching experience. He further pointed out the danger of linking experience with effectiveness. On the other hand, it would be valuable to follow novices through time in longitudinal case studies for the entire process in acquiring teaching expertise, as advocated by Xiao & Zhang (1998) and Schempp et al. (1998). Further research questions concern the definitions of expertise and the stage(s) beyond expert teaching.

(c) *The Cultural Domain*

Based on a Hong Kong teacher training institution setting, this study has incorporated views from a cultural perspective. Although the results have been interpreted in the context of existing literature, it should be pointed out that most previous studies have focused on teacher education in European or North American countries. In fact, the background setting of this research is also related to a western model. Despite the fact that all the student teachers are ethnic Chinese, the elective subject of English of the Certificate in Education programme is based on a western form of curriculum design, and the majority of teaching staff have received at least part of their education in western countries. It is therefore not surprising that the findings echo part of the literature on student teachers' thinking and PCK change.

The emerging theoretical propositions derived from this study are yet to be extensively studied in different cultural settings before any generalisable claims can be made and a theory of student teachers' developmental stages developed. Further studies may seek to address the questions whether Hong Kong student teachers' linguistic incompetence affects their professional development, whether what they teach is realistic and whether the conditions in school which support their practice teaching are also prevalent in western countries. Although the main focus of this study is not on the cultural domains, it has at least directed much of the attention from American and European teacher education programmes to South-east Asia; replication studies in other oriental programmes would also contribute much to promoting theoretical development. Research has shown that teachers' thinking styles and classroom practice are much influenced by the cultural environment and social values and beliefs (Freeman and Johnson, 1998). Although this study has not

specifically addressed cultural issues, it is worthwhile to explore the extent which influences derived from traditional Chinese values and contemporary beliefs in Hong Kong have on student teachers' thinking and actions. The cultural domains should therefore be important concerns in future studies. More comparative studies across different societal settings of Chinese cultural origin, such as mainland China, Taiwan and Hong Kong, are needed.

2. Teacher Education

The findings in this study have shown that student teachers modify their pre-training knowledge during teacher education, not only their knowledge about English, but also the way English is learned and taught. Most attempted to follow the method learned from the methods course in lesson planning and classroom practices during teaching practice. What remains an open question is, despite much struggle going on inside these student teachers, whether their adherence to the method is a result of their limited subject content knowledge on entry to the course or whether this particular transformation is the only possibility available to them during the course. A related question is whether this induced change into a method encouraged by the Institute is the best way to promote teacher development in the dynamic and intriguing setting of the English classroom. It is on the basis of these descriptions that realistic expectations of teacher education can be considered. This study provokes consideration of a number of issues.

(a) *Content of Teacher Education*

This study suggests that PCK should play a more important role in our teacher education if a model of effective teaching practices is to be built up. Research has shown that teachers' curricula are closely connected to their pedagogical reasoning which is in turn governed by their PCK. In their studies of the differences between experienced and novice teachers on content knowledge transformation, both Chen & Ennis (1995) and Richards et al. (1998) report that the level of PCK matters greatly. During the process of pedagogical reasoning, the expert teachers, by making use of their large repertoire of PCK, critically interpret the subject matter knowledge, identify alternative knowledge representations, adapt the representations to their students' characteristics, and tailor the content to meet the needs of a specific student group (such as a class) rather than those of the student population in general.

The student teachers in this study brought to the teacher education programme some general knowledge about teaching and learning, but limited subject pedagogical knowledge. During teaching practice, they found the planning of lessons such a demanding job that some had to burn the mid-night oil in order to prepare well for their teaching. One of the reasons why lengthy work was needed might have to do with their under-developed subject content knowledge systems. Very often, owing to the limited schemata for conducting English lessons, they found it difficult to determine what information was useful for their planning. Hence, it is not surprising that some reported having to spend more than an hour on working out one single lesson plan. As reported in the findings, in order to save time most student teachers chose to take the "short cut" by following the lesson routines learned from the methods course (see IV, pp.115-119, and VI, pp.136-137, of Chapter Five).

The representations generated by the student teachers also reflect their surface knowledge of the teaching content. Owing to their incomplete and superficial levels of PCK, many of them relied on the unmodified representations extracted from the methods module. While expansion of the store of PCK was shown as the student teachers progressed through teacher education, much more has to be done to enable them to develop their PCK before they can achieve the level of the experienced teachers described by Chen & Ennis (1995) and Richards et al. (1998). The findings of this study support the perspective of Wilson et al. (1987) that PCK should be an integrated part of the teachers' knowledge and should therefore be incorporated in the teacher education curriculum.

(b) *Process of Teacher Education*

Recent research on teachers' thinking points out how unrealistic it is to conceive of teacher education as imparting a set of pre-formulated ideas or principles to be implemented by teachers (Kettle & Sellars, 1996; Foss & Kleinsasser, 1996). As mentioned earlier teacher educators associated with the academic-competency tradition, as described by Diamond (1991), voiced strongly the importance of helping teachers formulate adequately their individual selves and personal agendas. Their view was echoed by Liston and Zeichner (1991), who argued that the rationale for teacher education should extend from a behaviourist to a cognitive domain, which means instead of emphasising the acquisition of specific observable teaching skills, educating effective teachers should involve promoting teachers' personal discovery. From the constructivists' point of view, learning could be likened to a scientific-like inquiry. Learners (in this study the student teachers) are no longer passive recipients of knowledge supplied by the teacher, but scholars and investigators. Teachers are no

longer purveyors of knowledge and classroom managers. They must, in the words of Heller and Gordon (1992), demonstrate learning and thought, and be counsellors and supervisors. However, learning as research was challenged by Back (1999), who argued that human knowledge is cumulative. This means real research begins with something that the researcher does not know and wants to find out, and his lack of knowing is based on many other things that he already knows. Therefore a fundamental knowledge-structure must exist, and the assumption that this knowledge is created from scratch by each learner solely from his own personal experience does not have any grounds. Hence, it is crucial that an external agent, a teacher for instance, brings this knowledge to the pupil, and make sure that he assimilates it into his schema. Such view is recognised in this study, the findings of which strongly indicate that for foreign language student teachers such as those in Hong Kong Institute of Education who consider themselves linguistically deficient and who bring to teacher education an “empty disk” with lots of “mental space” to be filled (see I:2 of this chapter, pp.163-164), it would be unrealistic, right from the beginning of teacher education, to expect active participation of them in a shared curriculum which hopefully could lead to effective learning; instead, a given curriculum, initially structured by the methods tutors, may help them build up the basics, establish a knowledge base and survive at least until they have settled down in the programme. It is not until three months into the course when the student teachers are preparing for the micro-teaching practice that skills in planning, teaching, and evaluation could be built in as perspectives beyond lessons. By this time they should be helped to be in more control of their professional development and provided with the opportunity to approach the profession from a much broader perspective than as merely a method. However, to do so right from the very first days of teacher education programme

should be too demanding as that would mean having the teaching candidates thrown into the deep end of a swimming pool.

