Pedagogical reflection and teaching qualities in physical education: an interpretive study of beginning primary school teachers in Hong Kong

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Additional Information:

- A Doctoral Thesis. Submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy of Loughborough University.

Metadata Record: [https://dspace.lboro.ac.uk/2134/7603](https://dspace.lboro.ac.uk/2134/7603)

Publisher: © Anita K.Y. Tsui

Please cite the published version.
This item is held in Loughborough University's Institutional Repository (https://dspace.lboro.ac.uk/) and was harvested from the British Library's EThOS service (http://www.ethos.bl.uk/). It is made available under the following Creative Commons Licence conditions.

For the full text of this licence, please go to:
http://creativecommons.org/licenses/by-nc-nd/2.5/

Disclaimer ☞
Pedagogical Reflection and Teaching Qualities in Physical Education: An Interpretive Study of Beginning Primary School Teachers in Hong Kong

by

Anita King-yuk, TSUI

A Doctoral Thesis
Submitted in partial fulfilment of the requirements for the award of
Doctor of Philosophy of Loughborough University

5 May, 2004

© Anita K, Y. Tsui, 2004
ABSTRACT

Most of the empirical research work on reflective thinking in physical education is on promoting reflection in pre-service teacher education (Tsangaridou and Seidentop, 1995). In contrast, the purposes of this study were to explore the elements of pedagogical reflection in physical education, to examine the relationship between pedagogical reflection and ‘teaching quality’ and whether reflection could positively affect teachers’ values and beliefs in teaching and their teaching behaviour.

The study was divided into four phases. In the first two phases of the study, nine beginning primary school physical education teachers were recruited with four of the participants then being selected to participate in the third and final phases of this study. The four participants were engaged in an intervention exercise that was intended to promote their reflective thinking. Data was collected on this process through lesson observation, video-taping, teaching evaluation checklists, interviews and workshops.

Data from this study suggests reflective thinking intervention can promote the development of reflection for those who have the desire to improve the educational aspects and aspirations of physical education and there is a close connection between the development of reflection and the reflective practitioner’s professional and personal development. Also this study reveals that changes and improvement in ‘teaching quality’ are accompanied by corresponding heightened reflection. However it is also revealed that reflection and improvements in ‘teaching quality’
among the participants were mainly on technical matters in physical education teaching. Deeper issues relating to the educational values and purposes of physical education remained largely untouched and unchanged.

The study suggests that reflection can be productively modeled as a sequence of processes involving: analytical thinking, choice of appropriate action and execution of actions. It is suggested if any one of these processes is adversely affected, reflection and its development will then be impeded. Several factors, personal and professional qualities (such as knowledge of the subject matter of physical education, sport skill proficiency), physical education curriculum, school culture, colleagues and Principals and surviving the transition from students to teachers affecting reflection and its development were identified and discussed. It is also suggested there is a complex interrelationship between these factors, and that a more ‘situated’ view of teaching and learning is required if we are to better understand the processes of becoming a more reflective practitioner.

Finally, a hierarchy of reflective thinking development is proposed. There are different levels in this hierarchy though there are not rigid boundaries between them. It is suggested that beginning physical education teachers are at the initial level and they employ reflection as a tool to develop themselves professionally and refine their teaching skill. It is further suggested that after beginning teachers survive the transition from students to teachers, feel comfortable with their teaching and if they continue to have the desire for further development in their physical education teaching career, they may be able to progress from the initial level and move up (or along) the reflective thinking development hierarchy.
ACKNOWLEDGEMENTS

Being a part-time overseas PhD student was difficult and it was even more difficult for a working mother of a young child, such as myself, to complete the doctoral programme. It would have been impossible for me to complete this thesis without the support of my supervisor, director of research, colleagues and my family members.

I am heavily indebted to Professor John Evans, the supervisor of this research study. I have to say without his advice, unceasing encouragement, support, endurance throughout this study I would not have been able to complete it. The discussions with him were extremely fruitful and inspiring. He also took care of my well-being during my stays at Loughborough University. Once again I would like to take this opportunity to express my sincere thanks to this brilliant supervisor, Professor John Evans.

I would like to thank Dr. Colin A. Hardy, my former director of research, for his advice, especially in the early phases in this study. Sadly Dr Hardy died during the early stages of this study. I would also like to thank Dr. Kathleen M. Armour my current director of research, for her support in this study. I would like to thank Mrs Jean Gordon, the administrative staff who gave me much help and support throughout these years, especially during my stays at Loughborough University.

I would like to thank all the participants, especially Yum, Chung, Shan and Ku who took part in all four phases in this study, as well as their Principals who gave
permission for the participants to participate and gave me access to their schools.

I would also like to thank the Hong Kong Institute of Education for providing the funding and leave for this study. Also the Doctoral Study Programs on research seminars and research methodology workshops provided by the Centre for Research and Development of the Institute were very useful and enabled me to consolidate my research skills. I received much encouragement, support and advice on this study from my colleagues.

A special note of thanks is due to my parents-in-law who looked after my child during my stays at Loughborough University. No less important are my husband, Thomas and my young daughter, Ying Chi. They gave me so much encouragement, consistent support and understanding especially my lovely husband. Ying Chi used to say, 'When will you finish Uncle John's work?' I felt guilty because my study had disturbed normal family life. All this love and support will become a part of my everlasting memory.

My ultimate thank to God who gives me the strength and faith to complete this doctoral study.
Table of Contents

Certificate of Originality ...........................................................................................................ii
Abstract ..................................................................................................................................iii
Acknowledgements ..................................................................................................................v
Table of Contents .....................................................................................................................vii
List of Abbreviations ................................................................................................................xiv
List of Appendices ..................................................................................................................xv
List of Tables ..........................................................................................................................xviii
List of Diagrams ......................................................................................................................xix

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study ................................................................. 1
1.2 Significance of the Study ............................................................... 2
1.3 Purposes of the Study ..................................................................... 6
1.4 Methods .......................................................................................... 7
1.5 Development of the Whole Study ................................................ 12
1.6 Limitations of the Study ............................................................... 14

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Introduction ...................................................................................... 17
2.2 Pedagogical Reflection .................................................................... 18
2.2.1 Conceptualization of reflection .................................................. 18
2.2.1.1 John Dewey's view on reflection ........................................ 18
2.2.1.2 Other scholars' view on reflection ...................................... 19
2.2.2 Levels / forms of reflection ....................................................... 22
2.2.3 Types of reflection ..................................................................... 23
2.2.4 Roles of reflection in teaching and teacher education programmes ......................................................... 24
2.2.4.1 Teacher action ........................................................................................................................................ 24
2.2.4.2 Developmental process of teacher reflectivity .................................................................................. 25
2.2.4.3 Reflective teaching .......................................................................................................................... 26
2.2.4.4 Characteristics of reflective teachers ............................................................................................. 27

2.2.5 Pedagogical reflection in physical education teacher education ............................................................ 30

2.3 Teaching Quality ........................................................ 33
2.3.1 Conceptualization of quality ............................................................................................................ 33
2.3.2 Quality of teaching ........................................................................................................................... 34
2.3.3 Qualities of reflection and qualities of teaching ............................................................................. 39
2.3.4 Educational values of physical education ....................................................................................... 41

2.4 Summary of the Chapter ...................................................................................................................... 45

CHAPTER THREE: METHODS

3.1 Introduction ........................................................................................................................................ 46
3.2 Interpretive Paradigm .......................................................................................................................... 46
3.3 Qualitative Research .......................................................................................................................... 49
3.4 Grounded Theory ................................................................................................................................. 50
3.5 Action Research ................................................................................................................................ 51

3.6 Research Design and Procedure ................................................................................................. 52
3.6.1 Participants ........................................................................................................................................ 52
3.6.2 Interventions .................................................................................................................................... 53

3.7 Data Collection Methods .................................................................................................................. 54
3.7.1 Interview ............................................................... 54
3.7.2 Lesson observation .................................................. 56
3.7.3 Documentary sources ............................................... 57

3.8 Data Gathering Process (four phases) ................................ 58
3.8.1 Phase I ................................................................. 58
3.8.2 Phase II ................................................................. 59
3.8.3 Phase III ............................................................... 61
3.8.4 Phase IV ............................................................... 66

3.9 Analysis of Data ....................................................... 67
3.10 Issues of Validity and Credibility .................................. 68
3.11 Ethical Considerations ............................................... 68
3.12 Limitations and Problems ........................................... 70

CHAPTER FOUR: FINDINGS

4.1 Introduction .................................................................. 71

4.2 Individual Case: Chung ................................................ 77
4.2.1 Introduction ............................................................ 77
4.2.2 Personal Characteristics ............................................ 78
4.2.3 School Context ........................................................ 80

4.2.4 Changes in Action, Behaviour and Thinking in Teaching ................................................................. 84
4.2.4.1 On reflective thinking ............................................ 84
4.2.4.2 On teaching ........................................................ 90
4.2.4.3 On interaction with children ................................... 92

4.2.5 Why Chung had Changed .......................................... 96
4.3 Individual case: Yum

4.3.1 Introduction

4.3.2 Personal Characteristics

4.3.3 School Context

4.3.4 Changes in Action, Behaviour and Thinking in Teaching

4.3.4.1 On reflective thinking

4.3.4.2 On teaching

4.3.4.3 On interaction with children

4.3.5 Why Yum had Changed

4.4 Individual case: Shan

4.4.1 Introduction

4.4.2 Personal Characteristics

4.4.3 School Context

4.4.4 Changes in Action, Behaviour and Thinking in Teaching

4.4.4.1 On reflective thinking

4.4.4.2 On teaching

4.4.4.2.1 The school Principal's resistance

4.4.4.2.2 Colleagues' negative attitudes

4.4.4.3 On interaction with children

4.4.5 Why Shan had changed and why she was not always able to change

4.4.5.1 Introduction
4.4.5.2 School colleagues ................................................... 142
4.4.5.3 Skill proficiency ...................................................... 144
4.4.5.4 Lack of confidence in physical education teaching .......... 144
4.4.5.5 School physical education curriculum ............................ 146
4.4.5.6 Venue / facilities ...................................................... 147
4.4.5.7 Summary ............................................................... 147

4.5 Individual case: Ku

4.5.1 Introduction ........................................................... 149
4.5.2 Personal Characteristics ............................................. 149
4.5.3 School Context ....................................................... 151

4.6 Relationships between Reflective Thinking and Teaching Quality................................................................. 153

4.7 Summary of the Chapter .......................................... 154

CHAPTER FIVE: DISCUSSIONS

5.1 Introduction .................................................................. 157

5.2 Relationships between the Desire for Professional Development and Reflective Thinking ............................................. 158

5.3 Relationships between Personal and Professional Qualities in the Development of Reflective Thinking ............ 164

5.4 Relationships between Reflection and School Context....... 174

5.4.1 Introduction ........................................................... 174
5.4.2 Effects of the physical education curriculum on reflective thinking ............................................................... 175
5.4.3 Effects of school culture on reflective thinking .................. 180
5.4.4 Effects of colleagues on reflective thinking ....................... 190
5.4.5 Effects of the Principal on reflective thinking .................... 194

5.5 Reasons why the Participants’ Reflection Focused Essentially on ‘Technical Matters’................................. 197

5.6 Summary of the Chapter........................................ 201

CHAPTER SIX: CONCLUSIONS AND IMPLICATIONS

6.1 Relationships between Reflective Thinking and Teaching Quality................................................................. 202

6.2 Factors Affecting Reflection and its Development............ 203

6.2.1 The desire for professional development on reflective thinking................................................................. 203
6.2.2 Reflective thinking as a chain of processes .................... 204
6.2.3 Personal and professional qualities affecting reflective thinking........................................................................ 205
6.2.4 Effects of physical education curriculum on reflective thinking................................................................. 207
6.2.5 School culture................................................................ 208
6.2.6 Colleagues .................................................................. 209
6.2.7 Principal ..................................................................... 211

6.3 Beginning Teachers’ Reflection Focused on ‘Technical Matters’................................................................. 213
6.4 Further Reflections on Methodology................................. 215
6.5 Implications and Recommendations................................. 221

CHAPTER SEVEN: PERSONAL REFLECTION

Personal Reflection ............................................................ 224

Appendices ........................................................................ 232
Bibliography ....................................................................... 291
Appendices (Chinese Versions) .......................................... 335
# List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Ed</td>
<td>Bachelor of Education</td>
</tr>
<tr>
<td>EMB</td>
<td>Former Education Department, Hong Kong</td>
</tr>
<tr>
<td>HKIEd</td>
<td>Hong Kong Institute of Education</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education</td>
</tr>
<tr>
<td>PETE</td>
<td>Physical Education Teacher Education</td>
</tr>
<tr>
<td>TC Education</td>
<td>Teacher Certificate Education Course</td>
</tr>
<tr>
<td>I</td>
<td>Phase One</td>
</tr>
<tr>
<td>II</td>
<td>Phase Two</td>
</tr>
<tr>
<td>III</td>
<td>Phase Three</td>
</tr>
<tr>
<td>IV</td>
<td>Phase Four</td>
</tr>
<tr>
<td>I-DRC</td>
<td>Daily Reflectivity Checklist at phase I</td>
</tr>
<tr>
<td>I-PPD</td>
<td>Personal and Professional Development at phase I</td>
</tr>
<tr>
<td>I-Sch</td>
<td>School Background and PE information at phase I</td>
</tr>
<tr>
<td>II-RTI-1</td>
<td>The first Reflective Thinking Interview at phase II</td>
</tr>
<tr>
<td>II-RTI-2</td>
<td>The second Reflective Thinking Interview at phase II</td>
</tr>
<tr>
<td>II-RLW-1</td>
<td>The first Reflective Learning Workshop at phase II</td>
</tr>
<tr>
<td>II-RLW-2</td>
<td>The second Reflective Learning Workshop at phase II</td>
</tr>
<tr>
<td>III-RTI-1</td>
<td>The first Reflective Thinking Interview at phase III</td>
</tr>
<tr>
<td>III-RTI-2</td>
<td>The second Reflective Thinking Interview at phase III</td>
</tr>
<tr>
<td>III-RTI-3</td>
<td>The third Reflective Thinking Interview at phase III</td>
</tr>
<tr>
<td>III-RTI-4</td>
<td>The fourth Reflective Thinking Interview at phase III</td>
</tr>
<tr>
<td>III-RLW-1</td>
<td>The first Reflective Learning Workshop at phase III</td>
</tr>
<tr>
<td>III-RLW-2</td>
<td>The second Reflective Learning Workshop at phase III</td>
</tr>
<tr>
<td>III-RLW-3</td>
<td>The third Reflective Learning Workshop at phase III</td>
</tr>
<tr>
<td>IV-FIDI</td>
<td>Final In-depth Interview at phase IV</td>
</tr>
<tr>
<td>TEC-P</td>
<td>Teaching Evaluation Checklist completed by participant</td>
</tr>
<tr>
<td>TEC-R</td>
<td>Teaching Evaluation Checklist completed by researcher</td>
</tr>
</tbody>
</table>
# List of Appendices

## Chapter 1

| Appendix 1-1 | Course Preamble for PE in the Teacher Certificate course (Primary), Hong Kong Institute of Education (1996-2000) | 233 |
| Appendix 1-2 | Background of the Hong Kong Institute of Education & teacher training programme in the year of 1994-2000 | 238 |
| Appendix 1-3 | Two-year Certificate in Education course (Primary) PE course outline, 1997-1999 | 239 |
| Appendix 1-4 | Preparatory year for three-year Certificate in Education course (Primary) PE outline, 1996-1999 | 240 |
| Appendix 1-5 | Two-year Certificate in Education course (Secondary) PE course outline, 1997-1999 | 241 |

## Chapter 3

| Appendix 3-1 | Sample for Daily Reflectivity Checklist (I-DRC) | 242 |
| Appendix 3-2 | Sample interview questions for participant’s personal and professional development (I-PPD) | 245 |
| Appendix 3-3 | Sample interview questions for participant’s school background and PE information (I-Sch) | 246 |
| Appendix 3-4 | Interview questions for Reflective Thinking Interview (II-RTI-1) | 248 |
| Appendix 3-5 | Interview questions for Reflective Thinking Interview (II-RTI-2) | 249 |
| Appendix 3-6 | Interview questions for Reflective Learning Workshop (II-RLW-1) | 250 |
| Appendix 3-7 | Interview questions for Reflective Learning |  |
Appendix 3-8  Sample for Teaching Evaluation Checklist by participant (TEC-P) .......................................................... 252
Appendix 3-9  Sample for Teaching Evaluation Checklist by researcher (TEC-R) ............................................................ 253
Appendix 3-10 Interview questions for Reflective Thinking Interview (III-RTI-1) .............................................................. 255
Appendix 3-11 Interview questions for Reflective Thinking Interview (III-RTI-2) .............................................................. 257
Appendix 3-12 Interview questions for Reflective Thinking Interview (III-RTI-3) .............................................................. 258
Appendix 3-13 Interview questions for Reflective Thinking Interview (III-RTI-4) .............................................................. 259
Appendix 3-14 Interview questions for Reflective Learning Workshop (III-RLW-1) .............................................................. 260
Appendix 3-15 Interview questions for Reflective Learning Workshop (III-RLW-2) .............................................................. 263
Appendix 3-16 Interview questions for Reflective Learning Workshop (III-RLW-3) .............................................................. 264
Appendix 3-17 Interview questions for Final In-depth Interview (IV-FIDI) .................................................................................. 265
Appendix 3-18 Interviews and activities attended by Chung, Yum, Shan & Ku throughout the 4 phases ................................................. 267
Appendix 3-19 Summary of the number of interventions taken by Chung, Yum, Shan & Ku throughout the 4 phases ................................. 268
Appendix 3-20 Letter to school Principal .......................................................... 269
Appendix 3-21 Letter to participant’s consent .................................................. 270

Chapter 4
Appendix 4-1  List of schedule for Chung’s interventions & activities .......................................................... 272
Appendix 4-2 List of schedule for Yum’s interventions & activities ................................................. 273
Appendix 4-3 List of schedule for Shan’s interventions & activities ................................................. 274
Appendix 4-4 List of schedule for Ku’s interventions & activities ................................................ 275
Appendix 4-5 Chung’s response to the Daily Reflectivity Checklists .............................................. 276
Appendix 4-6 Yum’s response to the Daily Reflectivity Checklists .............................................................. 279
Appendix 4-7 Shan’s response to the Daily Reflectivity Checklists .............................................. 282

Chapter 5
Appendix 5-1 Proposed curriculum for physical education from Syllabuses for Primary Schools Physical Education, the Curriculum Development Committee, Hong Kong 1995 .................. 285
Appendix 5-2 Teaching objectives in physical education from Syllabuses for Primary Schools Physical Education, the Curriculum Development Committee, Hong Kong 1995 .................. 286

Chapter 7
Appendix 7-1 Current four-years full-time Bachelor of Education programme for PE (Primary) 2003-2004, the Hong Kong Institute of Education ...... 287
Appendix 7-2 A proposed set of values and attitudes for incorporation into the school curriculum (2002) .. 289
Appendix 7-3 Proposed Physical Education Key Learning Area (2002) .................................................... 290
List of Tables

Chapter 1
Table 1-1  List of all interventions and activities throughout four phases......................................................... 10

Chapter 3
Table 3-1  Summary for Phase I of data gathering process....... 59
Table 3-2  Summary for Phase II of data gather process......... 60
Table 3-3  Different background of the selected four teachers..... 63
Table 3-4  Summary for Phase III of data gather process......... 65
Table 3-5  Summary for Phase IV of data gather process......... 66

Chapter 4
Table 4-1  Level of participants' reflection after interventions .... 76
# List of Diagrams

## Chapter 4

<table>
<thead>
<tr>
<th>Diagram 4-1</th>
<th>Relationships between participants' development in thought and action after intervention</th>
<th>75</th>
</tr>
</thead>
</table>

## Chapter 6

| Diagram 6-1 | Reflective thinking as a chain of processes | 205 |
1.1 Background of the Study

In the past few decades, there have been many changes in this world. Technical and social environments of our society are changing rapidly and these have an impact upon the careers of professional teachers. In 1999 a list of new educational aims published in Hong Kong indicated that

'Schools should enable everyone to develop to their full and individual potential in all areas covering ethics, intellect, physique, social skills and aesthetics, so that each individual is ready for continuous self-learning, thinking, exploring, innovating and adapting to changes throughout life, filled with self-confidence and team spirit; and is willing to strive incessantly for the prosperity, progress, freedom and democracy of the society, and to contribute to the future well-being of the nation and the world at large.'