A related issue that is worthy of revisiting is whether a baccalaureate level qualification in the subject matter should be a pre-requisite for foreign language student teachers, that is, entrance to teacher preparation programmes be limited to students who hold a bachelors degree with a subject matter major. It has been reported in the findings of this study that the student teachers considered themselves “linguistically deficient” and the two-year teacher education programme, split between subject matter and pedagogy, has achieved little in enhancing their English proficiency. Such feeling of incompetence not only hinders their professional development during teacher education but might also prevail when they become full-fledged classroom teachers. A baccalaureate qualification is deemed more necessary for English student teachers than those of other subjects which are less affected by the recent rapid decline in English standard in Hong Kong.

Additionally, results suggest that a spiral programme curriculum might be more appropriate than a linear one, and that the programme content should be revised from time to time to meet the current needs of the student teachers and teaching contexts. One example is the inadequate preparation for the Final Teaching Practice found in the Year 2 programme. Rather than keeping on learning something new not all of which is considered relevant or particularly applicable and practical in the Hong Kong classroom context, it would be more useful if pedagogical knowledge acquired in Year 1 could be revisited in Year 2. Moreover, micro-teaching practices, which for some administrative reasons are not part of the Year 2 curriculum, have been found to be useful in reviewing student teachers’ skills in planning and teaching and in

building up their confidence for the final field experience. A spiral curriculum would have mini-teaching scheduled again in Year 2 of the programme. Another example specific to the programme studied has to do with its failure to provide sufficient coaching about teaching low achievers. None of the eight subjects felt they had enough experience or instruction to successfully work with low achievers by the end of the programme. The gradual change of the Hong Kong education system from one which catered for the elitists to one which catered for the general public in the 1980s', and the switch of the practices of three quarters of the secondary schools from an English to a Chinese medium of instruction across the curriculum in 1997 are considered to be two of the main reasons that have led to the decline in the pupils' English standard in Hong Kong. More and more pupils are not motivated in the English classroom as they fail to see the real need for learning English. Inevitably, such attitudes would have a negative impact on classroom management and motivational strategies, and practising teachers are most hard hit. Extensive and comprehensive attention to helping new teachers come to terms with these might maximise the subject-specific learning and meet the new challenges. Continuous revision of the programme content should be needed.

(c) *Goals of Teacher Education as Related to Student Teachers' Knowledge Growth*

Despite the fact that aims and objectives are clearly stated for teacher education programmes, the outcomes are provocative (see e.g. Calderhead 1987a; Livingston, 1990; Marland, 1998). The results of this study add to the literature in asserting the need to query the expected outcomes of teacher education. In re-considering the goals of teacher education, the issues of desirability and attainability require attention.

The practice of allowing different teacher education programmes to set their own curricula and goals has long been followed by most educational governing bodies. While such practice encourages flexibility, which takes into account the different characteristics of individual programmes, quality assurance of the new teachers comes into question. The findings of this study show that the student teachers considered themselves weak in their subject matter knowledge on entry to teacher education, and that what the programme had offered was inadequate in enhancing their English proficiency. On leaving the course, most of the novice teachers reported more time would be needed in building up their confidence in using the target language to teach. On the other hand, the impact of teacher education on Teacher 5 was minimal. She began and ended teacher education with more the less the same beliefs and conception about teaching and learning English. Research has shown that teachers' thought is closely linked to their classroom practice (Calderhead, 1987a; Chen and Ennis, 1995; Leinhardt and Smith, 1985); new teachers such as Teacher 5 might end up planning and conducting lessons far below the level of competence required for qualified teachers. In the current climate of professional accountability, all these call for the introduction of competence-based models to monitor closely the outcomes of teacher training (Drever and Cope, 1999). This could mean the establishing of competence descriptors in the form of a set of standards for awarding qualified teacher status. Apart from this, there could be a case for a national curriculum for teacher education in which the expectations and requirements for new teachers should be clearly spelt out. An example could be the National Curriculum for Initial Teacher Training (ITT) introduced by the Department for Education and Employment in the United Kingdom. The ITT curricula specify the essential core of knowledge, understanding and skills which teacher trainees must be taught and be able to use in relation to the teaching of

different subjects (DfEE, 1998: p.5). It builds on the standards for the award of qualified teacher status (QTS) (DfEE, 1998: p.3). Though the curricula do not specify a course model or scheme of work, providers of teacher education programmes must use the curricula as the basis for designing courses. While the National Curricula for ITT was first implemented in the U.K. in 1997, the Education Department of Hong Kong has been slow in setting up standards for its teacher trainees. Yet all local teachers will be benchmarked, starting September 2001, on their ability in using the target language across the curriculum. Despite the one-sided focus, on teachers' language use, the impact of the forthcoming benchmarking on teacher education is likely to be tremendous. Changes to various teacher education programme curricula to make them more in line with the specifications of the benchmarking assessment have been observed. The need for inclusion of other aspects of teachers' knowledge in the benchmarking, such as planning, teaching, or classroom management, requires further research and exploration.

While goals can be determined by government policy, they can also be identified from research on pedagogical expertise. As put forward by Borko and Livingston (1989), and Schempp et al. (1998), teacher educators' conceptions of expertise clearly have implications for the design of teacher education programmes. Indeed there is no shortage in the discussion of expertise. Rubin (1989) argued that it is not what expert teachers do, but rather the ways in which they decide what to do that makes the difference in instructional effectiveness, and noted pedagogical intelligence as the ability to facilitate significant learning, with maximal efficiency, under the conditions which prevail. Richards et al. (1995) provided a conceptual framework for the kinds of knowledge that effective teachers should possess: general instructional knowledge and skills, pedagogical content knowledge and pedagogical

reasoning skills. Schempp et al. (1998) refers teaching expertise to the teachers' ability to search for new ideas, not reinventing their pedagogical practice but refining and improving the techniques and knowledge they presently possessed. Research on novice-expert comparisons has certainly illuminated the nature of pedagogical expertise, which should arguably be considered for targeting the teacher education experience.

Although conceptions of expertise can provide new orientations to teacher education, little remains known of the process by which novices become experts. As pointed out by Schempp et al. (1998, p.9), "The pinnacle of a professional practice is reached by only a few." In most cases these few are considered experts who help set the standards for those who follow. Questions were raised regarding attainability of the goals - whether teacher education experiences reflect the ambiguity of teaching, and how teacher preparation programmes might be producing incompetent teachers by advocating practices that simply do not work for novices. In considering both the desirability and the attainability of goals, perhaps there should be specific as well as general views. Supplementing the theory of expertise acquisition proposed by Berliner (1988), the theoretical propositions about student teachers' developmental patterns which emerged from this study suggest some specific as well as general goals for teacher education. While knowing what expert teachers do, and why, cannot lift one from the level of novice to expert teacher, specific goals in the form of benchmarks can be provided to measure progress in the pursuit of pedagogical expertise. In achieving the goals offered student teachers should be made aware of the practice and development of expert teachers. On the other hand, increase in metacognition in relation to teaching along with attempts to experiment with student-centred activities, and to shift attention from teacher performance to pupil learning

turn out to be rather general goals. Arguably, ideal targets and individual variations should both be considered. To maximise the positive effect of teacher education, the goals should be individualised according to the stage that each student teacher enters at the beginning of the practice period. While the identification of stages of student teachers' development is yet to be clarified in future studies, sensitivity to possible stages would help establish more attainable goals for individuals, in particular those who consider themselves not so competent as teachers.

(d) *Development of Critical Reflective Skills*

In their review of research on teacher thinking, Clark and Yinger (1987), and more recently Boyd et al. (1998) challenged the image of teacher as technician and the image of research (see I:2 of Chapter Two, pp.17-19) as a source of empirically proven and generalisable prescription, and viewed teachers as reflective professionals. As discussed earlier (see III:2 of Chapter Two, pp.33-34), research on expert teaching has reached consensus on the fact that expert teachers have amassed a large quantity of knowledge and possess cognitively more elaborated structures. This allows them to meaningfully interpret classroom events and effectively make decisions that lead to exemplary performance (Borko & Livingston, 1989; Richards, Li & Tang, 1995). Although Schempp et al. (1998) suggested that expertise in pedagogy is not a level of development attained by everyone, this study reports on the student teachers' capacity and ability for reflection, though it is not fully actualised in most cases. It is likely that the recurrence of problems throughout teacher education programmes could be a consequence of the adherence to the method and teaching plans without active evaluation and critical reflection of its practicality and feasibility and of past lessons.

In view of a need to strengthen the link between planning and evaluation, this study agrees with Calderhead (1991), and also Boyd et al. (1998), that student teachers may require not only experience in schools but assistance and support to reflect upon that experience. It seems that if student teachers are equipped with critical reflective skills they are better able to evaluate their practical and intellectual experiences and have these stored in their growing schema of teaching and learning. Some of the means to develop student teachers' schema and their attitudes as reflective professionals may have to do with the school cultures and work contexts. As observed by Boyd et al. (1998) and Nicholson (1999), reflective teachers are culturally and socially nurtured by many others, such as co-operating teachers, peers, pupils, supervisors, principals, and the schooling context. The findings of this study strongly support the view that individual practitioners, if assisted by these other people in the school setting, are able to construct and reconstruct knowledge about teaching through the reflective analysis of experiences, though much more still needs to be done, as discussed in the following:

Developing the Practice of On-going Professional Enquiry. In enabling student teachers to go through the journey towards becoming reflective practitioners, one of the challenges that teacher educators face is to motivate them to become investigators of thinking and action. The teaching candidates must be encouraged to question how and why they are doing what they are doing (Cruikshank, 1990). They must be facilitated to make connections between thinking and action. As suggested by Holmes Group (1995), teacher education programmes which can enable student teachers to connect knowledge taught in the methods course to practical classroom application are more likely to prepare reflective professional teachers than technicians.

As reported in the findings of this study earlier, most of the participants, owing to their educational biographies, lacked confidence in teaching on entry to teacher education, and so were basically playing the humble role of recipients of knowledge. The methods and theories presented to them in course work were seldom challenged or questioned but treated as “solutions” to classroom problems. It was not until the first placement that some student teachers came to realise that the imposition of uniform practice did not work in their own teaching contexts. Some reported having trouble with coping with the situation on their own. This calls for the need to examine ways teacher education and school cultures assist student teachers in developing attitudes of a reflective practitioner. One of the alternatives is to develop in student teachers the practice of on-going professional enquiry.

The idea is to, in the Institute classroom, encourage student teachers to rethink the basic assumptions underlying English, teaching and learning English, and to question new as well as traditional practices. Novice teachers should be guided to question what they read or heard, or to compare it with their own experiences or prior knowledge. In this direction, Jackson (1999) has successfully developed the use of reality-based TEFL (Teaching English as a Foreign Language) cases to help student teachers narrow the gap between theory and practice and refine their reflective, analytical and decision-making skills. In the teacher education programme she directed, detailed narrative accounts of teachers confronting dilemmas in local classrooms were used as powerful catalysts for questions and answers as well as discussions. These cases could be a means of providing opportunities for questioning and reflection. On the other hand, professional enquiry should not be restricted to the Institute classroom. Novice teachers should be provided with opportunities so that they know to what extent the questions generated are answered or confirmed during

teaching practice. Placement also enables student teachers to be involved in real classroom experiences that generated practical questions to be answered and problems to be solved. Findings of the study conducted by Boyd et al. (1998) on forty-seven student teachers enrolled on a language arts methods course review a reflective pattern in their questioning of issues of management, appropriate teaching materials and methods of instruction. These questions further indicate student teachers' request for the provision of time for generating questions, exploring answers, coming up with solutions that could then be involved in trialling of ideas again. The study suggests, by assisting student teachers' in committing to ongoing professional inquiry, growth as reflective professionals can be promoted.

Consistent Support by the Institute Supervising Tutor. The student teachers in this study reported the inadequate support rendered by the Institute supervisor during teaching practice – one or two visits made by a supervisor whom the student teacher might not know (see I:3 of this chapter, p.173). While teaching practice is considered an important component of the teacher education programme, much of the student teachers' time on extended practice was spent without the supervisor's guidance. Reports from their journal entries reported the student teachers' feelings of fighting a lonely battle. To them the supervision visits were considered as a form of assessment rather than support or guidance. Opportunities provided for consulting the supervisor on matters related to coping with the placement were rare. It is not surprising that many student teachers experienced what Hargreaves (1980) described as fundamental competence anxiety, arising in part from their self-doubts in both their subject matter knowledge and pedagogical knowledge, and their anxiety about the contexts in which they work.

As suggested by Tillema (1997) and Sugrue (1997), student teachers enter teacher training with quite different expectations for the programme and their own learning, which in turn influence how they make sense of their training experiences. In helping practising teachers alleviate their anxiety, Calderhead (1991) suggested supervisors' playing a counselling role in supervising learning during placement, when the support needs of individual student teachers are considered. Among the support strategies he proposed, the major ones include the supervisor's sensitivity to student teachers' developmental stages, openness in appreciating different contexts of teaching, and consistent support for student teachers' experimentation which involves risk-taking. In the absence of the supervisor during most of the time of teaching practice, student teachers should be encouraged to initiate possibilities of observing and working with other teachers, and to seek support from peers in tackling problems, in enhancing reflective practice and in activating the potential of self-evaluation.