*(Education Blue Print for the 21st Century: Reviews of Academic System, January 1999).*

Teaching has gradually become a more complex and personal process, occurring in a complicated public environment (Dolye, 1986; Shulman, 1987) and physical education teacher education (PETE) offers little guidance as to how best to respond to these circumstances (Hellison and Templin, 1991). Yet it is generally agreed amongst both politicians and educationalists that physical education plays
an important role in the educational process, with its stress on building a physically, emotionally, mentally and socially 'fit' individual. At the same time, there seems to be little emphasis placed in political and educational discourse either in Hong Kong or elsewhere, on teacher's self-improvement through continuing professional development (CPD) within the contemporary educational system, including physical education (Armour and Yelling, 2004). Armour and Yelling (2004) suggested that professional development in physical education should be restructured and refocused on physical education teachers' career-long learning needs.

1.2 Significance of the Study

Many educators consider that reflective abilities are desirable characteristics of teachers (Gore and Zeichner, 1991; Herrmann and Sarracino, 1993). There is a considerable literature devoted to reflection and reflective teaching. However, as we shall see in Chapter two, there is no consensus with regard to the definition of 'reflection'. Dewey (1933), for example, argued that reflection involves not only a sequence of ideas but also a consequence. He identified reflective thinking as: (1) a state of doubt and (2) an act of searching. In this view, reflection involves a complicated mental processing of issues for which there is no obvious solution (Dewey, 1933; King and Kitchener, 1994). Based on the above view, Moon (1999) considers that the word 'reflection' implies a form of mental processing with a purpose and or an anticipated outcome that is applied to relatively complicated or unstructured ideas for which there is not an obvious solution. Schon (1983; 1987) suggested that 'reflection-in-action' can be termed 'routine present' and reflection-
on-action occurs when a routine action can change future action. Zeichner (1983) considers reflection as the examination of the moral, ethical and political issues in teacher's everyday thinking and practice, while Dirkx (1989) argues that 'self-improvement' is more important than moral, ethical and political change. Shulman (1987) conceptualized reflection as 'reviewing, reconstructing, enacting and critically analyzing one's own and the class performance. Van Manen (1977) proposed a hierarchy of reflectivity: technical reflection, practical reflection and critical reflection. He argued that 'critical reflectivity' is the highest and most desirable form of reflection.

Even this cursory introduction to the academic literature on 'reflection' reveals something of the complexity and nuance that surrounds the term. In chapter two I will seek to clarify this and other related terms that are central to this study and also suggest that when dealing with concepts such as 'reflection', 'effectiveness' and 'quality', a certain amount of ambiguity and uncertainty must prevail because of their inherent value laden subjectivity.

The view I take in this research (see Chapter two) is that 'reflection' is a paramount component of 'teaching quality'. I will explore whether reflection can positively affect beginning teachers' belief in teaching and their teaching behavior. Killon and Todnem (1991) concluded from their study of in-service teachers that reflection can be a tool for continued personal and professional development. Cruickshank and Applegate (1981) suggested that 'reflective teaching' gives teachers time to think carefully about their own teaching behaviors and opportunities to view experienced professionals in action. As a result, they claim,
teachers become more reflective about teaching and more interested in self-improving. Tinning (1988) argued that teachers should have their own theories on pedagogical reflection and that these theories should be subjected to critical reflection. Gore (1990) emphasized that the process of reflection needs to go beyond the technical aspects of teaching. Tinning, Kirk and Evans (1993) further pointed out that quality teaching is a reflective process with implications for what and the way a teacher teaches. In my view, reflection is a paramount component of teaching quality. However, this study will subject this view and those of the authors mentioned above, to critical scrutiny.

Many questions underpin the direction taken by this research. For example, what is the nature and form of contemporary physical education in Hong Kong schools? What are the purposes of physical education? Who teaches physical education in primary schools? What do pupils learn in physical education? How do teachers teach? What is 'quality' in teaching physical education? How can we help teachers improve and develop their teaching? All these questions have occupied my thinking for many years as a professional teacher educator at the Institute of Education in Hong Kong. These questions are all inter-related and it is difficult to talk about one without reference to others. In Hong Kong, physical education is considered a 'non-core' subject in the school curriculum in both primary and secondary schools. However, in this context it is generally agreed that 'good teaching' in physical education is closely related to the success of physical education lessons in producing sport competition awards. Educational goals enter the frame of educational and political debate all too rarely as we shall later see (Chapter four and five). In this 'narrow' view of education, 'good teaching' refers
to 'teaching effectiveness' which is considered synonymous with 'teaching quality'. Numerous criteria or elements are invoked to define teaching effectiveness in physical education and such elements are considered indicators of 'effectiveness' but they are not quality indicators. This research will attempt to highlight and clarify the distinctions between the terms 'teaching effectiveness' and 'teaching quality'. Discussion on these issues is to be found in Chapter two.

"Quality" is an interesting but elusive concept. It is inevitably a subjective term; it is value laden and there is no consensus around its meaning (Doherty, 1994). Ellis (1993) suggests that 'quality' itself is an ambiguous term since it has connotations to both standards and excellence. Indeed, as this study developed I found it more, not less, difficult to gain purchase on the term. I tend to agree with Loder et. al. (1989) who argues that it is not possible to cast judgment on 'quality teaching' as judgment in this area is surely subjective. However, I entered the research with personal and professional values and conceptions of the 'good teacher'. Although I attempted to 'bracket' these values they inevitably came into play during the course of the research. These are issues dealt with later in the research (see Chapter two and six).

What is clear from the literature on reflective teaching is that we can neither focus solely on its 'effectiveness' nor merely on educational values while neglecting the element of pedagogical 'skills'. All these things matter in any discussion of reflective teaching, as we shall see in Chapters four and five.
1.3 Purposes of the Study

In their review of reflective thinking Tsangaridou and Seidentop (1995) point out that the literature on reflection is mostly theoretical, empirical work is at a stage of infancy and tends to be focused either on preparing reflective teachers or the promotion of reflective thinking. They also indicate that all, except one, of the empirical works on reflective thinking in physical education (Tsangaridou, 1993) are on promoting reflection among pre-service physical education teachers. Empirical work on reflection in physical education by teachers in-service is seriously underplayed. Little has changed in this respect since 1995 though research and development in the field of Continued Professional Development Physical Education is beginning to emerge (Armour and Yelling, 2004).

Since empirical data on reflection in physical education teaching is almost nonexistent. I felt it would be valuable to explore the elements of pedagogical reflection in physical education as well as to examine the relationships between pedagogical reflection and teaching quality. I wanted to examine whether reflection could positively affect teachers’ values and beliefs in teaching and their teaching behaviour. I wanted to give teachers time to think carefully about their teaching behaviour and also opportunities to view other experienced professionals in action. If teachers could become more reflective about teaching, they might also become more interested in self-improving, or so I believed. This belief formed the motivation for much of this research.
1.4 Methods

This study can be described as a piece of qualitative research (see Chapter three). A particular phenomena is studied in depth and over an extended period of time, using case study techniques. It provides a detailed account and analysis of a number of cases (Merriam 1988). Nine beginning primary school teachers with less than three years teaching experience were invited from various primary schools in Hong Kong to participate in the study. The teachers were the graduates of the teacher certificate education programme (Appendix 1-1), on which I taught, in the Hong Kong Institute of Education (HKIEd, Appendix 1-2). They graduated between the years of 1997 and 1999. The view I took was that it is impossible for the Hong Kong Institute of Education to train student-teachers to cope with the variety of situations they will meet in teaching in the time permitted. The Hong Kong Institute of Education provides very little training in pedagogical reflection for the student-teachers in the two-year and three-year teacher training programmes. The student-teachers in this study, most of them (7 out of 9 participants) were two year trained (Appendix 1-3) and one was three year trained (Appendix 1-3 & 1-4). Another one was two-year trained in secondary programme (Appendix 1-5). All took physical education as their elective subject. That is to say they had chosen it from a range of options (music, arts and design, general studies, information technology, English Language, Chinese Language, Putonghua) available. It was their specialist field. The teaching practice in physical education teaching takes place in the final year studies and it lasts for only eight weeks. However, teaching practice was insufficient for them to gain sufficient practice in field experience. In my experience, most beginning teachers take time to establish
their teaching approach and consolidate their professional development. An earlier study (Tsui, 1999) found that pre-service final year student-teachers in the Hong Kong Institute of Education rarely engaged in reflective thinking. Most of them were focused on technical reflection (on management, control and survival) in their teaching practice. Very few focused on 'practical' and 'critical' reflection, the nature of which is discussed in chapter two. I wanted to explore these issues further and see if I could help promote higher levels of reflection amongst teachers. I therefore designed an intervention study with the following structure.

There were four phases in the data collection process and a series of interventions and activities were provided for all participants in each phase (see Table 1-1) (from November 1999 to June 2000). In the first phase, nine beginning primary school teachers (4 male and 5 female) were recruited. Their personal development, professional development and school physical education information were examined prior to the interventions. They were also asked to complete a daily reflectivity checklist. The aim was to see whether these teachers ever reflected on their teaching before, during or after lessons. Their views on the intrinsic and extrinsic values of physical education were also examined. In the second phase, two reflective thinking interviews and two reflective learning workshops were conducted with the nine participants, to better understand their reflective thinking as well as to encourage them to adopt reflective thinking. A physical education lesson was video recorded for inter-observing and reflective thinking. Interviews were audio-taped. A checklist for evaluating teaching after each lesson was provided for participants as a tool to help their reflection. Their types of teaching behaviour, thinking and teaching experience were analysed. Four out of the nine
participants were then selected for the third phase, and it is this phase that forms the substance of this thesis.

#1There was slight difference of the number of interventions for each participant because of different participant's availability.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Code</th>
<th>Interventions / Activities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>A daily reflectivity checklist</td>
<td>Prior to the intervention</td>
</tr>
<tr>
<td></td>
<td>I-PFD</td>
<td>Personal &amp; professional development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I-Sch</td>
<td>School PE information</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>II-ETC(P)-1</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>II-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>II-ETC(P)-2</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>II-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>III-ETC(P)-1</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>III-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>III-ETC(P)-2</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>III-RTI-3</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>III-ETC(P)-3</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>III-RTI-4</td>
<td>Reflective Thinking Interview</td>
<td>Lesson observation &amp; video-recorded</td>
</tr>
<tr>
<td></td>
<td>III-ETC(P)-4</td>
<td>Teaching evaluation checklist</td>
<td>Completed by participant after each lesson observation</td>
</tr>
<tr>
<td></td>
<td>III-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RLW-3</td>
<td>Reflective Learning Workshop</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>Final In-depth Interview</td>
<td></td>
</tr>
</tbody>
</table>

*Code - Shorthand for each intervention activities*

*N.B. The researcher simultaneously completed a teaching evaluation checklist after each lesson observation. Its aim was for recording the participant's progress and development in teaching.*
During the third phase, four reflective thinking interviews and three reflective learning workshops were provided for the four participants. The physical education lessons taught by the participants were observed prior to each reflective interview and video recorded for inter-observation and analysis. Reflective thinking interviews were audio-taped. I made no suggestions as to how participants should improve their teaching in reflective thinking interviews. Participants were asked to complete a checklist to evaluate their teaching. Throughout this phase, changes in teaching behaviours (action and thinking change) in terms of teaching quality after all interventions had occurred, were observed and examined. The aim was to explore whether any changes had occurred in teaching behaviours and participants felt they had changed as a result of the interventions. My intention was to identify whether changes had occurred in their teaching, curriculum content and pupils' learning and to see whether participants were becoming more reflective. A final in-depth interview was also given to each participant at the end of the research. The aims were to see whether there was any further change in their teaching and if they had become more reflective.

*The four participants (Chung, Yum, Shan and Ku) were selected from the nine participants*

The research questions were generated as follows: (1) Do the interventions make any impact on the participants? (2) Do the participants themselves think there has been an impact on their teaching and on how children learn? (3) Is there any change in their teaching? (4) Are the participants becoming more reflective? (5)
Do the participants’ change their behaviour in directions that can be said to enhance ‘teaching quality’? The details of the intervention strategy and the methodology employed in this research are outlined in chapter three.

1.5 Development of the Whole Study

Of the four participants (Chung, Yum, Shan and Ku) who participated in the third phase through the final phase of the study, only three (Chung, Yum and Shan) displayed significant development in reflection after taking part in the reflective thinking intervention. The remaining participant (Ku) neither displayed any reflective thinking in physical education nor any sign of having a desire to engage in reflective thinking. As we will see in chapters four and five the data suggest that unless a teacher has the desire to improve the educational aspects and aspirations of physical education teaching then he or she is unlikely to employ reflective thinking as a tool for professional development. Unless a physical education teacher has a positive attitude towards physical education teaching, reflective thinking promotion programs, such as the intervention in this study, will not succeed in its development. In chapter five of this study it is, therefore, suggested that the attitude of participants toward physical education teaching strongly determines the development of reflective thinking in physical education. Furthermore, the attitude of participants towards physical education teaching is in turn strongly affected by their past experiences in physical education lessons and the peer group cultures of departments in schools (see Chapter five).
We will also see that the three participants who displayed reflective thinking in physical education also showed corresponding improvement in their teaching. However their reflective thinking in physical education focused mostly on the technical aspects of physical education, as did their changes in teaching behaviour and improvement in physical education teaching. Underpinning educational values in physical education were left largely unchanged. As we will see in chapter four participants had employed reflective thinking as a tool to improve the effectiveness of their physical education teaching. This finding challenges the views of Carr (1989) and Tinning, Kirk and Evans (1993) who suggest that beginning teachers can engage in critical reflection on educational values in order to improve teaching quality with respect to physical education educational values. But what restricts the reflective thinking of novitiate teachers to ‘technical matters’ in physical education teaching? It became increasingly apparent to me that I could not answer these questions without an understanding of the social and situational factors that bear upon teachers’ work. As the study progressed my attention was thus diverted to uncover what factors affected, and how, their reflective thinking in physical education and its development. In Chapter five I, therefore, attempt to explore connections between teachers’ biographies and the social and cultural contexts in which they work.

Although participants displayed various degrees of development in reflective thinking in physical education, as we will see in chapter four, Shan’s development in reflective thinking lagged some way behind that of Yum’s and Chung’s. Further investigation of Shan’s case revealed that her personal and professional qualities as well as the culture of the school in which she taught impeded development of her
reflective thinking in physical education. Chapter five is, therefore, mainly focused on Shan's case as it illustrates so well how these factors intersect to frame and limit reflective thinking in physical education and its development.

1.6 Limitations of the Study

As a researcher I also became aware of some of the problems that might interfere with and distort the 'outcomes' of this study. As such I have taken every possible precaution to minimize the effects of these problems.

A number of studies (Lortie, 1975; 2002; Denscombe, 1980; Copeland and Jamgochian, 1985; Templin, 1986) indicate that teachers usually work in isolation. Gottesman and Jennings (1994) point out that teachers often resist lesson observation. From this perspective the presence of a researcher observing and video taping lessons would inevitably cause uneasy feelings or even stress among participants that might have adverse effects on their teaching during lesson observation and video taping and distort the findings. As a researcher I took every precaution to cause minimal interference in participants' lesson during lesson observation and especially when video taping lessons. However, as I emphasize in chapter three the effect of the presence of the researcher during lesson observations and of video taping could be minimized but not completely eliminated.

My lesson observation and the checklist for teaching evaluation was intended to help participants engage in reflection on their teaching. However, I recognized that
it might also make them think that their teaching was being evaluated, causing further stress and distortion of findings prior to data collection. I explained to participants clearly the purposes of this study and emphasized their teaching would not be evaluated. However, as it was almost inevitable that they would experience stress I endeavoured to monitor its levels throughout the period of data collection and constantly endeavoured to reassure them that my role was not to judge their performance but help them develop as teachers in directions that they chose.

It was also to be acknowledged that lesson video taping and the checklist for teaching evaluation were potential factors that might channel the reflection of the participants in a certain direction. It was not my intention to shepherd participants' reflective thinking or its development in a predetermined direction, though Van Manen (1977) has suggested that reflection on critical issues was the most desirable form of reflection. Inevitably, reviewing lesson video tape and answering checklist question would likely affect the direction of reflective thinking of the participants. I was conscious of this adverse effect and exercised precautions in designing a checklist that, hopefully, would not incorporate the researcher's personal view and belief in physical education into the checklist. Likewise, precautions were taken in lesson video taping so as not to highlight specific events or issues in the video. However, one must admit my personal views and beliefs in physical education could not be completely avoided either in the analysis of the checklist or lesson video tapes.

In the final section of this thesis (Chapter six) I draw on the data to discuss again both the available literature and thinking on 'reflective teaching' and consider the
implications of the findings for future teacher education and continuing professional education in physical education. I began this study believing that a reflective thinking intervention could have a positive effect on teachers and their professional development. I will reflect on whether I still feel this to be the case. Having been involved in this study over a period of seven years I now understand that teaching and reflection are extremely complex social processes. I feel I have barely touched their surface while throwing some light on the factors involved in educational change.
CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

There are two main parts in this literature review. The first part focuses on pedagogical reflection and the second on teaching quality. The purpose of the first part is to provide an overview of related research and theory on the nature and meaning of reflection. It is divided into five sections. The first section introduces the concept of reflection. Different levels or forms and types of reflection are provided in the second and third section respectively. The roles of reflection in teaching and teacher education programme are discussed. Research studies that have been conducted on teacher action, developmental process of teacher reflectivity, reflective teaching and characteristics of reflective teachers are examined in the fourth section. The final section discusses what we know about pedagogical reflection in physical education teacher education. The second part regarding teaching quality is divided into four. The first introduces a definition of 'quality'. Its relationship with teaching is provided in the second section. The relationship between qualities of reflection and qualities of teaching are examined in the third section. It is recognized that 'quality' is a particularly problematic concepts and potentially value laden. It is important to emphasize that we are talking here of the 'quality' of reflection and by extension of teaching and not the qualities of the teacher as a person. The final section examines the educational values of physical education.
2.2 Pedagogical Reflection

2.2.1 Conceptualizations of reflection

A lack of definition and clarity of the concept of reflection is evident in much of the literature reviewed (Mezirow, 1981, Powell, 1989; Goodman, 1991). Though there is considerable research regarding reflection and reflective teaching among theoreticians, researchers, and teacher educators, there is no consensus with regard to the definition of reflection (Schon, 1991, Atkins, 1993).

2.2.1.1 John Dewey’s view on reflection

John Dewey (1933), the early 20th century educational thinker, is an influential proponent of reflection. He initiated a whole line of thinking on reflection. Dewey (1933) proposed that reflection involves not only a sequence of ideas but also a consequence. Dewey defined reflective thinking as a kind that begins with some uncertainty or ambiguity. It usually began with something not directly perceived and aimed at a conclusion. He identified it as (1) a state of doubt (2) an act of searching. Reflection entails a chain of thoughts which are linked together so that there is a sustained movement to a common end (Dewey, 1933). Dewey (1963) contends that there is no guarantee that reflection always leads to positive results. It may develop in positively wrong ways and lead to false and harmful beliefs. If reflection is used optimally, it emancipates us from mere impulsive and routine activity. It potentially leads to learning, more critical inquiry and intelligent living.
Literature Review

and enriches our lives by giving greater meaning to objects and events. He acknowledges that individuals need to possess certain attitudes, in order to be able to engage in this productive way of reflecting.

2.2.1.2 Other scholars’ views on reflection

After Dewey’s view on reflection, numerous scholars concerned themselves with the definition and nature of reflection. Cruickshank and Applegate (1981) define reflection as ‘helping teachers to think about what happened, why it happened and what else they could have done to reach their goals’ (p.553). Valverde (1982) considers different aspects of reflection. Firstly, reflection means asking basic questions of oneself. The basic and comprehensive question during reflection is, ‘what am I doing and why?’ Secondly, reflection is a form of slightly distorted self-evaluation – distorted in the sense that judgement is emphasized rather than data collection. Individuals ask value-laden questions and respond on stored, selected data (memory) and then conclude whether they are satisfied or dissatisfied. Furthermore, reflection is an individual’s needs assessment and continued self-monitoring or satisfaction with effectiveness.