Dynamics of Peer Reflection. This study shows positive effects of collegiality amongst student teachers and the benefits in learning they gained from one another. It is clear that interaction with peers encouraged student teachers to challenge existing views and their own views about teaching. As pointed out by Chow (1996), developing skills of critical analysis and reflection in the relatively non-threatening environment of peer reflection groups should help build student teachers' confidence in discussing issues with others, in particular their supervisors and co-operating teachers. Such peer interaction also serves to model for students the process of collaborative professional development which may encourage them to continue such collaboration with colleagues when they become full-time teachers. In the scenario when student teachers have to work with disruptive learners, as in the case of nearly half of the subjects in this study, peer reflection groups could be a strong form of

support for morale boosting and problem-solving. This study also reported more vigorous peer interaction found between student teachers of the same elective, which may inform the system of placement exercises. Rather than putting student teachers of different electives in the same teaching practice school, consideration should be given, if situation allows, to the possibility of pairing up student teachers from the same elective and having pairs instead of individuals placed in different teaching practice schools.

Opportunities for Trialling of Ideas. While echoing the argument put forward by Chen et. al. (1995) that reflection is cultural and social, this study suggests the need to involve the school, where professional life in teaching takes place. However, the findings of this study show that the formal and informal school context, in its present form, does not provide the ideal environment for the trialling of ideas considered central to student teachers' reflection (see IV & V of Chapter Six, pp.149-156). The co-operating teachers' advocacy of teacher-centred learning for easier classroom management and a structural-based approach to teaching, and their overall ignorance of the programme's philosophy, coupled with the numerous contextual barriers found in different schools, all made student teachers hesitant, if not reticent, to trial ideas. These call for improved "Institute-School" collaboration and mentoring systems.

In teaching practice, the student teachers are the ones intended to benefit. But the findings of this study show that the effectiveness of teaching practice can be reduced if the people concerned, including those from the teacher education institutions and schools, work in different contexts with different professional cultures. It is evident that they have diverse attitudes and beliefs about research, teaching and

learning. In this study, student teachers who carried with them their own experiences and background with specific assumptions about knowledge and belief systems had to work with different personalities from both organisations. Most of them, if not all, found the relationship complex and difficult to cope with, and refrained from experimentation.

Effective implementation of the field experience component in initial teacher education courses requires an effective partnership between schools and the teacher education institution. This relationship is crucial to success in preparing student teachers.

On the other hand, the role the co-operating teachers play is far from clear at present. To student teachers, the role should not be one of dictating practice but rather, giving them support, helping them understand the practice of teaching, and providing alternative opportunities for trialling of ideas. In the view of the constructivists, it is by no means enough just to let the novice teachers share the teaching files and notes, observe the lessons of the co-operating teachers and model some of their practices. To encourage active knowledge, intellectual and experience development in novices, it is important that the co-operating teachers can demonstrate and explain in detail the strategies they use and discuss with the novices skills in solving pedagogical-related problems. It is also important that more vigorous shared professional discourse can be established, and that the co-operating teachers can explicate their pedagogical reasoning to novices in the processes of transforming subject matter into pedagogical representations so that the linkage between their practices and knowledge structure can clearly be shown. As Feiman-Nemser and Parker (1990) point out, whatever preparation beginning teachers have, there are some aspects of teaching which can

only be acquired during such conversations between the co-operating teacher and the novice.

However, as pointed out earlier in this study (see III of Chapter Six, p.152), nearly half of the English teachers in Hong Kong are not subject trained. Many lack confidence and the expertise in giving guidance to student teachers. Besides, owing to their heavy teaching load and non-teaching duties, most are not willing to be involved in frequent discussions with practising teachers. The need for an improved mentoring system is pressing. According to Feiman-Nemser and Buchmann (1986) and Berliner (1987), experienced teachers are not necessarily expert teacher educators. Therefore the mentors involved in teacher education should be carefully selected. One suggestion is to have those recommended by school principals or others chosen from in-service training courses. On the practical side, experienced teachers should be more willing to take up the extra responsibilities if, as suggested by Jancer (1996), they are given incentives - their teaching load is reduced and their work recognised by the TESL community.

3. A Closer Link between Research and Practice in Teacher Education

This study supports the call in the literature for innovations in teacher education which enhance student teachers' development of PCK and cognitive competence (see Hollingsworth, 1989; Richards et al., 1995; Xiao & Zhang, 1998). It also echoes the recommendation of Schempp et al. (1998) that there is a need for research to identify the characteristics of student teachers in their acquisition of expertise within teacher education programmes aimed at promoting various conceptions of pedagogical expertise. To actualise this, in-depth study on the part of

the teacher educator to explore the processes by which student teachers respond to innovations and develop themselves should be required. While researchers who are not teacher educators may be less sensitive to the complexities of teacher education, and may have inappropriate frames guiding their research, it is necessary to narrow the gap between those who do the research and those who deliver teacher education. In acquiring knowledge about processes in learning to teach, the supervisor-researcher of this study has been prompted to reflect on his own practice, and participate as designer in teacher education curriculum reform. Apart from the contribution to the knowledge base for teacher educators, findings about learning to teach in this study have a direct impact on innovations which bring about understanding of processes in learning to teach. A close link between research, broadly defined, and practice in teacher education has thus been developed.

Advocating integration between research and training does not imply that research based teacher education by itself could help teachers achieve innovations in teaching and thinking. As recognised by Freeman and Johnson (1998), teaching is more than the accumulation of research knowledge, as giving more research knowledge to teachers does not necessarily make them better practitioners. According to them learning to teach is a long-term, complex, developmental process that functions through participation in teaching and learning contexts as well as social practices. Thus there are strong links between pre-service and in-service teacher education and teacher development, teacher education should be viewed holistically. Apart from training, it is also important to consider the school context where the development of professionalism in teaching is taking place. They further argued that how teachers actually use their knowledge in classrooms is highly interpretive, socially negotiated, and continuously reconstructed, within the classrooms and

schools where the teachers work. Their propositions included the call for a broader epistemological view of teacher education – one that accounts for teaching as it is learned and as it is practised, reconceptualisation of the knowledge-base of teacher education documenting teacher learning within the social, cultural and methodological contexts in which it occurs, and the integration of initial preparation and continuing education of teachers. Associated with these concerns are the recent movements in the direction of the development of teachers' practical knowledge through school-based curriculum development projects (Marland, 1998; Nicholson, 1999), and partnerships in teacher education between teacher training institutions and co-operating schools (e.g. Anderson, 1997; Boyd et al., 1998; Lacey, 1996; Nicholson, 1999). As put forward by the Holmes Group (1995), "Schooling in America cannot renew itself so long as the links between teacher education institutions and public schools languish". The concept of partnership emphasises the crucial but complementary roles of both training institute staff and co-operating teachers in school-based practical experiences. Collaboration with schools requires a different system of operation which should be the focus of ongoing action research, and the observation of its effects should contribute to theoretical development.