Reflective action is also a process that involves more than logical and rational problem-solving procedures. Boyd and Fales (1983) state that reflection is an internal examination of concerns and emphasizes self as the source of learning. Zeichner (1983a) considers reflection relates to the examination of the moral, ethical and political issues in teachers’ everyday thinking and practice. Ross (1987) defines reflection as ‘a way of thinking about educational matters that
Literature Review

involves the ability to make rational choices and to assume responsibility for those choices’ (p.22). Shulman (1987) indicated the process of reflection as ‘reviewing, reconstructing, enacting and critically analyzing one’s own and the class performance.’ Kemmis (1985, p.141) suggests that ‘reflection’ is a dialectical process: it looks inward at our thoughts and thought processes, and outward at the situation in which we find ourselves; when we consider the interaction of the internal and the external, our reflection orients us for further thought and action. Dirkx (1989) considers the importance of ‘self-improvement’ rather than the importance of moral, ethical and political issues. Van Manen (1991) asserts that reflection can take place only if teachers in general have the time to think about their teaching in terms of what was done, what could have been done and what should be the next step to take.

In recent years, Jennifer Moon (1999) has suggested several understandings for the word ‘reflection’. Reflection seems to lie somewhere around the process of learning and the representation of that learning. We reflect on something in order to consider it in more detail (let me reflect on what you are saying or to represent it in oral or written form). Reflection implies purpose. Generally, we reflect for a purpose.

Reflection involves complicated mental processing of issues for which there is no obvious solution (Dewey, 1933; King and Kitchener, 1994). Moon (1999) based on the above view considers that the word ‘reflection’ implies a form of mental processing with a purpose and or an anticipated outcome that is applied to relatively complicated or unstructured ideas for which there is not an obvious
solution. This suggests close association with, or involvement in, learning and the representation of learning. Based on different views on the definition and nature of reflection, it is suggested in this study that reflection is a mental activity and a chain of ideas (unstructured ideas or experience or analyzing and reviewing) in the mind. All these principles form a meaningful pattern. The consequences may not be obvious or provide an immediate solution. Follow-up actions and suggestions may have an effect on future action. On the other hand, reflection can arise from comments and criticism after gathering experience and professional development (see the following chart).

Mental activity

\[ \downarrow \]

to learn from experience

\[ \downarrow \]

unstructured ideas + experience + analyzing and reviewing

\[ \downarrow \]

principles → form a meaningful pattern

\[ \downarrow \]

reflection (all reflection come from comments and criticism after gaining experience)

\[ \downarrow \]

seeking development, using experience → strong or powerful enduring knowledge.
People do not use the word ‘reflection’ to describe their processing of simple mental arithmetic or their mental processes applied to a known place. They are more likely to use the words ‘think’ or ‘recall’. The word ‘reflection’ and ‘thinking’ commonly but perhaps mistakenly refers to the same activity.

2.2.2 Levels / forms of reflection

As well as defining (or understanding) the word ‘reflection’, some scholars have elaborated forms, levels and other categorizations of the process. (e.g. Van Manen, 1977). Some scholars, however, have delineated different forms and types of reflection. Van Manen (1977) proposed three hierarchical forms of reflectivity (processes of thought) or suggested that reflection can take three different forms: technical reflection, practical reflection and critical reflection. The level of technical reflection focuses on technical means and educational principles – to reach a given end or goal. It concerns effective application of educational knowledge and skills. This category describes an event from personal experience and is not viewed as problematic. The level of practical reflection is the process of analyzing, meanings, assumptions, and perceptions underlying practical actions. It describes an experience so that a subjective perception or commitment underlying practical actions is revealed. The focus of reflection at this level is ‘on an interpretive understanding both of the nature and quality of educational experience, and of making practical choices’ (p. 226-227). Van Manen (1977) argues that ‘critical reflectivity’ is the highest and most desirable form of reflection – incorporating critical questions related to moral, ethical and political aspects of teaching and schooling. Van Manen (1977) similarly noted that
“universal consensus, free from delusions or distortions, is the ideal of a deliberative rationality that pursues worthwhile educational ends in self-determination, community, and on the basis of justice, equality, and freedom” (p.227).

2.2.3 Types of reflection

Donald Schon, perhaps the best known recent writer on ‘reflection’, a professor at the Massachusetts Institute of Technology, provided the foundation of many of our ideas about reflective teaching. Schon (1983) introduced the concepts of reflection-in-action (during) and reflection-on-action (after). Reflection-in-action refers to the process of interpreting, analyzing and providing solutions to complex and situational problems during an action. Reflection-on-action takes place when the practitioner has left the venue and mentally reconstructs that venue to analyze actions and events. In teaching, reflection-on-action occurs both before a lesson when we plan for and think about our lesson and after instruction when we consider what occurred. Reflection can also occur during the action as well in what is called the ‘routine present’. Teachers may attempt to adjust their instruction to take into account these reactions. Schon called this ‘reflection-in-action’. Schon (1983) contended that the notion of ‘reflective practitioner’ is largely captured in the colloquial phrase ‘thinking on your feet’, it has the same meaning as the phrase “let me think about this one…” ‘let me reflect on this’.

Killion and Todnem (1991) proposed three types of reflection: reflection-on-action, reflection-in-action and reflection-for-action. Reflection-for-action refers to
reflection prior to the practices. Both reflection-in-action and reflection-on-action are essentially reactive in nature. Reflection-on-action takes place after an event or ideas. Reflection-in-action refers to reflection in the midst of practice. This latter type of reflection is not usually present among beginning teachers, it is more likely to occur in experienced teachers.

2.2.4 Roles of reflection in teaching and teacher education programmes

Definitions of 'reflection', 'reflective teaching' and 'reflective teachers' abound in the literature. Although there are different conceptions of reflection, there is generally an agreement on the importance of such activity, of fully examining one's thoughts in order to improve one's teaching. The following section examines the role of reflection in a teacher education programme and draws upon the various uses of the term reflection and reflective teaching in the literature. Most of these definitions have their roots in some key concepts advanced by Dewey (1933), Van Manen (1977) and Schon (1983; 1987).

2.2.4.1 Teacher action

Dewey (1933) made a distinction between two types of teacher action, 'routine' and 'reflective' action. 'Routine action' is guided by impulse, tradition, and authority while 'reflective action' aims at 'active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that supports it and the further conclusions to which it tends constitutes reflective thought' (p.9). Dewey (1933) further indicated three attitudes to be prerequisites
for reflective action. The first is open-mindedness which is an 'active desire to listen to more sides than one; to give heed to the facts from whatever source they come; to give full attention to alternative possibilities; and to recognize the possibility of error even in the beliefs that are dearest to us' (p.29). The second prerequisite for reflective action is responsibility which refers to the careful consideration of the consequences of a particular action. Finally, Dewey (1933) referred to wholeheartedness according to which individuals should be willing to take a risk and put their ideals into practice.

2.2.4.2 Developmental process of teacher reflectivity

Few studies have investigated the character of teacher reflectivity. Pultorak's (1996) three-year qualitative research, however, has highlighted that reflectivity is a developmental process and indicates that it may be characteristic of beginning teachers. Cook (1993) after reviewing over 170 articles and papers on reflection, concluded that no one has completely addressed developmental aspects of reflection. The research suggests that certain activities foster reflection processes. Teaching is a highly intellectual process requiring continuous decision making before, during and after classroom instruction (Lampert and Clark, 1990; Colton and Spark-Langer, 1993; Berliner and Biddle, 1995; Costa, 1995). Teacher reflectivity enhances the skills necessary for this process to occur effectively (Dewey, 1933; Cruickshank and Metcalf, 1993; Glen, 1995) so that, it is contended, educational researchers and reformers must seek out ways to understand and cultivate developmental processes of teacher reflectivity. A framework approach fashioned after Van Manen's conception of levels of
reflectivity (Van Manen, 1977) and parallel levels described by Zeichner and Liston (1987) might prove effective in classifying and measuring teacher reflectivity.

2.2.4.3 Reflective teaching

Dewey (1933) viewed reflective teaching as the ‘analysis of one’s beliefs, monitoring the effects of one’s action, and certain attitudes’. Schon (1987) summarized his ‘reflective practitioner’ theory as follows: Reflective teaching has become a widely used term in current discussion about the nature of professional training. Reflective teaching approaches to professional training and development have been associated with notions of growth through critical enquiry, analysis, and self-directed evaluation and have sometimes been distinguished from behavior, skills or craft apprenticeship approaches which emphasis the acquisition of pre-determined classroom practices (Zeichner, 1983a; May and Zimpher, 1985).

Much of the writing on reflection in teacher education derives from the concepts offered by a few key theorists, each emphasizing different aspects of the process. Dewey’s (1933, p.9) concept of ‘reflection’, for instance, defined broadly as ‘active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it’ and the further conclusions to which it tends constitutes reflective thought. Action based on reflection was viewed as intelligent action, in which justifications and consequences had been considered, as opposed to appetitive, blind or impulsive action. Reflective thought was initiated by uncertainty and guided by one’s conception of a goal or end-point.
Dewey suggested that the development of reflection involved the acquisition of certain attitudes (e.g. of open-mindedness) and skills of thinking (e.g. reasoning and ordering thought).

2.2.4.4 *The characteristics of reflective teachers*

Researchers in America have begun to develop what they claim to be a 'set of critical attributes of reflection' in an effort to distinguish reflective teachers from their 'less reflective' colleagues (Day, 1993). The four assumptions which guide their operational definition are that: (i) engaging in reflective practice involves a process of solving problems and reconstructing meaning; (ii) reflective practice in teaching is manifested as a stance towards inquiry; (iii) the demonstration of reflective practice is seen to exist along a continuum or 'reflective spectrum', and (iv) reflective practice occurs within a social context. This echoes Dewey's perception of the reflective practitioner: a person open-minded, responsible and trustworthy. Numerous other scholars also highlight their versions of the characteristics of reflective practitioners.

In Calderhead's (1992) view, becoming a reflective teacher is considered to be a matter of critically examining one's own and other's educational beliefs, and developing a coherent, articulated view of teaching and learning. It is expected that reflective teachers take personal, social, ethical and political factors into consideration. Reflective teachers should be as concerned with student learning as with their own (Capel, Leask and Turner, 1995). Cruickshank, Bainer & Metcalf (1999) take a similar view, claiming that reflective practitioners share certain
characteristics. They purposefully deliberate or reflect on teaching; they are open-minded, freely questioning their own views and reactions to their teaching practices; they consider and accept responsibility for the consequences of the decisions; and they are enthusiastic and eagerly focus on ways to improve their teaching.

Reagan, Case and Brubacher (2000) state four propositions for reflection and consideration. Firstly, study of reflective thinking need not result in an individual becoming a reflective practitioner. To become a reflective practitioner, a person must alter his or her behaviour. Secondly, reflective practitioners identify categories of knowledge that are requisite for successful reflective teaching (e.g. content, pedagogy, curriculum, learning, educational contexts, educational ends). They use these categories to analyze and modify practice. Thirdly, reflective practitioners are concerned with and involved in issues of social justice and ethics in education. Fourthly, reflective practitioners make conscious, rational decisions based on a solid and defensible knowledge base. Laker (2001) indicated the following characteristics of reflective teachers as: (1) those who look back on their work, their teaching and their pupils' learning and reconstruct what happened and why; and (2) propose alternatives and take into account the social, moral and political contexts that surround their teaching and schooling.

Posner (1996) indicated that non-reflective teachers rely on routine behavior and are guided more by impulse, tradition, and authority than by reflection. They simplify their professional lives by uncritically accepting everyday reality in schools. They can then concentrate their efforts on finding the most effective and
efficient means to achieve ends and to solve problems that have largely been defined for them by others. In contrast, reflective teachers actively, persistently and carefully consider and reconsider beliefs and practices ‘in light of the grounds that support them and the further consequences to which they lead’ (p.21). This echoes Dewey’s view on the two types of teacher action.

Based on the literature and research in this field, it is generally agreed that reflective teachers are those who are able to analyze their own practice and the contexts in which it occurs. They are expected to be able to stand back from their own teaching, evaluate their situations, and take responsibility for their own, future action. In this study it is suggested that reflective teachers should possess the following characteristics. They should reflect on their teaching, ultimately for self-improvement. They should reflect on or review their action. They should display self-awareness and strive towards self-improvement. They should possess open-mindedness, responsibility and whole-heartedness. They should not simply follow routine action. All these should be enduring characteristics of their behaviour rather than simply surface level attitudes of mind. Being reflective practitioners, they should comfortably engage in the mental activity of reflection and relate more strongly to the characteristics of persons, rather than to habitual use of reflection as a mental tool. This echoes Dewey: reflective teachers look at classroom problems from many perspectives and especially from those of their students.
Inculcating pedagogic knowledge and practice is a major concern of teacher education (Tinning, 1991), for they lie at the heart of teachers' roles (McNamara, 1990). In pursuit of 'improvement' in physical education, Pieron (1997, p.43) claimed that 'pedagogy is a body of theories and rules aimed at guiding teachers and educators in their daily actions', a multi-disciplinary activity that deals with aims and objectives, with relationships on a one to one basis or with groups and with various means to reach the objectives. It can be defined as the skillful arrangement of an action in such a way that students acquire specifically intended learnings. As a field of knowledge or discourse, it links teachers' actions with student outcomes, offering as a means of reconstructing the phenomena for intellectual debate (Hariman cited in Lather, 1990).

Reflection has been considered as something that one either believes in or does not believe in, not something that stands on evidence and proof (Dewey, 1933). I share Dewey's view that reflection can be subject to empirical verification. Cruickshank et. al. (1981) indicated that reflective teaching could be adopted as an instructional technique in teacher education. Some educators and scholars consider reflection is a characteristic of good teaching and therefore desirable to preservice teachers (Troyer, 1988; Richert, 1991; Gore and Zeichner, 1991; Herrmann and Sarracino, 1993). Self-reflection is particularly significant. Did I do this effectively? Did my voice reach all the students? Did I teach appropriately?
Zeichner and Liston (1987) strongly argued that a teacher education programme should emphasize student-teachers' willingness to develop reflective capabilities on the origins, purposes and consequences of their actions. They advocate active, persistent and careful consideration of any belief. Furthermore, Shulman (1987) defined the process of reflection as 'reviewing, reconstructing, reenacting and critically analyzing one's own and the class's performance'. Tinning (1988) argued that teachers and student teachers develop their own theories on pedagogical reflection and these theories become more effective and meaningful after engaging in critical reflection. Researchers suggested that teacher educators need to ask student teachers critical questions about teaching physical education (McKay, Gore and Kirk, 1990). Some sample questions were proposed: (1) What are the relationships between physical education and other school subjects? (2) What overt, hidden, and null curriculum elements can be discerned in physical education teaching? (3) How can physical education alert people about important moral and political questions, such as quality, justice and emancipation (McKay, Gore and Kirk, 1990, p.64). This was a stance that I adopted in my study.

There is very little research on reflection in physical education. Empirical evidence about reflection in physical education for beginning teachers is almost nonexistent. Gore's (1990) case study described student teachers' experiences and the development of reflective practices. Data were collected through journals and interviews. Three groups participated in this study and the most committed of them seemed to find value in the activity of reflection about teaching.
Tinning (1991) suggested that physical education teacher educators placed value on the social, moral and political aspects of their work. He emphasized in accepting the discourse of performance pedagogy as the foundation of our teacher education, we will be in danger of 'continuing to prepare teachers who remain ignorant of the ways in which physical education itself is implicated in producing many of the unjust social practices that characterize much contemporary educational experience' (p.17-18). Graham (1991) argued that teachers should reflect on their own and their pupils’ needs. She emphasized the promotion of teachers’ reflection not only on the technical aspects of teaching but also on the social and cultural contexts of education.

Cutforth and Hellison (1992) introduced an approach to teaching a physical education curriculum method course for eight preservice student-teachers. Its aim was to provide them with the opportunity to implement, compare and contrast, and make judgements about different curriculum models in physical education. They concluded that reflective teaching ‘needs to be both conceptualized and experienced if it is to become more than another trend without substance in physical education teacher education programs’ (p.135).

Sebren (1992) provided another example of how to promote reflection in physical education. Its aim was to describe the reflections and development of seven prospective teachers during an elementary methods course. The questions focused on what the preservice teachers learned, how that learning changed over time, and how reflection changed their development during the course. Rovengo’s (1992) study of one physical education student teacher during an elementary teacher
education methods course concluded that the desire to foster reflection did not carry with it any easy answer. Tsangaridou and O’Sullivan’s (1994) study described how specific reflective pedagogical strategies influenced preservice physical education teachers to reflect on practice. Their findings supported the positive influence of new, reflective pedagogical strategies in enhancing the reflective abilities of student teachers.

2.3 Teaching Quality

2.3.1 Conceptualization of quality

"Quality" is an interesting word widely used in everyday English. The concept of ‘quality’ has different meanings. Pirsig (1976) relates ‘quality’ to the Greek *arête* which means ‘excellence of function’. In the New Oxford Dictionary of English (1998, p.1515), quality refers to the standard of something as measured against other things of a similar kind. Two significant meanings are measured: the degree of excellence of something; a distinctive attribute, characteristics possessed by someone or something. According to Webster’s Third New International Dictionary (1981, p.1858), the definition of quality means ‘essential character, a distinctive inherent feature, degree of excellence, degree of conformance to a standard, intrinsic excellent of character’. From the American Heritage Dictionary of the English Language (1992, p.1479), quality refers to an ‘inherent or distinguishing characteristic, a personal trait, essential character, superiority of kind, degree of excellence, high social position. Its synonyms are property, attribute, character and trait’.
What 'quality' refers to when someone uses this word to describe an item is far from being precise and, most likely, different persons will give it different meanings. Take 'shoe', a well understood product as an example; what is a pair of quality shoes? One is bound to receive different answers from different people though there may be some points in common. One may say a pair of 'quality shoes' are shoes that are fashionable. Others may say that they are comfortable to wear. Yet another person will say they are durable and last for a long time. The list of answers goes on and on and is endless. From this perspective "quality" is a subjective term and is value laden. The shoe example serves to illustrate the problem of using the word "quality" to describe something precisely. It will be even more problematic when "quality" is used to describe an issue that is far more complicated than a shoe in nature, teaching. Armour and Yelling (2004) mentioned that 'high-quality' professional learning for teachers is a central factor in determining the 'quality' of teaching, yet they too have little to say about either the meaning or definition of quality.

2.3.2 Quality of teaching

The UK White Paper Teaching Quality (Department of Education and Science, 1983) indicated the teaching force to be 'the major single determinant of the quality of education', although it did not specify precisely what 'quality in teaching' actually meant. Though the concepts of 'teaching' and 'quality' used in the document are 'more frequently simplistic and naïve' (Carr, 1989, p.2), it drew the attention of educators as to how to expand effort on this issue (Stones, 1994). What is 'teaching quality'? As in the shoe example offered above there are a
whole range of possible answers to this question. Educators do not have a definite view on teaching quality. Doherty (1994) argues that 'we can't define it but we know it when we see it.' Ellis (1993) suggests that 'quality itself is a somewhat more ambiguous term since it has connotations to both standards and excellence'. One difficulty seems to be that talk about 'standards' raises questions of 'truth', 'goodness' or 'beauty'. 'Quality' should deliver some good value and can be measured. Pollitt (1992) suggests that 'a high quality service should at least meet two very different conditions: it should be experienced in providing the service and in meeting customers' needs and wants'. Doherty (1994) contends that there is no consensus view on nor definition of teaching quality. Quality teaching is a value-laden term and refers to the purposes, processes and standards of education (Ashcroft, 1995) and it is not possible to cast judgment on quality teaching as judgment in this area is subjective (Loder, et. al, 1989). Tinning, Kirk and Evans (1993) cited two teaching supervisors using different criteria to evaluate the teaching of two student teachers as a good illustration of Ashcroft, Doherty and Loder's viewpoint.

Travers (1981) review of different criteria of 'good teaching' over the centuries concludes that different conceptions of 'good' have prevailed at different times. Teaching quality is more often than not related to good teaching that has a close tie to teaching effectiveness. In the early 1970s, researchers began investigating the so-called 'process and product' of class teaching, defined as the relationships between teachers' behavior (process) in class and pupils learning (product). One of the most influential reviews of this teaching effectiveness research in physical education was conducted by Rosenshine and Furst (1971). They identified five key variables:
clarity of presentations; teacher enthusiasm; variety of activities; task-oriented and business-like teacher behavior; and the content covered by the class. Siedentop (1991) claimed eight strategies for effective teaching in physical education expressed as injunctions to: devote a large percentage of time to content; minimize management or wait or transition time in class routine; devote a high percentage of content time to practice; keep pupils on task; assign tasks that are meaningful and matched to pupils' abilities; keep the learning environment supportive and set high but realistic standards; lesson smoothness and momentum; and hold students accountable for learning. His eight strategies for effective teaching in physical education had profound impact on the study of teaching effectiveness in subsequent physical education research. Research on 'academic learning time' is said to offer one of the best measures of teaching effectiveness in physical education (Siedentop, 1991; Tinning, 1991; 1986). Siedentop, Mand and Taggart (1986) indicate that 'effective teaching can only be judged in terms of the goals of the teacher' (p. 374). They further point out that academic learning time is a simple and convenient method to judge teaching effectiveness. In this view of teaching effectiveness concern focuses solely on teaching process that can be evaluated against a standard. In other words teaching effectiveness focuses on the 'technical' matters of teaching process, it does not touch on educational values. It is more a tool that can be used by someone, for example a politician, to hold schools and their teachers accountable for the academic achievement of their pupils (Tinning, Kirk and Evans, 1993). It may be of little value in the development of teachers and teaching.
Other researchers do not view teaching as 'process-product' and 'knowledge delivery' processes that lay stress on teaching effectiveness. Tinning (1993) and Carr (1996) argue that quality in teaching refers to its intrinsic value as a worthwhile educational process. Carr (1989) pointed out that qualities constituting something's excellence will be related to its effectiveness. The criteria for judging the quality of something will derive from its value; the effectiveness with which it can be used to pursue some particular human purpose or activity. A judgement of quality can only be made from the intrinsic value of the activity being judged. Carr based his views on the theories developed by Schwab (1969), Stenhouse (1975) and Schon (1983; 1987) who portray educators as 'practitioners of the art of translating abstract educational values into educational practice' (Carr, 1989 p.10). Carr further indicated that 'pedagogy' comprises 'primarily an ethical language which recognizes that teachers are guided by moral values and constantly under a professional obligation to justify their works in educational terms' (p.10). On this view teaching quality refers to and can only be judged by the educator's intrinsic values. Tinning, Kirk and Evans (1993) share a similar view on teaching quality. They indicate it is valuable to distinguish between the terms 'teaching effectiveness' and 'teaching quality'. Tinning, Kirk and Evans (1993) and Tinning, et. al. (2002) argue for the use of the term 'teaching quality' rather than 'teaching effectiveness'. Their view is that teaching quality tends to focus on intrinsic and educational values of physical education. Teaching quality is not an ending but a process. It involves more dynamic interaction between teachers and pupils as well as uncertain phenomena in classes. Carr (1983; 1996), Tinning, Kirk and Evans (1993) and Tinning, et. al. (2002) indicate that identifying quality in teaching requires making explicit whether the criteria being employed derive from intrinsic
or instrumental values. To the extent that teachers and others who are directly involved in education invariably look upon themselves as professional educators, they will perceive quality in teaching to refer to its intrinsic value as a worthwhile educational process. From this perspective, teaching will be of 'quality' insofar as it is perceived to be inherently educative rather than, say, a process of passive training.

In my point of view young people should be educated through teaching processes to become intelligent, worthwhile and responsible members of society. Teaching is a complex process and must not be viewed holistically. We should not lay stress solely on its effectiveness nor focus merely on educational values while neglecting elements of knowledge, competence and skill. Ignore the educational values of physical education and teaching will be reduced to the activities of a coach, a technician in a school rather than a physical educator. Teaching 'effectiveness' is not always synonymous with teaching quality, it is, at best, an element in teaching quality. However one cannot discard the importance of the 'technical' matters in the physical education teaching process. We cannot teach pupils something if teaching effectiveness is low. Teaching consists of both skill elements and educational values. Siedentop (1991) and Siedentop and Tannchill (2000) pointed out that quality teaching in physical education involves both implicit and explicit values. We will see in the data presented later that quality teaching, to be meaningful, must include both the skill elements in teaching as well as educational values.
2.3.3 Qualities of reflection and qualities of teaching

Reflection can be claimed to be a paramount component of teaching quality. Reflection positively affects student-teachers’ belief in teaching and their teaching behaviour. Cruickshank and Applegate (1989) considered that reflective teaching gives teachers time to think carefully about their own teaching behaviours and opportunities to view any experienced professional in action. Teachers become more reflective about teaching and more interested in self-improving. Killon and Todnem (1991) indicate that reflection is a tool for continual personal and professional development. Their views suggest there may be a relationship between reflective thinking and teaching quality.

Empirical evidence about reflection in physical education is almost nonexistent (Gore, 1990; Rovegno, 1992; Sebren, 1992). Tsagaridou’s study (1993) was focused on experienced teachers’ reflection within their teaching and learning environments and the role of reflection in their professional development. This study set out to redress this paucity of knowledge and limited empirical evidence in physical education.

In view of the above discussion can we, then, talk of different qualities of reflection and, by extension, qualities of teaching? This is a complex and difficult issue given the many dimensions of reflection, and of behavioural change. Firstly, we can make a distinction between surface change (what I will call low level change) and deep change (high level). Deep or high level changes refer to changes that have profound and lasting effects on individual orientations, for example in
one’s beliefs about physical education and educational, ethical, social and cultural values. Surface or low level changes refer to changes that may be situational whose effects are relatively short lived. For example, changes in teaching behaviour, teaching goals, teaching skills and methods of classroom control belong to surface or low level changes. In other words, deep or high level changes focus on critical issues in education while surface or low level changes focus on practical and technical matters in teaching. These are difficult and problematic distinctions but they form a useful heuristic for the analysis that follows in later chapters. This closely follows Van Manen (1977) who presented three levels at which reflective thinking occurs: technical reflection, practical reflection and critical reflection. Technical reflection refers to reflections on technical matters that involve the application of pedagogical knowledge and skills. Practical reflection refers to the matters that involve the clarification of assumptions related to pedagogical goals, action and evaluation of the consequences of a teaching action. Using these definitions in defining high and low level changes, changes in reflection in technical and practical levels are said to be ‘low level’ reflection changes since these changes focus on teaching effectiveness in physical education. Van Manen (1977) views reflection on critical issues as the most desirable form of reflection. This level of reflection is related to moral, ethical and societal issues together with the means and ends as well as intrinsic and educational values in physical education. It is anticipated that changes in reflection at a critical level will have a profound and lasting effect on education.
2.3.4 Educational values of physical education

In section 2.3.2 I related 'quality of teaching' to both skill elements and educational values in physical education. I also equated skill elements in physical education teaching to notions of 'teaching effectiveness' in physical education, such as Rosenshine and Furst's (1971) five key variables, Siedentop's eight strategies (1983), academic learning time (Siedentop, 1991; Tinning, 1987; 1991), as well as to teaching skill and teaching behavior. But what are educational values in physical education? In this section I shall, albeit briefly, review the literature on the aims, roles, purposes and values of physical education, outlining how I view educational values in physical education and suggest that the reflective teachers would engage with issues such as these.

Historically, physical education has been ascribed low status in education and occupied a fragile position in the school timetable in the UK (Evans, 1998) and in Hong Kong. Penny (2004) revealed that physical education is a subject that many people still regard as marginal to 'core' and 'more academic' subjects. However, there are many, different points of view on the definition, aims and purposes of 'physical education'. (Penny and Evans, 2000). Traditionally, the values of physical education relate to the following objectives: organic (fitness), cognitive (knowledge), psychomotor (skill) and affective (pleasure). Some researchers (Tousignant and Siedentop, 1983; Tinning and Siedentop, 1985) have identified three domains of physical education: psychomotor, affective and cognitive and an additional domain, the 'social', was suggested by Kirk (1992). In the 21st century, more concrete and diverse terms have been used to describe the aims and roles of
physical education. Blunkett (1999, cited in Penny, 2004) argued that physical education can play a key role in helping young people 'to develop spiritually, morally, culturally, mentally and physically. Four aspects of the prime role of physical education: (1) promoting health; (2) providing education for leisure; (3) offering vocational preparation; (4) providing initiation into the culture of the society have been advocated (Whitehead, 2000). In Britain, the Physical Education Association (PEAUK, 2001) has highlighted various roles and aims of physical education, claiming that: (1) provides opportunities for young people to develop their knowledge, skills and understanding of the body and its movement; (2) develops physical awareness, skills and competence and contributes to healthy growth and physical development; (3) develops artistic and aesthetic understanding in and through movement; (4) influences the development of healthy lifestyles and lifelong habits; (5) provides opportunities to promote spiritual, moral, social and cultural development and develops personal qualities such as self-esteem, independence, citizenship, tolerance and empathy; (6) provides opportunities to promote key skills such as communication (verbal and non-verbal), working with others, improving own learning and performance and problem-solving; and (7) makes a strong contribution to the development of pupils' language through the extensive use of speaking and listening skills. In the USA Don Hellison (1985) has argued that physical education is not only about fitness and skills but social skills, focused on human needs and values.

In Hong Kong the teaching objectives for physical education are explicitly stated in the Syllabus for Physical Education (1995, p.11). They are,
(1) To improve the organic system, the neuro-muscular system and physical fitness of pupils.

(2) To develop pupils' desirable social attitudes and patterns of behavior such as fair play and good sportsmanship.

(3) To help pupils to understand the essentials of co-operating with others in communal life and to foster them with a sense of responsibility and belonging.

(4) To cultivate pupils' sense of aesthetic appreciation and to enrich them with the knowledge of elegant posture and movements.

(5) To cultivate pupils' powers of observation, analysis, judgement and creativity in the process of participation in activities.

(6) To stimulate pupils' interest and desirable attitudes towards physical activities.

(Syllabus for Physical Education (Primary 1 – 6) prepared by the Curriculum Development Council recommended for use in schools by the Education Department, Hong Kong, 1995)

A series of educational reforms were introduced in Hong Kong in 2000 and the aims of physical education were mentioned in the 'Key Learning Area Curriculum Guide'. Physical education is 'to educate students through physical activities'.

It aims to develop students' physical competence and knowledge of movement and safety, and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle. It also
develops students' confidence and generic skills, especially those of collaboration, communication, creativity, critical thinking, as well as the attribute of aesthetic appreciation. These, together with the nurturing of positive values and attitudes in physical education, are foundation for students' life-long and life-wide learning.


Even this cursory overview of the aims and values of Physical Education reveals both their complexity and potential for contestation. Clearly the above mentioned aims and values touch on different aspects of physical education and all are important to physical education. However, not all the aims and values mentioned are educational values. For example, while we may not dispute the importance of helping young people to become physically fit through physical education, few would argue that young people could be considered 'physically educated' were they just to achieve only this. The focus of physical education embraces much more than the pursuit of this single ideal. The 'educational values' to which I allude throughout this study and which I hope to encourage, though not impose, through reflective exercises, can perhaps be best encapsulated in what Bernstein (2000) refers to as 'competency codes' and modes. It is a view of education that places emphasis upon the 'competence' that all children possess, that sees children as an active learners, and teachers as helping them to realise their potential. It is 'student centred' and concerned as much with the social and ethical aspects of education as it is with the educational. In this view 'performance' in education and sport is an important part of the educational project but not the primary goal and, in my view, is more appropriately identified with the role of a coach. In the context
of this study, then, when I refer to educational values in physical education I mean helping young people to develop physically, spiritually, morally, socially, culturally and ethically through physical activities. In this sense, the endeavour to develop a reflective practitioner is not just a matter of effecting a process or an approach to teaching but also one of contents and outcomes; it signifies a way of teaching and what we hope children will learn.

2.4 Summary of the Chapter

This chapter has been about reflection and the nature of what we might refer to as 'quality' of reflection and 'quality' of teaching. It is to be noted that little of this literature on reflection says anything about the social and organisational contexts in which reflection occurs. It will become evident however, that we can not understand reflection and its development unless we set teachers and teaching in the context of the cultures of their departments and schools (see Curtner-Smith and Sofo, 2004). I will not however, deal with the literature on context and culture until my discussion in chapter five. This is, in part, to reflect that my awareness of the importance of this element of reflection did not materialize until after my data had been collected. It throws into relief the limitations of the literature on reflective teaching and offers new insights into the direction of future research. These are matters to which I will return.
3.1 Introduction

This chapter introduces the methods employed in this research. It describes the research paradigm, offers a rationale for interpretative methods, research design and procedure, intervention, data collection method and process, triangulation of data, analysis of data, generalizability, issues of validity and reflects on limitations and ethical considerations.

3.2 Interpretive Paradigm

The present study adopted an interpretive approach to explore whether participants felt they had changed as a result of the series of interventions and to see whether they were becoming more reflective. Three approaches to social science research were described by Neuman (1997): positivist, interpretive and critical social science. Sparkes (1992a) indicated that each of these three major paradigms have impacted upon the world of physical education in recent years, researchers operating within one more of them. Each provides a different lens for viewing and understanding the world of human activity (Sparkes, 1994). Burrell and Morgan (1979, p. 28) argue:
The interpretive paradigm is informed by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. It seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action...it sees the social world as an emergent social process which is created by the individuals concerned.

The main purpose of an interpretive approach is to understand participants' worlds. Human activity in specific situations from participant's perspectives is examined (Curtner-Smith, 2002). Interactions between researchers and participants 'create' findings using predominantly qualitative methods. 'Thick and detailed description' is used to bring the contexts and meanings of participants' lives and behaviour to readers. The use of 'thick description' allows readers to formulate their own interpretations of the results (Patton, 1990). Research within an interpretive paradigm uses methods that allow investigators to record activity closely, participant observation using and to uncover the meanings that participants ascribe to their life experiences (Denzin and Lincoln, 1994).

Sparkes (1994) held that individuals who conducted research within an interpretive paradigm did not believe that the social world could be studied in the same manner as the physical world. Borg and Gall (1989) suggest that individuals act, think, and behave in different ways since everyone's activity is a reflection of individual intentions and beliefs. It is impossible to set universal rules. Sparkes (1994) emphasized that 'multiple interpretations' of human activity are possible. Thus, researchers work in an interpretive paradigm tend to use 'a wider angle lens' than
positivists and emphasize other influences (historical, political, social and cultural), should be taken into account. Interpretive researchers tend to use qualitative techniques to gather data in the form of texts (written, behavioral and attitudinal) and rely heavily on their own social skills in collecting and analyzing data. They argue that it is impossible to avoid bias during research processes. Relying heavily on researchers' social skills and creative ability for interpretation, their presence in and influence upon the research process has to be accounted for.

‘Trustworthiness’ is postulated as one of the criteria for judging the quality of research in this paradigm (Lincoln and Guba, 1985). Trustworthiness includes four components: credibility (internal validity), transferability (external validity), dependability (reliability) and conformability (objectivity). Guba and Lincoln (1989) contended that outcome and product are the methodological criteria for the evaluation of qualitative research. By taking an interpretive approach, the present study attempted to interpret whether interventions had any impact on and whether become more reflective as a result of the processes involved. It adopted a case study approach, laying emphasis on the discovery and exploration of the impact of interventions on participants.
3.3 Qualitative Research

Qualitative research in the behavioral sciences is used to study organizations, groups and individuals. Mason (1993) maintains that qualitative research is grounded in a philosophical position concerned with how the social world is interpreted, experienced or produced. It may often be called 'interpretive'. Qualitative research is based on methods of data generation which are flexible and sensitive to social contexts and on methods of analysis and explanation building which involve understandings of complexity, detail and context. It can produce rich, contextual and detailed data. 'Holistic' forms of analysis and explanation are emphasized. Strauss and Corbin (1990) argued that qualitative research can refer to persons' lives, stories, behaviour or interactional relationships.

Qualitative researchers are interested in understanding the meanings that people construct, that is, how they make sense of their world and the experiences they have of it. The key concern is to understand the phenomenon of interest from participants' rather than researchers' perspectives. This is referred to as the emic, or insiders' perspectives, versus the etic, or outsiders' view. There are many good reasons for conducting qualitative research. It can provide intricate detail of phenomena. There are basically three major elements in qualitative research (Strauss and Corbin, 1990). First, there are the data from various sources, with interviews and observations being the most common sources. The second element of qualitative research includes the different analytic or interpretation procedures used to generate findings and develop theories. The third element of qualitative research consists of written and verbal reports. During fieldwork, researchers may
physically go to settings or sites in order to observe behaviour in its 'natural' setting. Sample selection in qualitative research is usually nonrandom, purposeful and small scale. Qualitative research focuses on process, meaning and understanding and its product may be richly descriptive. Words and pictures rather than numbers are used to convey what researchers have learned about phenomena. Findings take the form of themes, categories, concept, more or less theorised, which have been inductively derived from data.

There are different types of approaches within a qualitative research paradigm, for example, grounded theory, ethnography, phenomenological, life history and conversational analysis. Accurate description, analysis and presentational skills are important for qualitative researchers because it is impossible to present all the data to readers and in a way that adequately represents the 'reality' of those involved in the study. Researchers have to develop great skills in description. Field notes, selective quotation and their own interpretation have to be built into a rich descriptive narrative. Ultimately, researchers are concerned with building theories that represent 'reality' while integrating scientific knowledge in this case relating to reflection and reflective teaching (Strauss and Corbin, 1990).

3.4 Grounded Theory

A grounded theory approach aims to develop theories or understandings of the social world observed. Theories are discovered, developed and verified through systematic data collection and analysis. It is an iterative process by the analyst but that becomes more and more 'grounded' in the data (Denzin and Lincoln, 2000).
According to sociologists Barney Glaser and Anselm Strauss (1967), who developed this approach in the early 1960's at the University of California in San Francisco, grounded theory is 'a general methodology for developing theory and is grounded in data systematically gathered and analyzed' (Strauss and Corbin, 1994, p.273). Grounded theory is perhaps the most precise of the qualitative, inductive methods for developing theory from data. As with other forms of qualitative research, researchers as the primary instruments of data collection and analysis assumes an inductive stance and strives to derive meaning from the data. Rich description is important but it is not the primary focus of this type of study. As Strauss and Corbin (1994) note the major difference between this methodology and other approaches to qualitative research is its emphasis upon theory development. In this study, it is used to generate theory from data. It is legitimately claimed that the research is guided by the work of Glaser and Strauss and is working towards the generation of a theory of reflective teaching from data.

3.5 Action Research

'Action research' was originated by Lewin (1946). His model for change was based on action and research. It involved researchers, with teachers or other practitioners, in a cyclical process of planning, action, observation and reflection before beginning the whole process all over again. Further development of this model was instigated by Stenhouse (1975) and elaborated by Elliott and Adelman (1973) in their work with the Ford Teaching Project, based at the Centre for Applied Research in Education at the University of East Anglia. It was this generation of researchers who coined the term 'teacher-as-researcher' to refer to
the participants in the movement they helped to create. This encouraged teachers to assume the role of researcher in their own classrooms as part of their professional, reflective stance. Carr and Kemmis (1986) argue that such work provides a means of ‘becoming critical’. They suggest that action-research involves: (i) improvement of practice, (ii) improvement of the understanding of the practice by the practitioners and (iii) and improvement of the situation in which practice takes place. McCutcheon and Jung (1990) defined action research ‘as systematic inquiry that is collective, collaborative, self-reflective, critical, and undertaken by the participants of the inquiry’. The fundamental aim of action research is to improve practice rather than to produce knowledge (Elliott, 1991, p. 49). ‘Action research is a form of research which can be undertaken by people in any context, regardless of their status or position’ (McNiff, 2002, p.15). It engages teachers in a four-step process, namely to (i) identify an area of focus, (ii) collect data, (iii) analyze and interpret data, and (iv) develop an action plan.