Though obviously limited by the single programme studied and the small sample size, this study makes no claims beyond giving an insight into the processes involved in the development of student teachers' PCK and thinking and into some of the factors which influence this development. However, it does raise issues that help direct our thinking about teacher education reform. The thesis concludes here with anticipation of a closer link between research and improved practice in teacher education.

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Appendix 1¹ Certificate in Secondary Education Course

1. *COURSE AIMS AND OBJECTIVES*

The Certificate in Secondary Education (English) Course prepares Secondary 5 to Secondary 7 graduates to become teachers qualified to teach two subjects up to the level of Secondary 3, using English as the medium of instruction.

On completion of the course, students should be able:

- to teach two subjects up to the level of Secondary 3, using English as the medium of instruction;
- to select and demonstrate the use of appropriate teaching strategies and resources;
- to perform the duties of a form teacher;
- to work collaboratively with pupils, parents, colleagues in school and groups in the community;
- to demonstrate critical reflection on their teaching and educational-related issues; and
- to evaluate curriculum documents.

2. *COURSE DESCRIPTION / STRUCTURE*

The Certificate in Secondary Education (English) Course seeks to integrate theory and practice and to develop critical reflective ability and pedagogical content knowledge. The course is conducted using a wide range of teaching and learning methods which may include lectures, tutorials, workshops, seminars, discussion, projects, field trips, visits, laboratory and practical work.

The course adopts a modular credit point system. Within each area of studies (except for the practicum), there are modules of related learning. Modules are generally assigned 2 credit points. Each credit point is equivalent to 15 contact and directed hours. Students are expected to commit additional time for reading, assignments and independent study.

The two-year full-time course requires a minimum of 60 credit points of course work plus 14 weeks of field experience.

The course curriculum is classified into five domains of study:

- Curriculum Studies
- Academic Studies
- Professional Studies
- General Education

1 This document is adapted from the *Certificate in Secondary Education Course Student Handbook (1996-98)*, The Hong Kong Institute of Education

- Practicum

Curriculum Studies

Students will study the secondary school curriculum, with particular emphasis on the two elective subjects they have chosen. The purpose is to acquaint students with the curriculum aims, objectives, design rationale, subject content, teaching methods and assessment approaches of these subjects, so that they can have a better understanding of the needs of learners. Elective subjects available in this academic year are:

- Accounting & Office Management
- Art & Design
- Business & Office Management
- Chinese
- Chinese History
- Computer Literacy
- Design & Technology
- English
- Economic and Public Affairs
- Geography
- History
- Home Economics
- Mathematics
- Music
- Physical Education
- Putonghua
- Science
- Social Studies
- Technical Drawing

Besides the two elective subjects, students are also required to study Personal and Social Education, which aims at developing their competence in performing their future roles as form teachers.

Academic Studies

In this area of study, students will choose the same two subjects as they choose in Curriculum Studies. The aim of this domain is to widen and deepen students' knowledge base so that they are better equipped to teach the subjects they have chosen. In addition to the two subjects, students are also required to study one core module entitled Culture and Society (Hong Kong Studies).

Professional Studies

This domain provides students with an understanding of theoretical knowledge

in the education foundation, including philosophy of education and curriculum studies.

The modules offered are:

- Human Development: Childhood & Adolescence
- Learning and Teaching
- Instructional Design & Skills for Effective Teaching
- Fundamental Principles of Education
- Classroom Teaching Skills
- Designing & Developing Instructional Media
- Productive Human Relationship in School
- Understanding the Hong Kong Educational Context
- Seminars & Talks (non-credit bearing)

General Education

In this domain, core modules and elective subjects are designed to extend students' language proficiency, study skills, personal and social competencies as well as their awareness and appreciation of culture and arts. Core modules include English Language Skills, Putonghua and Life Skills. In addition to the core modules, students are required to study one of the following elective subjects:

- Computer Applications
- Art
- Music
- Physical Education

Practicum

The Practicum includes tutorial sessions, school visits, attachments and block teaching practice. The purpose is to provide students with practical experience which helps them integrate theory and practice. It includes approximately 14 weeks of school experience introduced progressively to enable students to carry out the duties of a teacher effectively.

3. *ACADEMIC POLICIES AND REGULATIONS*

A full set of the Academic Policies and Regulations relating to this course is contained in the Student Handbook.

4. *MEDIUM OF INSTRUCTION*

For the Certificate in Secondary Education (English) Course, all subjects other than Chinese, Chinese History and Putonghua will normally be taught in English.

Appendix 2²
Description of the English Elective Course

Hong Kong Institute of Education
Certificate in Secondary Education Course
English

AIMS

The English elective course is designed to prepare students for the highly specialised task of teaching English in Hong Kong primary and secondary schools.

OBJECTIVES

The objectives of the elective are:

1. to increase students' knowledge of the English Language System.
2. to help students to use English for effective communication.
3. to help students acquire a range of specialised teaching skills.

ELECTIVE CURRICULUM

Secondary education course modules provide an in-depth study of aspects of language and communication relevant to the teaching of English at lower secondary level.

Modules offered are:

Academic Studies

1. Syntax and Pedagogical Grammar
2. Phonology, Lexis & Discourse
3. Second Language Acquisition and Bilingual Education

Curriculum Studies

1. ELT Methodology at Junior Secondary Level
2. Teaching ESL and Language Arts

General Education (English medium stream only)

1. English for Student Learning
2. English for Teaching and Pupil-centred Learning

2 This document is adapted from the *Course Handbook for English Elective Students (1996-98)*, English Department, Hong Kong Institute of Education.

Appendix 3
Pre-programme - Pre-training Beliefs
Interview questions

Personal Information

Name

Sex

Age

Name and type of secondary school attended

Family background

Sources from which English was learned

Pretraining Beliefs and Conceptions about ESL Teaching

1. What do you remember best about learning English at school?
2. What are your views about ESL teaching?
3. Where do these beliefs come from?
4. What kind of teacher are you?
5. What in your views are the qualities an effective ESL teacher should possess?
6. How do you define effective ESL teaching?
7. How do you see the role as a teacher?
8. What is your major concern in planning an ESL lesson?
9. If you are to plan an English lesson, what form or structure do you lessons have?
10. Do you think students should learn grammar in the ESL classroom?

Appendix 4
Winter (Year 1) - Campus-based Practicum
Interview questions

1. How much time did you spend on preparing the lesson plan?
2. What concerned you most before you started planning?
3. What do you want your students to learn from this lesson?
4. What activities are included in the lesson?
5. How does the lesson connect to what students already know?
6. How do you organise the lesson into stages?
7. How do you begin and conclude the lesson?
8. How will you check on student understanding?
9. What role will you take on during this lesson?
10. What discipline and management techniques do you anticipate?
11. What grouping arrangements will you use?
12. What are your alternative plans if problems arise with some aspect of the lesson?
13. What will you do if you have too much time?
14. How would you characterise your planning of this lesson? Would you say it is theory-based or not?
15. What do you think are the most interesting features of your lesson and why?