3.6 Research Design and Procedure

3.6.1 Participants

Nine beginning primary school teachers (four males and five females) with less than three years teaching experience were invited from various primary schools in Hong Kong to take part in this study. Each had graduated from the year of 1997 to 1999 from the Hong Kong Institute of Education and completed the Certificate in Education Programme. Seven of them had taken the two-year (primary) programme and one had taken the three-year (primary) programme. One of the
participants had completed the Certificate in Education (Secondary) Programme. Eight of them were working in various government-aided primary schools\(^2\). These schools were founded between four to forty years ago. One of the participants was teaching in a private primary school\(^3\). All of them took physical education as their elective subject during the education studies programme. They took a teaching practicum (teaching practice in school) in physical education teaching which lasted for eight weeks in their final year studies. It is acknowledged that the teaching practice was insufficient for them to gain anything like a detailed or sufficient understanding of the practice of teaching. Undoubtedly, most of beginning teachers needed more time to establish their teaching approaches and consolidate their professional development.

\(^2\) These schools are funded and monitored by the government. Pupils do not need to pay school fees.

\(^3\) The school is operated by private sector and does not receive any funding from the government. Pupils have to pay school fees.

3.6.2 Interventions

A series of reflective thinking interventions were conducted in the second and third phase of this study. These reflective thinking interventions took the form of interviews, workshops and checklists. I wanted to achieve three objectives through them: (1) to enable participants to become reflective, or more reflective physical education teachers; (2) to enhance their reflection; (3) to provide time and opportunity for the participants to reflect on their teaching.
Each interview was held after lesson observation and lasted for about forty-five minutes to one hour. The questions from the interviews were set by me and some of them derived from the literature (Van Manen, 1977; McKay, Gore and Kirk, 1990; Tsangaridou, 1993; Loughran, 1995; 1996; Wise, Spiegel & Bruning, 1999). Interview questions were designed to help participants to reflect on their teaching. A checklist was designed to help them to perform self-evaluation on different aspects (preparation, performance, the value of physical education and teachers) of physical education teaching. The theoretical background of reflective thinking was introduced to them in workshops. They were also encouraged to discuss their reflection in the workshops. Details of these reflective thinking interventions are described in Section 3.7 and 3.8. On the other hand, I was aware of the potential (halo effect) that any changes of the participants I observed might be occurring during the process because I was present but might disappear once the intervention was over. Later I will argue that it is possible to identify enduring changes in the thinking and action of at least some of these teachers (see Chapter five).

3.7 Data Collection Methods

3.7.1 Interview

Interview is a particularly good method of producing data in qualitative research. Interviewing does not require great technical skill or sophisticated tools. However, it does require considerable sensitivity to persons, interests and context. It is also necessary to note that in undertaking a research interview (Denscombe, 1999), the agreement of participants must be secured prior to conducting interviews. There
has to be informed consent and a general understanding that interviewees' words can be used by researchers. Interview issues are either set or guided by the researcher. Researchers assume the right to control the direction of discussion while affording opportunity for the interviewees to range over 'new terrain'. In general, there are three types of research interview: structured, semi-structured and unstructured.

Structured interviews involve tight control over the format of questions and answers. It is rather like a tightly framed questionnaire administered face to face to respondents. Respondents are faced with standardized wordings and meanings to which responding they react. They are often associated with social surveys where researchers try to collect large amounts of data from a wide range of respondents. Semi-structured interviews are characterized by a clear list of questions, but where interviewers are prepared to be flexible in terms of situations and responses. The issue of 'discovery' is the ultimate aim in unstructured interview since the interviewer lets interviewees develop their ideas and pursue their thoughts. It is useful where interviewers seek to explore interviewees' personal experiences and feelings (Denscombe, 1999).

In this study, semi-structured interviews were adopted to gather information about personal development in relation to physical education in schools. They were also used for all the reflective thinking interviews, reflective learning workshops and final in-depth interviews. Though a set of questions was provided, it was easy for participants to express their personal opinions and feelings. All interviews were one-to-one and therefore relatively easy to arrange manage and control. They were
conducted in participants' schools after lessons. Teachers felt relaxed and comfortable since the venue was convenient and familiar and under apparent stress.

I strove to remain sensitive to the feelings of participants and was able to tolerate silences during interviews. Prompts, probes and checks were important technical skills used throughout all interviews. I avoided expressing suggestions, comments and personal values and respected the rights of those who did not always wish to respond. Throughout the data collection process, all interviews were audio-taped and observed lessons video-recorded. Thus provided records of the information generated by the questions asked and what the technology could see and hear. It was from these that data were generated.

3.7.2 Lesson observation

Observation is a commonly used method of collecting data in qualitative research. It does not rely on what people say they do, or what they say they think. Two kinds of observation research are commonly used, systematic and participant (Denscombe, 1999). Systematic observation involves the study of interaction in settings, such as school classroom using schemas schedules that are chosen in advance to illuminate the issues at hand (Denscombe, 1999). They are commonly used as the basis of statistical analysis. Participant observation aims to understand and investigate the situation and processes of the participants in natural settings and real life situations. It relies on the first hand, not secondary sources. Our types of participant observation were identified (Spradley, 1980): passive; moderate;
active and complete participation. In this study, I adopted 'passive participation', being present but not interacting with teachers. The researcher’s ‘self’ was the main instrument of research, made prior to each reflective thinking interview. Video recordings were simultaneously used for observing teachers’ teaching. There were two major aims in making the recordings. Firstly, they were used as a tool to help teachers self-reflect after viewing their own teaching. Secondly, each recording provided a means for me to record and review participants’ teaching as a basis for analysis.

3.7.3 Documentary sources

Documentary sources are identified as written sources (letters, memos, diaries, journal) and visual sources (pictures) (Denscombe, 1999). Two types of documents were adopted for data collection methods in this study. They were in the forms of checklists and questions. At the beginning of the study, all the participants were required to complete a checklist for daily reflectivity in teaching before lesson, during lesson and after lesson. It was divided into two parts: (1) a ‘how often do you think of’ checklist; and (2) questions about intrinsic and extrinsic values in physical education, insight and improvement in teaching (see Appendix 3-1). Another checklist for teaching evaluation (see Appendix 3-8) was given to participants at each visit and lesson observation as a tool to help them to reflect upon their teaching. All these documents provided sources of information for analysis of data.
3.8 Data Gathering Process (four phases)

3.8.1 Phase I

In the study, there were four phases of data collection (from October 1999 to July 2000) (see Tables 3-1, 3-2, 3-4, 3-5). Nine beginning primary school teachers with less than 3 years teaching experience (4 males and 5 females) participated in the first phase (October and November 1999). A daily reflectivity checklist was dispatched to each participant (see Appendix 3-1) at the beginning of the study. It aimed to examine their daily reflectivity in teaching before, during and after lessons with respecting curriculum planning, curriculum content, suitability of pupils, performance in pedagogy, preparation, class management, pupils' ability and interests and the aims of lessons. Their views on the intrinsic and extrinsic value of physical education were also examined. Any insights and improvement in teaching were examined as well. There were two interviews to examine their personal and professional development, school background and views of physical education (see Appendix 3-2 and 3-3). Tsangaridou's (1993) study of four experienced elementary and secondary physical education teachers revealed that teachers' histories and continuous education were influential factors in stimulating the participants' reflection and values. Their working attitude towards and expectations of their careers were enhanced. Their current school background and knowledge in physical education were also described. All these were of importance to examine in my study prior to the interventions. This information provided the basis for selection of four teachers for the phases III and IV.
Table 3-1: Summary for Phase I of the data gathering process

<table>
<thead>
<tr>
<th>Aims/purposes</th>
<th>Activities / interventions</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall aims for this phase:</td>
<td>A daily reflectivity checklist</td>
<td>(I-DRC)</td>
</tr>
<tr>
<td>♦ Information background of all participants</td>
<td>One interview (personal and professional development)</td>
<td>(I-PPD)</td>
</tr>
<tr>
<td>♦ Criteria for selecting four teachers for the phase 3 and 4</td>
<td>One interview (school information)</td>
<td>(I-Sch)</td>
</tr>
</tbody>
</table>

3.8.2 Phase II

In this phase, two reflective thinking interviews (see Appendix 3-4, 3-5) and two reflective learning workshops (see Appendix 3-6, 3-7) were conducted with the nine participants during the period November 1999 to January 2000. Two physical education lessons taught by each participant were also observed during this period. These observations were made prior to each reflective thinking interview. The participants were encouraged to reflect on their understandings of their teaching in these interventions and workshops. Commentary video was used for observing teaching and audio-tape was used to record the lesson for use in the reflective thinking interview. Each interview and workshop lasted for about 45 minutes to one hour. A checklist for teaching evaluation (see Appendix 3-8) was given to the participants in each visit. The purpose of this checklist was to help teachers reflect on their teaching, especially in lesson preparation, pedagogy and class management. It was used as a tool to help them become more reflective on
their teaching. I also completed a checklist for teaching evaluation for my own personal record and reference (see Appendix 3-9). A reflective thinking workshop was also provided for participants. It was used to uncover their view on the purposes and educational role of physical education as well as to help their reflection. The ultimate aim of this phase was to encourage and understand their reflection.

#4 There was slight difference of the number of interventions for each participant because of different participant's availability (see Appendix 3-19).

Table 3-2: Summary for Phase II of the data gathering process

<table>
<thead>
<tr>
<th>Aims/purposes</th>
<th>Activities / interventions</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHASE II (Nov 1999 – Jan 2000) 9 participants</td>
<td></td>
</tr>
<tr>
<td>Aims for interview:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Encouraged to reflect on their understandings of their teaching</td>
<td>One reflective thinking interview</td>
<td>II-RTI-1</td>
</tr>
<tr>
<td></td>
<td>One reflective thinking interview</td>
<td>II-RTI-2</td>
</tr>
<tr>
<td></td>
<td>Two physical education lessons to be observed</td>
<td></td>
</tr>
<tr>
<td>Aims for checklists:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Help the teacher reflect on their teachings</td>
<td>Teaching evaluation checklists</td>
<td>II-TEC(P)-1</td>
</tr>
<tr>
<td></td>
<td>A reflective learning workshop</td>
<td>II-RLW-1</td>
</tr>
<tr>
<td></td>
<td>A reflective learning workshop</td>
<td>II-RLW-2</td>
</tr>
<tr>
<td>Overall aims in this phase: to encourage and understand teachers’ reflection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.8.3 Phase III

Criteria for selecting the four teachers

After all the interventions were carried out with the nine participants in the second phase, four teachers (2 male and 2 female) from the nine participants were selected for the third phase (Chung, Yum, Shan and Ku) mainly with reference to their background (see Table 3-3). The schools these teachers served in were located in different parts of Hong Kong and their pupils, depending on location, came from low, middle and upper class 'regions' in Hong Kong. These schools varied from newly founded (less than 5 years) to well established (founded for more than 40 years). They also offered different levels of support for physical education and sport activities. The background of the teachers was another important factor. They were chosen because each had displayed different levels of reflectivity, ranging from always reflecting to seldom reflecting in their daily teaching. Also, they had themselves taken part in different levels of sport activities during their school years. Most of the student teachers for primary school at the Institute took the two years Certificate of Education (primary) course and few took the three years Certificate of Education (primary) course. The teachers chosen also reflected this mix. Three of the four teachers took the 2-year programme and one took the three-year primary education course.

The main objective was to choose teachers having school and personal backgrounds that would represent 'typical' beginning primary teachers in Hong Kong. Finally, the availability of the teachers was always taken into consideration.
The teachers were also chosen in a way such that this research could be conducted smoothly without unexpected interruptions and delays. Even though they were chosen to be 'typical', we should be very careful in making generalization about or from these teachers' criticisms and thoughts. The concept of generalization used in this study is close to that of 'naturalistic generalization'. I hoped to provide 'thick descriptions' of the intervention strategies, in the hope that others (readers) could recognize their actions in the processes described.
Table 3-3: Different background of the selected four teachers

<table>
<thead>
<tr>
<th>Selected teacher's name</th>
<th>Chung</th>
<th>Yum</th>
<th>Shan</th>
<th>Ku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Years of teaching experience</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Course undertook in the HKIEEd</td>
<td>2-years certificate in education (primary) course</td>
<td>2-years certificate in education (primary) course</td>
<td>2-years certificate in education (primary) course</td>
<td>3-years certificate in education (primary) course</td>
</tr>
<tr>
<td>Teachers' background and knowledge in physical education and sports activity during school years (primary, secondary and Institute studies)</td>
<td>Active participation in sports activity</td>
<td>Very active participation in sports activity</td>
<td>Seldom participation in sports activity</td>
<td>Keen on and very active participation in sports activity</td>
</tr>
<tr>
<td>Teachers' daily reflectivity before participating in this project</td>
<td>Always reflects</td>
<td>Always reflects</td>
<td>Sometimes reflects</td>
<td></td>
</tr>
<tr>
<td>Teachers' attitude towards participating in this study and availability</td>
<td>Willing to participate and available</td>
<td>Willing to participate and available</td>
<td>Willing to participate and available</td>
<td>Willing to participate and available</td>
</tr>
<tr>
<td>School Location</td>
<td>An upper class area in Hong Kong Island</td>
<td>A newly developed town in the New Territories</td>
<td>A private buildings area in Hong Kong Island</td>
<td>An old village in the New Territories</td>
</tr>
<tr>
<td>School Location</td>
<td>In high and middle class area</td>
<td>In lower class area</td>
<td>In middle-class area</td>
<td>In lower class area</td>
</tr>
<tr>
<td>School history</td>
<td>25 years</td>
<td>Founded less than 5 years</td>
<td>15 years</td>
<td>Over 50 years</td>
</tr>
<tr>
<td>Type of school</td>
<td>Private</td>
<td>Government-aided</td>
<td>Government-aided</td>
<td>Government-aided</td>
</tr>
<tr>
<td>Pupils background</td>
<td>From middle and upper middle class family</td>
<td>From lower-class family</td>
<td>From middle-class family</td>
<td>From lower-class family</td>
</tr>
<tr>
<td>School support towards PE &amp; sports activity</td>
<td>Supportive</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Very supportive</td>
</tr>
</tbody>
</table>

N.B. Ku did not return the Daily Reflectivity Checklist.

#2 These schools are funded and monitored by the government. Pupils do not need to pay school fees.

#3 The school is operated by private sector and does not receive any funding from the government. Pupils have to pay school fees.

#7 Participants' responses on Daily Reflectivity Checklists are in Appendix 4-5, 4-6 & 4-7 (apart from Ku)
In this third phase, there were in total four reflective thinking interviews (see Appendix 3-10, 3-11, 3-12, 3-13) and three reflective learning workshops (see Appendix 3-14, 3-15, 3-16) for each participant (from the period of February 2000 to June 2000)\(^5\). The interview and workshop lasted for about 45 minutes to one hour. Similar to Phase II, a physical education lesson taught by the participants was observed prior to each reflective thinking interview. The interviews focused on their reflection in teaching. The purposes of these reflective thinking interviews were: (i) to see whether any changes had occurred in their teaching behaviour and action, (ii) to explore whether they felt they had changed as result of the interventions and in what directions and (iii) to identify the changes that had occurred in teaching, curriculum organization or pupils learning. Commentary video was used for observing teaching and audio-tape was used to record the reflective thinking interview. Three additional learning workshops were provided to enhance their reflective ability and knowledge; to see whether they were becoming more reflective; and to assess their views on the process they had been through with me. Checklists for teaching evaluation were also provided after each visit for each teacher. I simultaneously completed a checklist for teaching evaluation for recording the participant’s progress and development in teaching.

\(^5\) There was slight difference of the number of interventions for each participant because of different participant’s availability (see Appendix 3-19).
Table 3-4: Summary for Phase III of the data gathering process

<table>
<thead>
<tr>
<th>Aims/purposes</th>
<th>Activities / interventions PHASE III</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Feb 2000 – June 2000) 4 participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A reflective thinking interview</td>
<td>III-RTI-1</td>
</tr>
<tr>
<td></td>
<td>A reflective thinking interview</td>
<td>III-RTI-2</td>
</tr>
<tr>
<td></td>
<td>A reflective thinking interview</td>
<td>III-RTI-3</td>
</tr>
<tr>
<td></td>
<td>A reflective thinking interview</td>
<td>III-RTI-4</td>
</tr>
<tr>
<td></td>
<td>4 physical education lessons to be observed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 teaching evaluation checklists conducted by the participant</td>
<td>III-TEC(P)-1; III-TEC(P)-2; III-TEC(P)-3; III-TEC(P)-4</td>
</tr>
<tr>
<td>Aims for the workshops:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ To enhance teachers' reflective ability and knowledge</td>
<td>A reflective learning workshop</td>
<td>III-RLW-1</td>
</tr>
<tr>
<td>◆ To see whether the teachers were becoming more reflective</td>
<td>A reflective learning workshop</td>
<td>III-RLW-2</td>
</tr>
<tr>
<td>◆ To assess their views on the process they had been though with the researchers</td>
<td>A reflective learning workshop</td>
<td>III-RLW-3</td>
</tr>
<tr>
<td>Overall aims in this phase:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ Focused on their reflection in teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ To see whether any changes had occurred in their teaching behaviour and action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ To explore whether the teachers themselves felt they had changed as a result of the interventions and in what directions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ To identify the changes that had occurred in teaching, curriculum content, pupils learning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.8.4 Phase IV

A final in-depth interview (see Appendix 3-17) was conducted with each participant during the period of June and July 2000. The interviews lasted for between 60 and 90 minutes. Some key points could be explored during this final phase. Firstly, to explore whether there were any changes in their teaching after participating in the research project. Secondly, to examine whether the self-evaluation form had affected their physical education teaching. Thirdly, to find out whether there was a halo effect during my presence in lesson. Fourthly, whether they were becoming not just more reflective but different types of reflective teachers, were examined.

Table 3-5: Summary for Phase IV of the data gathering process

<table>
<thead>
<tr>
<th>Aims/purposes</th>
<th>Activities / interventions</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHASE IV (June 2000 – July 2000) 4 participants</td>
<td>A final in-depth interview</td>
<td>(IV-FIDI)</td>
</tr>
</tbody>
</table>

Overall aims in this phase:

- To explore whether there were any changes in their teaching after participating in the study
- To examine whether the self-evaluation form had affected their physical education teaching
- To find out whether there was a halo effect during my presence in lessons
- Whether they were becoming not just more reflective but different types of reflective teachers, were examined
The interviews and activities attended by the four participants were tabulated in Appendix 3-18. The summary of the interventions with participants were listed in Appendix 3-19.

3.9 Analysis of Data

Qualitative data, either words or images, are the product of a process of interpretation. It is generally agreed that researchers play a significant role in the production and interpretation of qualitative data. Their values and beliefs can intervene in the interpretive process, in an interpretive paradigm. In this study, there were several important steps and procedures for analyzing data. Firstly, all the raw data (words, fieldnotes, documents and transcripts) were translated and transcribed into English by myself. The data was then stored and coded (with reference to the emerging themes, see page 86). Secondly, I went through transcripts, texts, field notes and made comments and insights in the margins alongside the data. I also kept memos and made comments to myself at all stages of research (Denscombe, 1999). These acted as a reminder about new and developing lines of thinking.

Coding is an important step in organizing and managing the data. Merriam (1998) pointed out that coding occurs at two levels: (i) identify information about the data; (ii) interpret constructs related to analysis. Data analysis is a complex process that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and
interpretations (Merrian, 1998 p. 178). Findings can merge in the form of themes, categories and patterns. In this study, the data around the key themes and major categories that emerged will be reported in chapter four where teachers’ thinking prior to and after the intervention on reflection, teaching, learning and pupils will be analyzed. Both individual case analysis and cross case analysis were adopted in this study.

3.10 Issues of Validity and Credibility

Curtner-Smith (2002) indicated that interpretive sport pedagogy research might use more than one data collection techniques. A combination of observation, formal and informal interviews and document analysis are often employed in one study. He argues that using multiple data collection techniques enables researchers to be more confident that their interpretations of the data are accurate and trustworthy. In this study, a combination of observation, interview and document analysis were adopted and ‘triangulated’ in an attempt to achieve more accurate and trustworthy data.

3.11 Ethical Considerations

A number of ethical considerations were made in the study including informal consent from participants; informed consent from principals; privacy; anonymity and confidentiality. I obtained the consent and cooperation of participants prior to the beginning of the study (Cohen and Manion, 1994). The nine beginning primary school teachers were invited to take part in this study and a letter was sent to their
school Principal for prior approval (see Appendix 3-20). Following the guidelines of the British Psychological Society, the participants were requested to sign a consent form and be given sufficient information about the study prior to data collection (see Appendix 3-21). They were informed that they had the right to withdraw from the study and opportunity to ask questions about the issues and procedures of the study.

Before phase I of the study the purpose of the questionnaire of the daily reflectivity was explained. Its purposes in terms of personal and professional development, school background and knowledge in physical education were described and explained to the participants. I explained the process of the study, the number of lessons to be observed, the approximate timing of each interview, etc. In arranging lesson audio-tape, observation and interviews, I first made telephone contact with the participant. The date and time of the visits and interviews were agreed between both parties. The consent of the school Principal was also obtained every visit.

In order to ensure anonymity and privacy, each participant was represented by a pseudonym. The participants were assured that the data would be used only for the purpose of this study. Neither the name of the schools nor the participants were to be indicated in the thesis. Interview tapes were translated and transcribed only by myself. Lesson observation, video-recording, recording from interview, workshop, checklists for teaching evaluations were also handled only by me. Throughout the study, I was aware of both the potential halo effect and feelings of stress.
experienced by the beginning teachers. I sought to monitor the stress inflicted on participants.

3.12 Limitations and Problems

The strengths and weaknesses of the interventions, and the methodology used to evaluate them, will be discussed in chapter six. I was aware that the research was attempting to document and describe a complex social process with 'outcomes' that are not easily amenable to measurement or evaluation. It is difficult to register 'change' in teaching behaviours, even more so in teacher attitudes, and no methodology, no matter how sophisticated, can claim to have discovered certainties in this field.
CHAPTER FOUR

FINDINGS

4.1 Introduction

In this study it was found that three out of the four participants (Chung, Yum and Shan) had made considerable improvements in their 'reflective thinking' accompanied by changes in their teaching behaviour and interaction with pupils after participating in the interventions. It was surprising to find that the other participant, Ku, had achieved very little or no improvement in his thinking and no change in teaching behaviour. All four participants were young, beginning, physical education teachers graduated from the Hong Kong Institute of Education. It would be natural to expect them to advance in a similar direction after taking part in the programme of interventions though their pace in change might be different. Later we will review Ku's case and interrogate why he behaved so differently.

Chung became more reflective after participating in this study. His reflective thinking functioned at a technical and practical level. However he could sometimes reflect critically. Chung had made remarkable changes in his teaching behaviour and especially in his interactions with children. He became more child-centered. He reflected more on his pupils' abilities and interests, and was more aware of pupils' feedback. He reflected on his teaching and made plans to implement changes for future improvement. He also made changes in his teaching
behaviour in the other subjects he taught. Chung was a serious physical education teacher. He had decided to become a physical education teacher when he was a pupil studying in form four in his secondary school. He also planned to embark on further studies in education. His religious faith and positive support from his colleagues also helped and drove him towards improvement. It seemed natural for Chung to take up reflective thinking as a tool for self-improvement. One expected to see changes in his teaching behaviour as the result of reflective thinking, and this was evident in the course of this study.

Yum, like Chung had become more reflective after participating in this study. Yum's reflective thinking functioned at a technical and practical level. In other words Yum was also a 'low level' reflective teacher. Although this study focused on physical education teaching, her reflective thinking development was not confined to physical education alone, it extended to all other subjects she taught. As the study proceeded she was able to modify her teaching methods in order to raise her pupil's motivation as well as making the curriculum content more flexible to suit her pupils' needs. She noticed her own mistakes and planned for future improvement. She also became more child-centered and her attitudes towards her pupils became more friendly, lenient and kind. Yum was an eager learner and had a desire for self-improvement. She had encouraging support from her colleagues. Her past experiences in physical education lessons were very positive. She also wanted her pupils to learn from physical education lessons. Following the reflective thinking intervention, like Chung, it was natural to expect Yum to adopt reflective thinking as a tool for improvement. These ingredients worked together to propel Yum forward on the road to improvement. It was no surprise to find Yum
developing her reflective thinking and making changes in teaching behaviour and in interaction with pupils.

Shan also displayed improvement in reflective thinking, though not as consistently as Chung and Yum, after taking part in the reflective thinking intervention. Shan only reflected at technical and practical levels and even then inconsistently. Shan was another 'low level' reflective teacher but, unlike Yum and Chung, was never seen to reflect critically on her teaching. The changes that occurred in Shan’s teaching behaviour as the result of reflective thinking did not keep pace with her progress towards reflective thinking. She had changed in her reactions towards pupils’ behavior and was more concerned about pupils’ class participation. She became more friendly and sensitive as well as gaining confidence in teaching. Various kinds of physical education activities were introduced in the school physical education curriculum. Further investigation showed that Shan was a serious learner who wanted to change and improve but was prohibited and constrained by her own professional shortcomings and the negative attitudes of her colleagues and the school Principal. These also affected her development in reflective thinking and the direction of change in her teaching behavior. Shan wanted to change and improve but, without support, her improvement could only inch forward slowly and painfully. Shan’s position vividly illustrated the complex interplay between the individual and context, which sometimes is under-played in the literature on reflective thinking.

Ku displayed little or no improvement in his thinking or teaching behaviour. Ku belonged to a category completely different from Chung, Yum and Shan. Ku
Findings

seemed uncommitted as a physical education teacher. He operated more as a coach. Ku's Principal and colleagues seemed supportive of him as a coach but not as a physical educationalist. Instead of helping Ku to becoming a professional physical education teacher, they channeled him further away from educational goals. Therefore, that Ku underwent little or no change in respect of reflective thinking and teaching was not unexpected.

The relationships between development in reflective thinking and changes in teaching behavior of participants are shown in Diagram 4-1. In this study Yum and Chung displayed development in reflective thinking. They also displayed corresponding changes in their teaching behaviors (Quadrant I of Diagram 4-1). Ku's case is located at the other end of the spectrum (Quadrant IV of Diagram 4-1). He neither displayed reflective thinking in his physical education teaching nor any changes in his teaching behavior. Shan's case was more interesting, her behaviour is located in two quadrants (Quadrant I and II in the Diagram 4-1). She displayed development in reflective thinking. However, it is important to note that not all of her reflective thinking was accompanied by a corresponding change in teaching behaviour. Why did Shan exhibit reflective thinking on some issues but no corresponding change in teaching behaviour? What stopped her from making behavioural changes in her teaching. Later I will probe more deeply into Shan's case to examine why Shan could not bring her teaching behaviour in line with her reflective thinking.
Diagram 4-1: Relationships between participants’ development in thought and action after intervention

thought (+)

(II)                       (I)

Yum                       Chung

Shan

action (-)

Ku (Little/No change)

(IV)                       (III)

thought (-)

N.B. Shan was located in these area at the top right and left quadrant.

Although interventions had brought about changes in Chung, Yum and Shan’s thinking and action, it is also worthwhile to note that these changes remained mostly at the technical level (see Table 4-1), although on some occasions they also displayed reflective thinking at the practical level, these low level changes focused essentially on teaching effectiveness in physical education. There was rarely evidence of high level reflection. Only Chung ever managed to engage in reflective thinking at the critical (a ‘high’) level. However, those occasions were few. In summary Yum, Chung and Shan were, routinely, low level reflective practitioners.
Table 4-1: Level of participants' reflection after interventions

<table>
<thead>
<tr>
<th>Name of the participants</th>
<th>Technical Level</th>
<th>Practical Level</th>
<th>Critical Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chung</td>
<td>Chung</td>
<td>Chung</td>
<td>Chung</td>
</tr>
<tr>
<td>Yum</td>
<td>Yum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shan</td>
<td>Shan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List of schedule for each participant's interventions and activities were attached in Appendix 4-1, 4-2, 4-3 and 4-4. Their responses on daily reflectivity checklists before joining the study were also attached in Appendix 4-5, 4-6 and 4-7.  

#6 Ku did not return the Checklist.
4.2 Individual Case: Chung

4.2.1 Introduction

Chung had made significant changes in his thinking during this study and had become more reflective. Before this study Chung would and could only occasionally reflect and his reflections were disorganized. It was found that his reflective thinking changed gradually as he participated in the study. The scope of his reflection broadened and he reflected in more detail on his colleagues and relationships with and between pupils. For example, he now reflected more on how to get children to get along with others. Through reflection he had discovered some of his shortcomings and he planned to change and correct these in his teaching over the next year.

Chung had gained a positive experience from his studies in primary and secondary schools. His previous teachers had greatly influenced him, as had his religious faith. All had left him with a positive teaching attitude. He desired self-improvement and wanted to become a good teacher. He possessed many characteristics of a reflective practitioner. For example, he thought routinely about his teaching and sought self-improvement. He always reviewed his action in teaching. He had the abilities and desire to reflect. He was open-minded, responsible and committed.

He recognized that as a result of the interventions he had become less teacher-centered and more child-centered. He was now more concerned with pupil's
Findings

responses and needs. He had also become more aware of the defects in school's space on the campus. The pupils were eager to participate in various sports activities. The school Principal and his colleagues supported him in his actions. Though this was his second year of teaching in this school after graduation, all of these factors had helped him to change and improve himself after the interventions.

4.2.2 Personal Characteristics

Chung had, as a pupil, encountered some teachers who were particularly good, especially in his studies at secondary school. Their teaching made him feel relaxed and he enjoyed learning. The characteristics of their teaching were noteworthy.

Although the teachers always wore a long face in front of the pupils during lesson, they were very fair and did something good to us. After class, we could chat together. They never hid themselves in the staff room but were very open to the pupils. The teacher who preached the gospel to me had a great influence on me. I appreciated those teachers who prepared and were willing to chat with pupils very much. They were also the teachers who inspired me on something. Their teaching? I can't remember their teaching....Yes, their teaching made us feel very relaxed. They liked to teach us by saying jokes. For example, there was a teacher teaching Chinese language, the content of which was about classical Chinese and should have been very boring. However, the way he taught us was very relaxing and never made us scared of the subject (I-PPD).

Chung liked sports activities and played various sports in schools. He was aware that teachers could offer help to pupils. One particular teacher had great influence
on him and he viewed being a teacher as a stable and secure job. He admired harmonious relationships between teachers and their pupils. He really wanted to become a teacher and teach physical education. In the following interview extract he revealed the reasons why he decided to become a teacher.

*At the time when I studied form four, I decided to be a teacher in the future. It's because I was aware that teachers could offer help to pupils. The teacher who preached the gospel to me had great influence on me. Another reason is that being a teacher is very secure. I also admired the harmonious relationship between teachers and pupils. I may never come across those pupils who treat teachers badly. Therefore, I think that it is good being a teacher (I-PPD).*

He also indicated that the two-year certificate education course in the Institute of Education was not sufficiently comprehensive in its coverage of physical education. He felt that the theories he learnt did not have sufficient practical application. These theories could not cope with real situations in teaching. But he emphasized that the teaching practice and practical (skill-oriented) area of the curriculum in physical education at the Institute had offered some help to his teaching. He stated:

*The teaching practice really had certain effects on my teaching. During the teaching practice I needed to write teaching plans, which reminded me to think of the ability of the children... When I arrange an activity for the children now, I know how to make a better arrangement for the teaching...*
For a variety of reasons, particularly his religious faith, he worked hard to meet the requirements of the teaching job. His working attitude and job expectations were reported in the following interview extract.

*I think that I shall try my best to do the job. It may be due to my faith or some other reasons that I prefer to try my best to do the job...I try my best to teach the children as much knowledge as I can during the physical education lessons...I became a physical education panel member last year, I was responsible for the school-based curriculum...I hope that I can make improvement bit by bit each year. I know there are shortcomings in the curriculum offered by our school.*

He firmly believed that he would remain a teacher in the coming five or ten years and apply for a place for further study in a local university.

4.2.3 School Context

This was Chung's second year of teaching. He worked in a private primary school (for pupils, age 6–12) in the Hong Kong Island. The school was established nearly fifty-five years ago. It was the fifth year after the re-construction of the school building. It was a whole-session school (i.e. from 9 am to 4 pm). Most of the children came from middle class and quite rich families. The pupils' academic standards were above average for the sector. There were only two games (basketball and table-tennis) in the extra-curricular activities for the children because of limited space on the campus. The pupils were quite eager to participate in various sports activities outside the school. The current physical education
subject syllabus was designed and based on the teachers’ expertise and the school’s needs.

Chung stated.

_We have the school-based curriculum for the physical education subject which is set up in accordance with the Syllabuses for Primary Schools proposed by the Education Department. For those sports activities which three of us are not familiar with, like dancing, we can cancel this content. We can change the dancing to rhythmic gymnastics and treat it as a kind of warm up exercises. Our present physical education subject syllabus is designed according to what teachers are good at and the school’s needs. All the teaching schedule must be submitted to the panel, i.e. I checked it first and asked the teacher to modify it whenever there were some questions arising (I-Sch)._

He commented that the school, as well as the Principal, paid much attention to and supported physical education and sports activities. The three physical education teachers gave him full support in physical education lessons.

_The school supports the physical education activities very much. Take the school team as an example, before a competition... the Principal will also be present in the briefing. She prays for them and chats with them. Although the pupils may not win the competition, the Principal pays attention to the activity and respects the pupils very much. For the pupils, they will feel honorable for joining the school team (I-Sch)._
Chung had positive attitudes towards physical education teaching. He provided further information as follows:

*Regarding the physical education activities during the lesson, I am scared that some teachers do not allow the pupils to attend physical education lessons. It's good that the physical education teachers still take the physical education lesson even though it rains. No matter what kind of activity we arrange for the pupils, we won't want the pupils to do homework or class work during the physical education lesson. We don't want the pupils to have the concept of doing homework or class work in the physical education lesson during rainy days (I-Sch).*

The school provided sufficient resources and teaching materials for the teachers in assisting their physical education teaching.

*There are many talks and seminars organized by the Education Department or the Institute of Education. The school often encourages and supports teachers to attend these talks. It was willing to employ supply teachers to relieve those teachers who attended the talk for one day. We have funding for the purchase of teaching tools each year. If the amount is not too big, the school must approve the purchase (I-Sch).*

The physical education teachers in the department were very enthusiastic though they weren't very experienced in physical education teaching. He emphasized that all the teachers in this school were very helpful and cooperative.

*Among three of us, only one teacher has physical education teaching experience. I have only taught for two years and*
can't be regarded as having any good experience and another teacher has just started his teaching in this school year. Although we aren't well experienced in teaching, we have enthusiasm...I understand that we all three are willing to work together. Teachers in this school are very helpful and cooperative (I-Sch).

He commented that there were some defects in the outdoor and indoor playgrounds that directly hindered the physical education activities.

_The shortcoming of the basketball court is it's backboard, which is a small one and was originally placed in the backyard (I-Sch)._ 

He further emphasized.

_We also have an indoor playground but there are too many pillars. There won't be much space for me to use. Then the pupils can't participate in the activities too much (I-Sch)._ 

However, he intended to teach in this school for some time to come and planned to further study.

_I plan to teach in this school for a few years into the future. We teachers plan to further study. Take me as an example, I want to have further study because we teachers are always eager to learn (I-Sch)._
4.2.4 Changes in Action, Behavior and Thinking in Teaching

Judging by the daily reflectivity checklist, Chung reflected quite often in his physical education lessons. He pointed out that there were some changes in his thinking and teaching behavior as a result of participating in this study. Three themes were highlighted on: reflective thinking; teaching behavior; and interaction with children. Each theme will be elaborated in the following sections.

4.2.4.1 On reflective thinking

At the outset of this study Chung could not think of any method to apply in his daily teaching to improve it.

......I am now thinking Is there any...how to improve. Any method can improve my physical education teaching?.... I can't think of any now (II-RLW-I, P.7).

He stated that the interventions affected his personal growth in the teaching profession and he thought more about potential solutions for improvement. He stated.

I think more. Absolutely, I reflect...more....You reflect more so you think of solutions solely. Only if you don't want to solve problems. However, once you think that there are some problems, you should expect to improve this problem (IV-FIDI).

After the intervention, he viewed that reflection was important to his improvement.
He stated.

*To improve my...What? To think what I need to improve. If I do not reflect How? May be...I do not have any power to make me improve.*

Most of his reflection involved the first two forms of reflectivity (technical reflection and practical reflection). There was some evidence, however, that he also engaged in critical reflection.

**Technical Reflection**

Chung mentioned that he had routinely engaged in reflection prior to the intervention but the reflection was not well organized and it was not analyzed in great detail. He stated.

*Even before participating in your project, I was reflective...I did not analyze in great detail as you did but....(IV-FIDI).*

His reflections were at a surface level during the first visit. His thoughts in the physical education lesson were as follows:

*For each lesson, I used to ask the children to do five minutes warm up exercise no matter if I have enough time or not (II-RTI-I, P.1).*

The interventions had made him reflect in more detail on his teaching and
solutions to perceived problems.

I reflected more. I think that I thought more. Exactly. Moreover, I thought of what solutions I could have. In fact, all along I have reflection but I do so more. Besides, when you talked with me, I thought in a more detailed way (IV-FIDI).

Chung also reflected during his teaching. Two examples are as follows:

When I experienced the kind of equipment which was not suitable for teaching, I had to find other resources to replace the previous ones during the lesson.... (II-RTI-1, P. 7).

Another example:

Teaching method? I think that the participation of the pupils was not that good. Take this lesson as an example; when six pupils did the practice, the rest of them just waited and collected the balls for their classmates. I understand this is a shortcoming and needs to be improved (II-RTI-1, P. 7).

Chung reflected mostly after watching the video of his lesson; for example, he considered that he should find a better way to teach the lay-up shot. He stated.

When I taught them the steps, I think that I should have asked them to speak out the steps at the same time, i.e. right-left-shoot. They should speak out themselves (III-RLW-2, P.10).

Another example:
Findings

The children can line up in front of the wall. They can throw the ball at a certain height. I am still figuring out the details (III-RLW-2, P.4).

Chung had also reflected on the practice of carrying out ‘tools’ (equipment) in lessons and strove towards improvement. He commented.

What I am scared of most in my teaching is the use of tools...It's because it involves the use of equipment and also the setting up of it with the help of the children...(III-RTI-2, P.1).

The following comment revealed that he now also thought about ‘follow-up actions’ after the lesson.

Having finished the teaching of a lesson, I think about what I should do in the following lesson (II-RTI-2, P.8).

He reflected on his teaching and recognized he had a problem in presentational skill.

I think that they haven’t mastered the skill of pressing or hitting the ball. Whenever I teach about patting a ball, what I am afraid of most is the explanation of pressing or hitting a ball.... My presentation skill of the explanation about pressing or hitting was not that good (II-RTI-2, P.7).

Practical Reflection

His reflection was not only confined to a technical level, he also reflected on a
practical level.

Chung was convinced that he needed reflective thinking. He continued.

*I thought why the children were like that in that lesson and why they could not learn. I would think of how to teach the same item in the next school year. I would engage in reflection (IV-FIDI).*

In the second visit and during the reflective thinking interview, he analyzed his lesson as follows.

*The pupils’ participation as a whole was quite good because they were all willing to pat the ball. Furthermore, they fully understood about the size of a basketball. They could also sense the strength while patting the ball and the speed of the ball. That’s all I think of right now (II-RTI-2, P.1).*

In his analysis of why he paid attention to skill practice in this lesson, the following example was offered.

*I paid attention to the skill practice in this lesson and didn’t have the group practice. I wanted the children to be familiar with the lay-off shot skills first and asked them to do something else in the group practice.... In the very beginning, I didn’t play the group practice for the learning of lay-off shots and wanted to concentrate on the skill practice. The children didn’t fully enjoy the lesson because there was no group practice (III-RTI-1, P.8).*

He also analyzed why he had acted in that way. From the lesson observation, the children were quite noisy after they finished the sit-up testing. It was difficult for
Findings

Chung to hear the scores. He reflected deeper on this issue. The situation was as follows:

*Usually, partner A receives the score sheet of partner B. I did not give them the sheet in this lesson because I knew it would be trouble and that I needed some time to collect the sheets. So, I only need them to report the mark this time. In general, I give them the sheet and therefore the trouble can be avoided. So, there was some trouble this time. I will use the sheet again because I usually separate them in group A and group B. The children in group A run a track and the children in group B do sit ups in the first lesson so that they can join the activities and report the mark in the same lesson. And they will change the positions in the next lesson. Since it seemed that it would rain, I grouped the assessment about running a track in one lesson only. There was no rotation of the positions and so I did not use the sheet (III-RTI-4, P.6).*

He had evaluated the class organization and was eager for improvement. The quotation reflects his dilemma regarding this issue.