Appendix 5
Summer (Year 1) – Supported Teaching Practice
Stimulated Recall Interview

1. What kind of on-the-spot decisions did you make while you teach?
2. What kind of interaction occurred in your classroom?
3. What interactional styles did your learners favour?
4. What kind of grouping arrangements did you use and how effective were they?
5. What kinds of learning activities did you employ?
6. What is the purpose of these activities?
7. What patterns of language use occurred when you were teaching?
8. How did you modify your language to facilitate teaching and learning?
9. What opportunities did learners have for authentic language use in your lessons?
10. What criteria did you use to evaluate your teaching?

Appendix 6
Summer (Years 1 & 2) - Supported & Block Teaching Practice
Teaching Practice Journal

You are expected to keep a journal of your teaching practice experience.

1. Purpose of the journal: The purpose of the journal is to encourage you to think carefully about the work you do with a particular class and how the work develops over the time.

2. Scope of the journal: You should keep the journal from week 1 to week 4 of your teaching practice. You should keep it on one class only. You can choose which class this should be.

3. Contents of the journal: You are free to include anything that seems to you to be important in the work that you do with the class.

Possible topics about which it may be interesting to comment are:

Student learning:

- whether you are satisfied that learning is taking place; how you can tell.
- any difficulties faced by any of the students and how you help the students to overcome them

Teaching:

- whether the methods and techniques you try are successful and why/why not.
- how you measure your success
- whether you are able to use any of the ideas / techniques which you learnt about during your methods class or other sessions; problems you met in trying out ideas and how you tackled them.
- how confident you feel in your teaching and how your confidence changes over time.

Class management

- whether it becomes easier / harder over time.
- difficulties with any special group / individual.
- what you try to address problems and how successful these means are.

Appendix 7
Winter (Year 2) - Task-based Learning
Interview Questions

- About the UK Immersion Programme held in the UK during the summer 1997:
 1. Tell me something about UKIPST. Did the course touch on language teaching methodology?
 2. What teaching techniques did you learn from the course?
 3. Do you have a different perspective in language teaching after finishing the course? If yes, what is it?
 4. Do you find what you have learned from the course useful in the context of Hong Kong? Do you think you can apply what you have learned in the Hong Kong ESL classroom?

- About Task-based Approach:
 1. Now that you have finished the module on task-based approach, what do you know about it?
 2. How is it different from the traditional approach in language teaching?
 3. How likely it is that you will try out Task-based Approach in the coming TP?

- About Target-oriented Curriculum
 1. What do you know about TOC?
 2. How is it different from the existing curriculum?
 3. What do you think are the drawbacks of TOC?
 4. To what extent do you think it is feasible in the schools?
 5. What kind of problems do you think teachers will face when TOC is implemented?

Appendix 8
Letter to the Principals of TP Schools

Date

The Principal

Dear Mr.

Thank you very much for accepting our student _____ to practise teaching in your school. The teaching practice provides student teachers with structured experiences and opportunities to try out different teaching approaches in the classroom with the guidance of the supporting teachers and tutors. Such experience is crucial to the preparation and development of a teacher.

Research on the preparation of competent teachers is equally important and has been encouraged and developed in the Hong Kong Institute of Education. In fact _____ is one of my subjects in the research project *Pedagogical Content Knowledge Development in Learning to Teach English* which I am currently undertaking. The purpose of the project is to find out the knowledge growth of the student teachers in the process of their learning to teach hoping that the findings will help curriculum planners to prepare better teacher education programmes.

One of the data collection procedures of the study is to have the lessons video-taped and then analysed right after so as to know the extent to which student teachers can reflect on the effectiveness of their lessons. For this reason I, in the capacity of XXX's subject supervisor and research investigator, would like to seek your approval in allowing a colleague of mine from the Education Technology Unit to video record XXX lesson during my supervision visit on XXX in XXX period. The focus of the recording will be on the teacher's performance only so that disruption to the students will be minimal.

I look forward to your kind consent. Please let XXX know your decision at your earliest convenience. If there is any question please do not hesitate to call me at XXXXXX.

With renewed thanks,

Yours sincerely,

Appendix 9
List of Tables

**Table 4 Student Teachers' Knowledge of the Subject Content -
On Entry to the Course**

CE Programme	Summary of Student Teachers' Knowledge
<u>1st week of programme:</u>	<u>Content</u>
<ul style="list-style-type: none"> • Pre-training Knowledge – recollection of own learning experiences 	<ul style="list-style-type: none"> • knew language having two functions and different substance in two contexts (classroom and natural) • more familiar with the pedagogical function of English as a subject in the school curriculum – system of English main focus • exposure to English in natural contexts limited <p><u>Learning English</u></p> <ul style="list-style-type: none"> • negative perception of learning English – difficult to learn, English lessons boring and a waste of time • apprenticeship of observation – spontaneous, intentional interactions seldom present in their own learning experience <p><u>Teaching English</u></p> <ul style="list-style-type: none"> • conceptualised English teaching as bringing fun into the classroom, establishing successful relationship with pupils, organising materials & selecting materials and content • not yet able to create a natural process of language learning within the constraints of a classroom • would avoid repeating their teachers' mistakes when become full-time classroom teacher • perception of effective lessons on general (not subject-specific) and observable aspects, e.g. whether the pupils' are motivated • perception of qualities of effective teachers on recalling the exemplary performances of teachers who most impressed them, e.g. having abundant subject content knowledge and a wide repertoire of teaching skills, fluent in English but not necessarily NETs • lacked confidence in teaching – linguistic competence, poor performance in English Language in public examinations

Table 5 Student Teachers' Knowledge of the Subject Content – Three Months into the Course

CE Programme	Summary of Student Teachers' Knowledge
<u>Course work on campus:</u>	<u>Content</u>
<ul style="list-style-type: none"> • Approaches to English Language Teaching (emphasis on the Communicative Approach) • Knowledge in the teaching of language skills • Micro-teaching workshops 	<ul style="list-style-type: none"> • knowledge embedded in the method learned to use in micro-teaching and teaching in future • believed that the method would be practical and feasible in the local context • pre-training knowledge of language performing a pedagogical function expanded to that of a range of language functions <p data-bbox="516 815 721 848"><u>Learning English</u></p> <ul style="list-style-type: none"> • conceptualisation of language learning focused on communicative classroom language learning • found it difficult yet interesting to relate their own learning processes (memorising vocabulary and language structures) to what were learned on the course <p data-bbox="516 1088 725 1122"><u>Teaching English</u></p> <ul style="list-style-type: none"> • lesson planning aimed to move away from structural-based learning to practices more accurately approximating language used in the world • presented lesson plans in nearly the same format and performed tasks in a similar way in micro-teaching – emerged as duplicators of the method learned

Table 6 Student Teachers' Knowledge of the Subject Content – The First Teaching Practice

CE Programme	Summary of Student Teachers' Knowledge	
<u>Supported Practice:</u>	<u>Teaching</u>	<u>Content</u>
◦	Gain acquaintance with classroom reality	◦ behaviour showed similar ways of dealing with the subject matter – following the same method
◦	Apply pedagogical knowledge and skills learned from the course	◦ knowledge not yet made homogeneous – use pre-training knowledge and new teacher education knowledge in a variety of ways during TP ◦ showed a certain degree of resistance towards the modifications of their pre-training subject matter knowledge
		<u>Learning English</u>
		◦ those practising teaching in lower-band schools torn between the ideas underlying what they did (following the method – emphasising natural process of learning) and what they really believed in and had experienced in TP (focusing on grammar rules and structures) ◦ found that Communicative Approach didn't work with weak pupils – not possible for reproducing the immersion process which characterises natural learning
		<u>Teaching English</u>
		◦ What constitutes an Effective English lesson? – a long list of criteria came up from newly learned knowledge and TP experience, but made no mention of any natural learning process – no change in rule-governed view of language (pre-training knowledge) ◦ qualities of effective English teacher – qualities suggested showed beginning signs of “an insider's view”, but level set far higher than they themselves could achieve ◦ more confidence in teaching – having a method, but considered themselves still linguistically incompetent

Table 7 Student Teachers' Knowledge of the Subject Content - Three Months into the Final Year

CE Programme	Summary of Student Teachers' Knowledge
<u>Summer Programme in the UK:</u>	<u>Content</u>
<ul style="list-style-type: none"> • English Language Immersion Programme for Student Teachers (ELIPST) 	<ul style="list-style-type: none"> ◦ understood language in a much wider sense – a cognitive view of language ◦ a new conceptualisation about language and language learning in relation to natural context
<u>Course work on the campus:</u>	<u>Learning English</u>
<ul style="list-style-type: none"> • Task-based Learning (TBL) Approach 	<ul style="list-style-type: none"> • assumptions made that pupils be provided with a learning environment similar to that of an English speaking country • quick to point out the differences between the learning environments of UK and HK
<ul style="list-style-type: none"> • Both programmes aimed at developing in student teachers understanding of language learning and teaching as a natural process rather than controlled practices of grammatical structures 	<u>Teaching English</u>
	<ul style="list-style-type: none"> • concerned about practicality in implementing TBL to local language classrooms • range of language functions gradually reduced to language performing a pedagogical function again • because of various constraints, back to old ways of teaching – manipulating pupils' learning from the outside, with emphasis on structures and forms

Table 8 Student Teachers' Knowledge of the Subject Content - The Final Teaching Practice

CE Programme	Summary of Student Teachers' Knowledge
<u>Block Teaching Practice:</u>	<u>Content</u>
<ul style="list-style-type: none"> Course work preparing student teachers with skills in observation, analysis, and evaluation of live and video-recorded lessons considered essential for self-reflection during TP 	<ul style="list-style-type: none"> conceptions of language same as those in TP last year neither ELIPST nor TBL able to change student teachers' schemata of language, language learning and teaching <p><u>Learning English</u></p> <ul style="list-style-type: none"> made use of different kinds of knowledge about dynamics of teaching and learning English despite homogenising effect of the "Institute method" variations rooted in pre-training knowledge – weak pupils need to revisit the basic system of English <p><u>Teaching English</u></p> <ul style="list-style-type: none"> attempted to bridge the differences between classroom and natural settings by covering whatever topics required by the supporting teacher and squeezing time for communicative games What constitutes an effective lesson? <ul style="list-style-type: none"> requirements reduced to something more specific and inclusive, focusing on main characteristics of the Communicative Approach found from practical experience the long list of requirements set in last TP not practical deeper understanding of the Communicative Approach but such understanding not yet reflected fully in practice qualities of an effective teacher – number of expected qualities shrank compared with last TP but new and substantial qualities added confidence in teaching – confident in having learnt a method but more time needed for enhancing language competence

Table 9 **Student Teachers' Knowledge of Lesson Planning and Instructional Strategies - On Entry to the Course**

CE Programme	Summary of Student Teachers' Knowledge
1st week of programme: ◦ Pre-training Knowledge – recollection of own learning experiences	<p><u>Lesson planning</u></p> <ul style="list-style-type: none"> ◦ no idea how to develop lesson plans ◦ understood lesson planning and instructional strategies inter-related ◦ teachers should prepare lesson plans for every lesson ◦ teachers should not be bound by a method ◦ no idea what method they could follow in teaching English <p><u>Instructional strategies (rationales)</u></p> <ul style="list-style-type: none"> ◦ creating a positive learning environment <ul style="list-style-type: none"> ➤ bringing fun into the classroom ◦ questioning and giving oral feedback <ul style="list-style-type: none"> ➤ checking pupil understanding ➤ keeping pupils involved in the lesson ➤ teacher feedback should be encouraging ➤ teacher feedback should focus more on content than accuracy of pupils' answers ◦ modifying teachers' language used <ul style="list-style-type: none"> ➤ slowing down speed of teacher talk ➤ using appropriate amount of Chinese ◦ assessing pupils' understanding level <ul style="list-style-type: none"> ➤ eliciting answers from pupils ➤ visual scanning of pupils ◦ organising pupils in groups <ul style="list-style-type: none"> ➤ increase pupil involvement and participation ➤ practise using English

Table 10 Student Teachers' Knowledge of Lesson Planning and Instructional strategies – Three Months into the Course

CE Programme	Summary of Student Teachers' Knowledge
<u>Course work on campus:</u>	<u>Lesson planning</u>
<ul style="list-style-type: none"> ○ Approaches to English Language Teaching (emphasis on the Communicative Approach) 	<ul style="list-style-type: none"> ○ followed the same format learned from the methods class – Presentation, Practice, Application ○ abandoned their pre-training conceptions – “different formats for different lessons” ○ made direct use of the exemplar activities suggested by the methods tutors with little or no modifications ○ criteria set for choosing activities based more on concerns about pupils’ interests and management problems than whether they are related to the objectives of the lessons
<ul style="list-style-type: none"> ● Knowledge in the teaching of language skills 	<u>Instructional rationales and strategies</u>
<ul style="list-style-type: none"> ● Micro-teaching workshops 	<ul style="list-style-type: none"> ○ getting pupils motivated crucial, a variety of strategies mentioned <ul style="list-style-type: none"> ➤ in the beginning of a lesson ➤ in presenting subject contents ○ questioning and giving oral feedback <ul style="list-style-type: none"> ➤ a few questioning techniques emerged ➤ strategies for teacher feedback remained unchanged - should focus more on content rather than accuracy of pupils’ answers ○ incompetent in implementing alternative strategies <ul style="list-style-type: none"> ➤ strategies not practical or relevant ○ assessing pupils’ understanding level <ul style="list-style-type: none"> ➤ relying more on pupils’ oral or written performances, lack of confidence in their own observation ➤ detecting pupils’ misunderstanding of the subject matter through after-class written assignments