*I think that I had better explain to them about my requirements in the classroom first...My instructions were not very clear and the children felt confused. I think that I may try to explain the arrangement of equipment by using the white board before the children go to the playground next lesson... I don't think that my organization in this lesson was good (III-RTI-2, P.2, P.4).*

**Critical Reflection**

*May be what I teach does not fit their needs today. Therefore, I need to reflect continuously in order to figure out what fits their*
Chung stressed the 'moral' aspects of lessons. In his own words:

During my teaching, I often stressed that when the children picked up the ball and passed it to their classmates, they should use both hands to pass the ball and shouldn't throw the ball at them. It's because I wanted them to take care of their classmates' safety (III-RTI-1, P.5).

Another example:

I told the children not to jump unless their classmates had left the other end of the starting point. That means the children learn to be considerate to other people (III-RTI-2, P.10).

He had clearly become concerned about pupils' needs. Another example:

I think that I started to perceive what the children need. I sought improvement in this aspect. In the past, I only thought of what I would teach in this lesson. Then I strove for teaching all I had planned. I might not think whether the children liked this item (IV-FIDI).

4.2.4.2 On teaching

At the start of the interventions he did not reflect either in-depth or in detail on his teaching performance.

I also taught the primary three classes last year. My way of
teaching was more or less the same. The only difference is that the number of balls that we had last year was more (II-RTI-I).

After participating in this study, Chung pointed out that something had changed in his teaching. He was more aware of the children’s perspectives, he placed greater stress on children’s enjoyment, on class organization, and on the teaching tactics for other subjects and lessons.

I have thought of the class organization....I noticed more the children’s feedback. Previously, I might not notice this. I think that I can see whether the children enjoy the lesson from their performance... I mostly lay stress on whether they enjoy their lesson. It has been changed a bit... (IV-FIDI).

From the lesson observation, Chung routinely gave feedback to the pupils. He clearly gave explanations for his actions. He gave feedback and positive reinforcement to the children (e.g. ‘Oh, yes, yes, you’ve answered well’). Overall, the class ran smoothly. He considered the children’s interests, such as, designing more games to make them want to participate. He stated.

The P.4 classes love playing ball games but this P.4 class loves the games for lower classes. I am angry with this! I think of ...I have designed the school curriculum. However, I reflect that we cannot stick to the curricular. We cannot teach the same things to the P.4 class yearly. We may change something...The children of this class are more childish mentally. I may teach more games to let them run around (IV-FIDI).

He had also changed his tactics in teaching other subjects. He indicated.
During the last whole year, I was so conservative...I was so conservative that I dared not to do more...Initially, I did worry...I have reflected on my teaching...How? I have changed the tactics. I think that next year, I will try because I will teach that class in the subject ‘Chinese’, next year (IV-FIDI).

During the second reflective thinking interview he had begun to reflect on his teaching.

Most of the children could pat the ball properly, understand the basic skills for patting a ball and know how to protect the ball. Therefore, I think that the children learned something in this lesson (II-RTI-2, P.7).

He then considered how to modify his teaching methods and future strategies.

When I teach them to pat a ball, I prefer asking them to pat a ball on the spot first. It's because they haven't mastered the skill when patting a ball on the spot (II-RTI-2, P.7).

4.2.4.3 On interaction with children

Chung had become more aware of the children’s reactions and performance in the classroom.

I think it is the children’s reaction. I think the children’s reaction is very essential. I have mentioned that I lay stress on whether the children enjoy the lesson or not... When I notice their performance, which shows that they do not enjoy it, I know that I
should figure out what I should do to make them... You should change your tactics to make them like to do it. May be you use some games...Therefore, the children begin to enjoy it more (IV-FIDI).

He now had a heightened perception of the children's learning needs. The following quotation reflected his dilemma regarding this issue.

In Chinese subject, there is a chapter about a poem. There is a bear who has a decayed tooth from eating honey jam. In fact, the children do not know what the honey jam is. Therefore, I buy a tin of honey jam. I discuss with them. Then I buy biscuits too. I spread honey jam on a few biscuits. All of us have one piece to eat (IV-FIDI, p.18).

He now introduced new activities and games to attract the children to participate. He stated.

I teach the children of a P.4 class, who are very childish, they love to play games more. When I teach ball games I should design more games to make them want to play then (IV-FIDI).

He also had concerns for the children's behavior and class order. In the lesson observed, he allowed children to be very noisy (by my standards), but there was no discipline problem in that lesson. He felt that he could allow the children to be noisy in a physical education lessons, for as long as it did not endanger them. He explained.

I think that by its very nature that the children are noisy in a physical education lesson but they cannot be excessive. Someone
who shouts loudly or screams is not allowed... However, if his conduct hurts his classmates' safety directly,... it will be dangerous. I will intervene with him (IV-FIDI).

He further quoted an example.

Last lesson, I taught the P.4 class to sprint. I taught the P.4 class sprint. When teaching sprint, I said, "On your mark. Get set. Go!" Some people... Because the class was divided into six groups, they expected their own group to win. Some of the next ones usually are very mischievous and push the one in front of them. "On your mark. Get set." The next one pushed the ready runner out. I must stop this situation because... I must... intervene with him (IV-FIDI).

Prior to the interventions, he placed emphasis on skill training rather than on children's education and enjoyment in a physical education lesson.

Before I became a teacher, I thought that my teaching in a school was similar to that of a coach. The training might be a little bit boring but the children could learn something. I now emphasize allowing the children to enjoy a lesson.

He further emphasized.

If the children are really enjoying a lesson, there is no problem for skill training and they are likely to continue with the practice after class (II-RTI-2, P.9).

He stressed that enjoyment was important for the children.
In the physical education lessons, the children want to enjoy and be happy. It is what they want most. Whether they can learn something is not the most important issue (IV-FIDI).

Chung displayed his special attention to the children’s enjoyment in the second reflective thinking interview. He stated.

Yes, I have. I especially pay attention to whether the children enjoy the lesson or not...I try my best to suit the girls’ needs and have to think more when preparing a lesson for a higher-grade class. I always try to think how to make them enjoy the lesson (II-RTI-2, P.8).

In another example, however, he expressed his concern with enjoyment as the only or dominant criterion for the lesson’s success.

I also think whether my teaching is fair. The children fulfilled my basic requirement – to play as joyfully as they could...I wondered whether it’s good to ask the children to compete against each other...(III-RTI-2, P.7-8).

During the lesson for patting a basketball, he used the following methods to enhance the children’s participation.

I think that the children were happy when they could have a ball of their own. If three children played with one ball, two of them would become idle when one was playing with the ball...Then they would enjoy the lesson (II-RTI-2, P.6).
4.2.5 Why Chung had Changed

Chung's past experience had deeply affected his development as a professional physical education teacher. His attitude towards teaching played an important part in his capacity and willingness to engage in reflective thinking and teaching. He had been greatly affected by his teachers in his secondary school. He admired the harmonious relationship between teachers and pupils, and had decided to become a physical education teacher in a secondary school. He planned to develop himself in the teaching profession by further study. His religious faith had driven him to do his best in teaching. He took pride in being a teacher and had the desire to become a 'good' teacher. These ingredients had combined to become a driving force pressing him towards professional improvement. He acknowledged the theories he learnt during training at the Institute could not cope with the ever changing teaching situations he was experiencing. It was, therefore, not surprising that he used reflective thinking as the tool for self-improvement. Dirkx's (1989) pointed out that it is an understandable desire and belief that improvement will lead to better reflective thinking and action. Whenever one believes in improvement and has the desire to improve, he or she will look for a means to improve oneself. Reflective thinking was, in this case, used as a tool to uncover and solve a problem, ultimately for improvement. As the teacher already had limited reflective thinking before the intervention, significant changes in reflective thinking after the intervention were to be expected. He believed that when a problem surfaced one should expect to find a solution to it. This belief led him to reflect more in order to find the problems and solutions which, hopefully, would improve his teaching.
The school provided considerable support from the school colleagues and the Principal. The deputy Principal in the school was his former teacher in the secondary school. He mentioned that he learnt a lot from this previous teacher. His school colleagues were very supportive and the school atmosphere was warm and positive. The pupils mainly came from the middle class and discipline was rarely a problem.

He liked and had enjoyed physical education lessons in his schooling. This led him to pay attention to whether his pupils enjoyed the physical education lessons. He was also an eager learner. He modeled himself on his former physical education teachers and his colleagues to stress learning in teaching. This was the driving force behind him for continuous self-improvement in teaching.

His personal experience in physical education learning, attitude in teaching and learning as well as positive school factors were similar to those of Yum. It was thus to be expected that changes and improvement would occur after participation in the intervention. It has to be acknowledged then, that these changes were a product of the interventions, the participant’s willingness to changes and factors in the school environment which were supportive and conducive to innovation.
4.3 Individual Case: Yum

4.3.1 Introduction

Yum like Chung, had made significant changes in reflective thinking at the first two levels (technical and practical reflection) in her teaching after the interventions. Also like Chung had enjoyed very positive experiences from her time studying in school, especially at secondary level where she had enjoyed physical education and sports activities very much. Her former teachers had strongly influenced her view of teaching and learning in physical education.

Although her current school resources for physical education were not, in her view, satisfactory, her colleagues encouraged her to emphasize the educational aspects of her teaching. Given her character and experience, Yum was proving to be an eager learner. She approached teaching in a serious way. Together these driving forces inspired her to teach well and ensure that the pupils learn. It was, therefore, to be expected that Yum would change and improve after the interventions.

4.3.2 Personal Characteristics

Yum's personal background and the way she perceived herself were amongst the reasons for the changes that occurred after intervention. Yum had gained positive experience while learning physical education during her studies in school. She liked and enjoyed physical education lessons.
I belonged to those pupils who were very active and joined sport teams from primary one to primary six. For example, I went to school wearing the physical education uniform every day. I might have practice for badminton, table-tennis, or track and field. I liked physical education lesson very much. When I attended physical education lesson, I was quite happy and had fun (I-PPD, P. 1).

When I was promoted to secondary school, I still liked the physical education lesson very much and joined many ball games team. I learnt a lot from these activities....The teachers taught us everything in great detail (I-PPD, P.1).

In secondary school, she adopted a serious and eager attitude towards learning in physical education. Her serious attitude was nurtured by her former teachers.

I began to think that I shouldn't just care about playing during physical education lesson. When the teacher taught about how to practice the long run, how to do hurdle actions, I still remember the teaching now. I had a heart for learning...I studied with all my heart in each lesson. I did whatever the teacher taught me. I concentrated on the learning (I-PPD, P.2).

She was appreciated by her secondary physical education teachers, and this had strongly influenced her view of teaching.

Once we lost the competition and were very unhappy. He told us not to bother about the loss.... We must have sportsmanship and not bother about the loss. Apart from teaching us some physical education knowledge, he also taught me something about the principles of being a person. He greatly inspired me.... When I didn't understand how to teach, he gave me lots of suggestions as
he had taught in primary schools and secondary schools (I-PPD, P.4).

She also emphasized that the teaching attitudes and methods of her former teacher had inspired her.

*It's serious, he set his mind on the teaching. It's very difficult to find a teacher who so immerses himself in the teaching (I-PPD, P.4).*

Her former teacher also influenced her method of assessment in physical education.

*It's the same as I experienced when I was small. When I was small, the teachers also used a similar method to assess us in the physical education lesson. I just follow my primary teachers' example and never try to think whether it is a good method for the assessment (III-RTI-4, P.1).*

Her friend, a kindergarten teacher, had also inspired her to seek admission to the Hong Kong Institute of Education.

Yum was an eager learner. She viewed that physical education was not just play and there should be learning and practising. The following segments revealed her serious and eager attitude towards learning and teaching.

*When I studied in the Hong Kong Institute of Education, I was still devoted to physical education and liked to play sports very much. Apart from playing, I had to learn lots of things to equip myself for future use as I was going to be a teacher....Whenever attending the physical education lesson, I paid great attention on*
something especially related to the skills of doing an action. If I didn’t know how to do the skill, I couldn’t teach my pupils in the future. This is the main point and I still like to play sports (I-PPD, P.2 and P.3).

I play ball games three or four times a week for my own interest. If I don’t play ball games any more, I may not have a great enthusiasm for the sports.... When the pupils find that I am so active, they will follow suit. This acts like a mirror (I-PPD, P.3).

If the pupils learn something then, I can do so, too. I think that many things are relative. If the pupils learn something, I can also do so. I learn how to have a better way of teaching next time (I-PPD, P.5).

I still have the desire for acquiring knowledge. At present, I still have the enthusiasm and ambition and hope to learn something....I should learn what has happened in this lesson....That’s why I say that I have to keep on learning and also asking. Whenever I don’t know how to teach, I would ask someone. If I don’t ask and come across the same thing next time, I shall become very discouraged. I can’t accept this. Maybe I have a high expectation of myself and hope that my teaching should be carried out smoothly. I won’t let anything hinder my teaching and I try my best to ask someone to solve my problems (I-PPD, P.8 and P.9).

I want to obtain the bachelor degree not only for the sake of the degree, but want to learn something that I don’t know.....That means I have to keep on learning (I-PPD, P. 9).

Clearly Yum was an eager learner, she was always looking for ways to improve herself. The series of interventions were seen as a tool to help her continuous self-
improvement. Apparently, all these forces had inspired and encouraged her to make changes and improvement after the interventions. Although sport was important in her previous school experience, unlike in Ku's case, it had been couched in an educational philosophy which had strongly impacted her new view of physical education.

4.3.3 School Context

This was Yum's first year of teaching. She worked in a government-aided primary school, which had been founded less than five years. The school was located in Tin Shui Wai (a newly developed town in the New Territories and far from the city centre). It was a bi-session school (i.e. morning and afternoon sessions). The children came mostly from lower class families. The pupils' academic standards were below average for the whole sector.

She commented that the school could not provide sufficient teaching resources in physical education. Though the school paid attention to physical education activities, it did not show great interest in supporting them.

She stated,

Does our school have enough resources? I think they are not enough. For example, I taught the lower grade class in the first semester. I also informed the school that there was not enough sponge balls. Now the situation is the same. Sometimes I request something but the school does not reply to us. I think that the resources in this school are not good enough (I-Sch).
She emphasized that the pupils in her school usually lived in the government-built housing estates. They played ball games after school in a nearby playground. The children themselves initiated playing sports activities. In Yum's view, their physical ability and the amount of exercise they engaged in were 'average'.

She commented that the teachers in this school were very committed and they had influenced her attitudes towards teaching.

She said.

*They are quite serious. They really teach the pupils something and won't just allow them to play what they like. Most of the teachers follow the rules of teaching a physical education lesson (I-Sch, P.4).*

A unified physical education teaching schedule for all the classes was determined by the physical education panel (PE officer). Yum commented that she used it as a reference for her teaching. She emphasized that her colleagues were models for her to follow. The school had thus positively affected the way she approached teaching, her learning and attitude towards improvement.

She said.

*They have something good that influences me. When I find there is a better method for teaching, I will follow it next time (I-Sch, P.4).*
4.3.4 Changes in Action, Behavior and Thinking in Teaching

There were some changes in her thinking and behavior after joining the project. Three themes were highlighted: on reflective thinking; on teacher’s teaching and on interaction with children.

4.3.4.1 On reflective thinking

Yum mentioned that previously she did not reflect on her teaching, though she had done so quite often while studying at the Institute. She indicated that the interventions were useful in helping her to develop her teaching. She mentioned that some changes had occurred after joining the project. She had become more reflective and thought in detail about her work. She was eager to improve and achieve excellent physical education lesson.

Surely, for physical education teaching, I have developed a deeper understanding. Honestly, if it was not for this project, I would not be aware that reflective thinking is very helpful (IV-FIDI, P.4).

She said.

In the Institute, quite often we were required to engage in reflective thinking and fill the evaluation forms for each module.... I thought that they were nothing. I wasn’t really inclined to think of them. I did it roughly. However, I have attended so many... I mean after your interviews, I find it is quite useful...I find it very
Yum considered that reflection was important and it could stimulate her thinking.

*I find it is quite useful.... I find it very helpful to my teaching (IV-FIDI).*

Yum was stimulated to think after the interview with the researcher.

*When you observed me, you highlighted the conditions of my teaching and suggested, 'is it better to do another way? You stimulated me so that I can know it is better to try other methods. Therefore, I will use a new teaching method next time (IV-FIDI-P.6).*

She stressed that the overall impact for her participation in this project was that it got her to think more and entertain new ways of teaching.

*I reflected on whether I taught poorly and it was necessary for me to follow this up in the next lesson.... The pupils performed poorly. How can you help them towards improvement? The most important thing of reflection is how to follow up.... I think that during these seven months, I have benefited so much from reflective thinking. After having reflective thinking, at least, I try to think of any methods to achieve improvement.*

After participating in the first few interviews, Yum started to think more. Some examples were as follows:

*After the last few interviews, I started to think why the pupils
could not do the action and got hurt and to wonder whether I explained clearly while teaching. I was reflecting at that time. My teaching was really like that. If I teach the same action next time, I shall try to highlight something which can remind them to do it successfully.... Sometimes, I reflect at home about how I shall do the next lesson. Say, I teach this lesson badly. I think of how I can teach better when I teach the same item for the other class (IV-FIDI-P.1).

The evaluation checklist for each lesson also helped her self-improvement.

When I read that form and ticked that item, I discovered that I didn't do well, in fact. Next time, I would focus on that point to do better (IV-FIDI-P.5).

She also reflected in classes other than the physical education lessons where there was no need for her to complete the evaluation checklist.

I didn't think in as detailed a way as every item of your checklist. Mainly, I thought of whether they were happy, whether they could reach the targets and how my preparation was (IV-FIDI).

Overall, she commented that she had benefited from this project.

I received great help in teaching...I thought of how to improve my teaching methods. I noticed what I did not do well and I would not make the same mistakes again. Mainly, I had more opportunity to think more. I was enlightened to think more about how to teach an excellent physical education lesson (IV-FIDI-P.17).
Most of Yum’s reflection involved the first two forms of reflectivity (technical reflection and practical reflection). There was no evidence that she engaged in critical reflection.

**Technical Reflection**

She reflected on her teaching content.

*I might add some new content or cancel something not suitable for my teaching each time..... I thought of my teaching previously and reflected what I should have had done better. If I explained some instructions unclearly in a lesson, I would improve it in the following lesson..... (III-RLW-1, P.1).*

She also reflected on her teaching effectiveness.

*I observed the pupils’ practice and noticed which pupils were and which weren’t capable of doing the practice. After I had found that there was no problem with them, I prepared the equipment and other necessities for the following practice (III-RLW-3, P.2).*

*It was quite boring for two pupils to practice throwing and receiving for so long. When I look back on it now, I think that I should have asked two groups to have a mini competition. They didn’t need to do the exercise so repetitively (III-RLW-3, P.3).*

*I may ask the pupils to exercise more. For example, they may be required to run around the cone after the throwing. They are also required to pick up the hoops and hand it back to the next group. My instructions were not that clear (III-RLW-3, P.5).*
Findings

It's bit chaotic because there were too many helpers (III-RLW-3, P.5).

She reflected on her method of assessment.

I thought of how I was going to assess the pupils, the allocation of marks for each item and the method of assessment (III-RTI-4, P.1).

I have thought of asking two to four pupils as a group to practice, like throwing the hoops, together for ten minutes. Then the same pupils remain as one group to be assessed. As I always consider that it may be too chaotic when I use this method. I gave up this idea (III-RTI-4, P.5).

Practical Reflection

Thinking back she commented on the difficulties of the activities.

When I flash back, I think that it's not good practice. When the pupils acted as a target they lose balance and move their bodies a lot. The one who throws at the hoops is also required to move accordingly. When they sit down and fix the legs, their legs can be steadier (III-RTI-2, P.11).