Table 11 Student Teachers' Knowledge of Lesson Planning and Instructional Strategies – The First Teaching Practice

CE Programme	Summary of Student Teachers' Knowledge
<p><u>Supported Teaching Practice:</u></p>	<p><u>Lesson planning</u></p> <ul style="list-style-type: none"> ◦ prepared lessons under various constraints during TP: <ul style="list-style-type: none"> ➤ limited time ➤ subtle influence exerted by the Institute supervisor ➤ limited knowledge about the pupils ➤ conform to the ideas of the supporting teacher ◦ failed to promote their autonomy in lesson planning ◦ familiar with lesson routines of the teaching of 4 language skills ◦ found “Institute Method” difficult to implement <ul style="list-style-type: none"> ➤ tightly packed syllabus of TP school ➤ pupils' low motivation in learning ➤ supporting teacher's traditional practice ◦ developed gradually negative conception of TP as an assessment task ◦ made more use of activities taken from the course book ◦ teacher should prepare lesson plan for every lesson – conception remained unchanged ◦ treated motivational activities as extra gifts, may not be related to the other parts of the lesson structure
	<p><u>Instructional rationales and strategies</u></p> <ul style="list-style-type: none"> ◦ bringing fun into the classroom, using more variety of strategies <ul style="list-style-type: none"> ➤ audio visual aids ➤ realia ➤ word cards ➤ popular cartoon figures ➤ playing songs & poems on cassette tapes ➤ using speech bubbles ➤ cracking jokes

Table 11 (continued)

- enabling pupils to derive language rules
 - questioning & giving oral feedback
 - following a system in calling pupils' name
 - using encouraging phrases in giving oral feedback
 - creating "connectiveness" among pupils, English and the "real world"
 - teachers using examples of their own experiences and those of pupils'
 - entry perspectives of language used underwent critical change during TP
 - use of Chinese in the classroom kept to a minimum
 - modified language used by slowing down speed in speaking English
 - assigning tasks to pupils in class
 - pupils practising the 4 language skills through communicative games and activities
 - pointed out the importance of detailed preparation, predicting pupils' difficulties & giving clear instructions before-hand
 - assessing pupils' understanding level
 - more confident in relying on their own observation
 - implementing alternative instructional strategies
 - a few "ad hoc" strategies to maintain the flow of lessons
 - instructional rationales were consistent with instructional strategies
 - not all instructional strategies were effective
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Table 12 Student Teachers' Knowledge of Lesson Planning and Instructional Strategies – Three Months into the Final Year

CE Programme	Summary of Student Teachers' Knowledge
<p><u>Summer Programme in the UK:</u></p>	<p><u>Lesson planning</u></p> <ul style="list-style-type: none"> • developing assignment - followed closely the characteristics of TBL • made much use of what they had experienced in ELIPST • were more aware of the importance of providing pupils with a learning environment likened to that of an English speaking country • knew some activities designed may not work in Hong Kong context – confined by the theme and pupils' low English ability
<p><u>Course work on the campus:</u></p>	<p><u>Instructional rationales</u></p> <ul style="list-style-type: none"> • a drastic change in instructional rationales, from observation of the practices of ELIPST Centre tutors <ul style="list-style-type: none"> ➢ motivational activities at the beginning of lessons to lead pupils in ➢ involve readers in the characters of the story but not let them be bystanders • expressed doubts as to whether some activities are feasible in Hong Kong context, such as <ul style="list-style-type: none"> ➢ collecting information about different cultural practices from English speaking schoolmates ➢ using one-to-one video conferencing in the language laboratory in giving feedback to pupils in pronunciation practice

Table 13 Student Teachers' Knowledge of Lesson Planning and Instructional Strategies – The Final Teaching Practice

CE Programme	Summary of Student Teachers' Knowledge
<p><u>Block Teaching Practice:</u></p> <p>Course work preparing student teachers with skills in observation, analysis, and evaluation of live and video-recorded lessons considered essential for self-reflection during TP</p>	<p><u>Lesson planning</u></p> <ul style="list-style-type: none"> ○ impact of TBL & ELIPST on student teachers' lesson planning minimal ○ main concerns in planning scheme of work and lessons same as previous TP ○ referred again to practices in previous practicum – following the lesson routines learned in Yr.1 ○ more emphasis on structures if lesson not under supervision ○ schema development in lesson planning limited by various constraints ○ not much knowledge change in curriculum and lesson planning in Yr.2 <p><u>Instructional rationales and strategies</u></p> <ul style="list-style-type: none"> ○ displayed an expansion of instructional strategies repertoire ○ motivational strategies built on the effective ones used in previous TP ○ some subjects able to implement a few alternative motivational strategies <ul style="list-style-type: none"> ➤ changing the focus ➤ using humour ➤ using classroom situations ○ assessed pupil understanding from more sources ○ mentioned more alternative strategies to alter their plans <ul style="list-style-type: none"> ➤ starting all over ➤ repeating concepts ➤ changing sequencing of activities ○ full-scale reflective practice of instructional strategies yet to develop

Table 14 **Student Teachers' Knowledge of the Teaching Context**

On Entry to the Course

(Pre-training conception of teaching)

- teaching was taken as a transmission of knowledge
- the English classroom was boring

The Micro-teaching Practice

- the course highlighted an alternative conception of teaching which emphasised facilitation of learning
- participants' pre-training conception of teaching and teaching context within and outside the English classroom challenged
- classroom no longer a place for talk and chalk and following whatever is said in the course book but with different settings in different lessons
- context of micro-teaching challenged - does not resemble a real classroom
- participants attained new level of conceptualisation of teaching context

The First Teaching Practice

- TP made teaching candidates aware of the complicated demands in teaching, not something they could understand when they were pupils
- contextual barriers identified:
 - classroom management
 - inadequate support by the supervisor and co-operating teacher
 - pupils' low English standard
 - lack of teaching resources
 - poor self-image
 - insufficient involvement in English panel activities
 - low level of collaboration with other colleagues of TP school
- participants reacted passively to contextual barriers, not able to initiate changes in the environment

The Final Teaching Practice

- impact of ELIPST – most reported expansion of schema but understanding of teaching context in Hong Kong classroom too deeply rooted to be changed
 - participants bothered by same non-pedagogical issues as first placement
 - sign of progress – some began to identify problems and search for strategies from within the self
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