4.3.4.2 On teaching

Yum's teaching behavior was affected after joining this project, for example.
In my curriculum, I teach a forward roll first. I teach a forward roll with a straddle vault in the next lesson. For the second class, I reverse the schedule: teaching a forward roll with a straddle vault first, then teaching a forward roll standing with double feet. It is really easier to stand up with a straddle vault!.... (IV-FIDI, P.2).

Her teaching arrangement had become more flexible.

I require them to throw bean bags....You should give more hints to help them so they can do it. In the next lesson, I shall add more elements to help them to do so.... However, if you are willing to think reflectively, you can have a flexible arrangement when you teach the other class of the same form who have a similar physical condition because they all are from the P.2 class (IV-FIDI, P.2).

Another example:

Demonstration! At the very beginning, I taught everything....Sometimes, I supposed that they all knew those things as they were the P.2 or P.3 pupils. I didn't do more demonstrations. Sometimes, I should remind them and demonstrate for them more (IV-FIDI-P.3).

Yum changed her teaching methods and thought of new ways to teach.

After you had talked with me, I found something I myself did not do well. Next time I teach the same item, I will improve something. Moreover, sometimes, I may not figure out what method I use to teach the item I want. After I had talked with you, I found that I could change and think of a new way to teach (IV-FIDI-P.8).
She stressed her desire for self-improvement in teaching and she sought advice from her peers or colleagues about her teaching. She was an eager learner, ever-improving her teaching. She said:

> I accept other colleagues' opinions. For example, when I encounter a problem in my teaching I can ask my colleagues for advice. Their ways of teaching may not be good but must be different from mine. Finally, I may have many pieces of valuable information. As a result, a new perspective on teaching may be developed. To sum up, I shall ask advice from other colleagues first and may develop a new idea afterwards. This implies that I first ask the opinion of my colleagues. Then I have my own reflection and check whether their ways of teaching are better or mine is better. In the final stage, I make a decision to use which method or even can develop a new method. (II-RLW-1, P.6).

As a result of this endeavour she felt.

> I am improving gradually (IV-FIDI, P.13).

Yum claimed that pedagogical reflection would affect her teaching during the next year.

> I think so. If I consider a lesson which is not suitable for the kids from P.2 classes, I will not teach it next year.... I will not teach that item. And also, I mainly focus on pupils' learning contents....I am concerned whether what the pupils learn is suitable for them to learn, whether they can master it or whether they cannot do it (IV-FIDI, P.15).
4.3.4.3 On interaction with children

Yum had developed a new perspective on physical education teaching after participating in the project. She was more child centered. She thought about the physical education exercises which could make the pupils' happy and the lessons more enjoyable.

She said:

*I have to add some new elements in each lesson so as to arouse their interest in learning (III-RTI-1, P.2).*

*I won’t just tell them to dance right away but tell them a story first. I think that this can arouse their interest in learning (III-RTI-1, P.7).*

*I think that the warm up exercise can arouse the pupils’ learning interest.... I don’t just simply ask the pupils to move their heads or legs. I think over how to make use of the warm up exercise to arouse their learning interest in each lesson. Before I go to bed, I think about what kind of warm up exercise.... As most of my classes are in the lower grade level, I have to think about the exercise which can make the pupils happy (III-RTI-1, P.12).*

The following examples indicate her concern for pupils' enjoyment of learning.

*All I want is that they actively participate in the dancing happily. As long as they can dance happily, I don’t care whether they know how to do the movements. When they have no heart for the dancing, they will not dance well. I want to enhance their interest*
in dancing and they can be happier in the physical education lesson (III-RTI-1, P.9).

Another example:

There are too many questions. I think that I pay too much attention on some of the questions. I care very much about whether the pupils are happy or not (III-RTI-1, P.11).

If there were several pupils unhappy after the lesson, I would check what had happened. Once there was a pupil that felt unhappy after class. I checked with him and found out something unhappy happened in his / her family (III-RLW-1, P.1).

On the other hand, she claimed that the pupils were happy if they found the lesson was good, that is to say, if they felt they were learning.

She valued the importance of learning in lessons.

The pupils could learn something in lessons and this was important. Whether the pupils can learn something from the lesson, it depends on how the teacher judges himself when the pupils only have fun and learn nothing after the teaching. For me, I expect that the pupils must learn something (II-RLW-1, P.4).

She was equally concerned with pupils’ feelings.

I also encouraged those pupils who performed not so well to do better next time. This is what I told the pupils. I not only showed
my care for those who were good at the performance, but also those who weren’t (III-RTI-2, P.9).

and could observe the pupils’ behavior, performance and responses.

I saw from their facial expression whether they could perform the skills successfully. Mainly identifying from their facial expression. It is very normal that if the kids are unable to do one thing, they will be miserable. If they can be one thing... Flinging, flinging, flinging. If they fling a thing at the target object, they will be very happy.... They will be happy too (IV-FIDI, P.8).

She was aware of pupils’ reactions in class.

Occasionally, during a lesson, I don’t let them play what they want. They shout, “Miss, can we play badminton today?” .......Normally, if they don’t like it, they will become disappointed (IV-FIDI, P.9).

She also modified her teaching with reference to the pupils’ ability.

The teaching of class 2B is a very good example. I taught class 2B right after the teaching of this class. It all depends very much on the pupils’ ability (III-RTI-I, P. 9).

Yum now designed activities in different ways to cater for pupils’ responses and interests. For example,

When they see the beanbag again, they may feel disappointed.... Although we only have rubber balls, quoits, etc, there are many ways to play with the same tool......We have very few tools but
Findings

can play with them in different ways.....When the lesson finished, they understood that there were many ways to play with the same tool (III-RTI-2, P.4).

She felt that the pupils were under her control and that discipline had improved. She had more contact and better relationships with her pupils.

When the teacher joins with their practice, they are happier. For example, when they placed the paper-scissors-stone with me, I was willing to be punished if I lost the game. Then they were very happy because the teacher was willing to play with them. When I am on duty during recess, the pupils also come to see me and we chat together. I feel happy with this..... In the very beginning, they were not familiar with me. They didn’t ask me any questions even though they didn’t understand something. When they failed to do the skills, they just kept quiet and stood aside. Now, it’s different...It’s obvious that they behave differently now (III-RTI-3, P.7).

She provided a warm and positive atmosphere in physical education lessons.

When they attend my physical education lesson, they know that in a physical education lesson, I am rather lenient and smile more. They can see it. I can see that they are very happy once they attend a physical education lesson (IV-FIDI-P.10).

4.3.5 Why Yum had Changed

Yum’s past experiences of physical education had deeply affected her development as a professional physical education teacher. She had enjoyed positive experience in physical education lessons throughout her primary and secondary career. She
wanted to share her good experience of physical education lessons with her pupils. This led her to pay attention to whether her pupils enjoyed her physical education lessons. She looked back frequently on the experiences that had inspired and encouraged her to become reflective and had paved her path towards improvement.

Her teaching attitude was nurtured by her former physical education teachers and her school colleagues. Her former physical education teachers were committed teachers. They had good lesson plans and taught in great detail. Yum still recalled their teaching, such as long run and hurdle in secondary studies, at the time of the interviews. Both her former physical education teachers and current colleagues emphasized that they wanted their pupils to learn.

Yum was an eager learner. During her secondary school studies she accepted that she should not just play in physical education lessons, she should also learn. She concentrated on learning in physical education lessons and practiced what the teachers taught. When she became a physical education teacher she wanted her pupils to learn in physical education lessons, as she had done. She was a learner and she modeled herself on her former physical education teachers and her colleagues to stress learning in teaching. This inspired her to find a ‘good’ way to teach so that her pupils could learn. These were the forces driving her towards continuous self-improvement. She wished to share her good experience with her pupils. Since she was looking to improve herself, it was natural for her to adopt reflective thinking as the tool for improvement.
4.4 Individual Case: Shan

4.4.1 Introduction

Like Yum and Chung, Shan had also become more reflective about the technical and practical aspects of her teaching after participating in the interventions. However her behavior could not be changed even though Shan wanted it to, because of school factors. Shan was not good at sports skills and lacked confidence in physical education teaching. She had met two particularly good teachers previously who had influenced her view in learning and teaching. She was a serious and eager learner. She had positive attitude towards teaching. Although the school resource in physical education was adequate, she was not satisfied with the teaching facilities. Also, she faced opposition and negative feedback from some of the experienced teachers and she did not receive strong support from the school Principal. Shan had proved herself as a serious learner and took her teaching seriously. She wanted her pupils to learn more. All of these factors contributed to Shan changing after participating in the interventions, but unlike the aforementioned teachers she found it very difficult to express these changes in practice.

4.4.2 Personal Characteristics

Shan’s personal background and the way she perceived herself were amongst the reasons for these changes to occur after the interventions.
Due to the limitations of her public examination results, Shan had applied for a place at the Institute and took physical education as her elective subject. She knew nothing about physical education training before she was admitted to the Hong Kong Institute of Education.

She said,

Frankly, physical education was not my favorite subject.... I didn't expect that I was accepted to study the physical education subject..... (I-PPD).

She did not have much confidence in her physical education teaching when she graduated from the Hong Kong Institute of Education. For example, she did not know how to play volleyball. Others (her peers on the course) felt that she was not familiar with sports activities.

It may be due to my background that I don't have much confidence in physical education teaching. When I started to study it, I found that I was inferior to my classmates (I-PPD).

Shan received some positive experiences from her physical education lessons during her studies in primary four and secondary level and commented that she had met two particularly good teachers. They were committed, prepared well, cared about the pupils and displayed a sense of responsibility.

I had met two teachers in my primary four and secondary level...
I think that I learned a lot in that year. I appreciated their seriousness and they prepared well. I also felt that they not only
cared about their pupils in words but also in action. I appreciated their sense of responsibility (I-PPD).

She found that the teacher certificate education course in the Hong Kong Institute of Education had offered her some but not enough help. It was very useful with regard to teaching methods and she had changed her views on teaching after finishing the teacher certificate education course. She now believed that her pupils should learn something of educational value from physical education lessons. She was quite serious in her attitude towards her work.

_I think that I'm quite serious but do not have enough experience. I know that I am not that outstanding but don't want the pupils to be like me and learn nothing, when studying in the primary school. I think that I have to teach them all I know (I-PPD)._  

Shan was also an eager learner. She sought ways to improve herself and her teaching.

_What I am continuously doing is to read books regarding physical education. In the past, I didn't read them very much.... Now I read books.... I ask my colleagues for advice. I think that a few colleagues teach very well (IV-FIDI-P.18)._  

Her personal background and positive attitude were driving forces towards change after the intervention. Although sport was not important in her previous school experience, she was eager to learn and improve herself and she hoped the pupils could learn something from her physical education lessons.
She had a very positive attitude towards organizing sports activities and training pupils' physical ability in extra-curricular activities.

*I don't want to train the pupils within such a short time and want to have a longer-time training. I just convinced the Principal to allow us to have a longer-term training (I-PPD).*

Shan was eager to modify the teaching schedule and believed the content of her teaching could be more comprehensive. Though there was a standard teaching schedule for all teachers ever since the school has been established. The schedule was very inflexible and only mentioned four topics to be taught in a year. She didn't think this was good and suggested some amendments, i.e. she added more sports to be taught. Her view was endorsed by an inspector for Quality Assurance Inspection from the Education Department who visited the School and suggested they should have a wider variety of sports. However, she faced some opposition from her more experienced colleagues.

*Their attitude was very negative... (I-PPD).*

Although the school did not arrange the peer physical education teaching observations, Shan made the arrangement with some of the newer teachers to the school, and the results were positive.

*It's quite good. We had some discussions. As we are new teachers, we understand the purpose of the observation is not for picking mistakes from each other but for the benefit of our teaching. However, we don't have much experience and can't learn much from it (I-PPD).*
She reported:

*I think that I'm quite serious but I don't have enough experience. When dealing with some work, I could not do it well. Since I am on the physical education panel here now, I find some of my colleagues..... I know that I am not that outstanding but don't want the pupils to be like me and learn nothing. I think that I have to teach them all I know.... The Principal has also had discussion with me and hopes the new recruited teachers will not follow the current teachers' way of teaching. I hope that I can change the situation slowly.... (I-PPD).*

4.4.3 School Context

The school culture also had an important influence on Shan. This was her third year of teaching. She worked in a government-aided primary school in a dense private residential area on the Hong Kong Island. The school has been established for 13 years. It was a bi-session school (i.e. morning and afternoon session). Most of the pupils came from middle-class families. In Shan's view, their physical ability was not particularly good. There were no sports extra-curricular activities in the school, other than a Chinese dancing group.

Shan had worked in this school for three years since graduation. The school provided sufficient resources, materials and texts for the teachers, to assist their physical education teaching.

*We have sufficient tools and the Principal fully supports us to*
purchase those tools that we want. We are not restricted to purchase the tools at the beginning of each semester. Even when we discover the tools are not enough after a semester starts, the Principal will approve a purchase. We also bought a lot of books and journals (I-Sch).

The School also encouraged the teachers to go on physical education courses as part of their professional development.

*The Principal encourages us to take some courses. However, we have to take the initiatives to find the courses. In most cases, only the new teachers show interest in taking the courses (I-Sch).*

She also faced negative attitudes from the more experienced physical education teachers in the school. Their attitude was very negative and they refused to follow the physical education schedule.

*Their attitude was very negative and they refused to follow the schedule. As a result, only some of us followed the new schedule at first (I-Sch).*

Shan reported:

*I made a small change to the schedule and added more kinds of sports to be taught......They thought that I made the amendment because of the Quality Assurance Inspector. In fact, it was not. I also talked with some experienced teachers and hoped they might give me some suggestions. However, their attitudes were very negative and refused to follow it......It's because I know that some teachers didn't want to change the schedule (I-Sch, P.1 and P.2).*
Though she was a physical education panel member, she found it difficult to complete any teaching observations.

*The school doesn’t tell me exactly what it wants. I then encounter difficulty in observing which teacher has taught which topics. All I can do is to advise my colleagues to try their best to follow the contents listed in the schedule in the meeting each year (I-Sch).*

The other teachers in the school did not pay much attention to the subject matter of physical education and were unwilling to take courses to further their studies.

*They may think that they already possess the knowledge, and it is a waste of time to take the courses. Some teachers may have more important subjects to teach and put more efforts into those subjects first (I-Sch, P.5).*

Shan added.

*I hope that I can change the situation slowly. I think that it is quite impossible for me to push the teachers to change everything all of a sudden. Moreover, I don’t have much experience. When they have more experience than I, it’s very difficult for me to ask them to change their teaching methods (I-PPD, P.5).*

She also felt that the Principal was unsupportive with regard to the development of competitive sport.

*He refused to join many competitions previously.... I discussed this with the Principal who told me that our school usually lost in the competitions. That’s why he didn’t want to waste time on*
Findings

He then claimed that he was afraid the pupils' self-confidence might be affected when they lost in the competition (I-Sch, P.4).

Shan also expressed her dissatisfaction with the facilities for teaching (i.e. the space available). She hoped that the school might improve the way they make use of their venues for teaching physical education.

4.4.4 Changes in Action, Behavior and Thinking in Teaching

Even before joining this project, Shan often reflected on her teaching in physical education before lesson preparation, during the lesson and after the teaching (see Appendix 4-7). Her thoughts covered the following: instructional design, instruction content, her performance in class, appropriate methods, pupils' participation and pupil's enjoyment. She often thought about what pupils learnt in the lesson; whether was it a pleasant physical education lesson, the purpose of the lesson, the educational role of the lesson and pupils' behavior. There were, however, some changes in her thinking and teaching behavior as a result of participating in this study. Three themes were highlighted: On reflective thinking; on teacher's teaching and on interaction with children.

4.4.4.1 On reflective thinking

Some changes in Shan's thinking were noted from her final in-depth interview.

After participating in this project, Shan personally thought that she needs reflective thinking and it was important (IV-FIDI, P.1).
Yes, I think so. I myself lack experience.... There are many things I need to improve (IV-FIDI, P.1).

Previously, Shan reflected on physical education less than on other subjects. She felt that she gave more thought to physical education since her participation in the project.

The other subjects seem to put more pressure on me because all.... However, for physical education, it relies on pupils' physique and talents. The reason was...I taught other subjects with more pressure. Maybe, traditionally, our school lays less stress on cultural subjects (IV-FIDI, P.2).

Shan also mentioned that she reflected more because she had taught more physical education lessons during the year (10 lessons in a week). She also reflected more on different aspects of lessons after she joined the physical education panel.

I reflect more. I have had more chance to think (IV-FIDI, P.10).

Now I reflect on many aspects. I became the subject leader of physical education last year. I needed to think about the whole development and what we have in extracurricular activities. Previously, mostly I thought of what I did in a lesson. Now I think of organizing an athletics team and planning before a sport day. I think more about these aspects (IV-FIDI, P.2).

Shan mentioned that she now had more discussion with other people.

I think more. Moreover, apart from my reflection, I discuss with
other people more. Previously, I reflected alone and revised. Now I discuss with someone whether my revision is correct. Sometimes, I talk with my classmates..... I also discuss with my colleagues. We always concentrate on the two colleagues if there is something which they do not completely understand (IV-FIDI, P.3).

She emphasized that the intervention project could greatly affect her teaching next year. She thought more deeply and provided a deeper understanding of the direction she should take.

She continued.

*I think more and I have direction knowing how to think. I follow the guidance about reflection. Sometimes, I think deeply. Previously, I thought simply. I did think but not comprehensively (IV-FIDI, P.8).*

The teaching self-evaluation form had clearly helped her to think in a more detailed way.

*I thought of the situation of that lesson. I recalled how I taught similar things last time and what was different or similar in that lesson. This made me think in detail. It seemed to guide me to think. Previously, I thought in a broad direction. Whether they can do the actions and whether they are happy. I rarely thought in detail....I think the form helped me to reflect but could not help the actual affects. That means that it helped me to think more but did not ensure that I got improvement (IV-FIDI, P.3 and P.4).*

She emphasized that her confidence in physical education teaching had grown.
Her view of an ideal physical education lesson had changed. She stated.

In the past, I thought that it was a good idea that the pupils could learn those things and were very happy. They could learn something. Really....they knew what they learned. It was perfect. Now I think that I should accommodate their individual differences (IV-FIDI, P.11).

At the outset of this study, Shan rarely, if ever, engaged in reflection on physical education. After the third visit of her teaching in the phase III (III-RTI-3, dated on 19 May 2000), she began to reflect on the technical and practical aspects of her work.

**Technical Reflection**

Shan acknowledged that her reflection was essentially at a technical level.

I have a cocktail of the three forms of reflection but tend to have the technical more. I usually reflect on how to achieve better teaching and seldom have critical reflection (III-RLW-1, P.4).

I consider that I have technical reflection more because my teaching experience is limited and my teaching isn't that good. Therefore, I think of the basic level of teaching more and my reflection is mostly technical (III-RLW-1, P.4).
Shan particularly paid attention to issues of class management.

I paid more attention to the pupils’ discipline.....(III-RTI-1, P.5).

She found that her teaching content in rope skipping was not attractive to pupils.

The content seems uninteresting. It is better to have content which is more attractive and easy to remember (III-RLW-2, p.3).

Shan reflected on her pupils’ responses in lesson.

It seemed that they felt very hot. The pupils who did well were happy. They felt proud when they demonstrated how to play rope skipping to the class (III-RLW-2, p.2).

Shan reflected on her teaching performance and teaching methods.

My teaching pace was rather quick this time. I asked them to form a group too soon. I should have asked them to practice more in pairs......It was rather chaotic just now and I learned that my pupils didn’t understand what I taught them (III-RTI-3, P1).

I shouldn’t have taught the pupils so many things at one time and should have taught them fewer things..... In the latter part of the teaching, I wanted the pupils to combine all the skills (III-RTI-3, P2).

She could now evaluate whether the format of assessment was good or not.

I feel that the form was not good but I could not change it.... I
Findings

need to carry out the assessment step by step (III-RTI-4).

The senior pupils also need to be tested on their knowledge of physical education. So, I think it is not so good. However, I need to make consistence to test the skills first (III-RTI-4, P.1).

She responded that her physical education lesson was very chaotic.

The teaching outcome was not what I expected. The performance of each group was very similar and only the last group understood what I wanted (III-RTI-3, P4).

The class order was not that good. I asked them to do the practice, they started to lose self-control and just cared about talking among themselves what kind of actions that they should imitate or act (III-RTI-3, P.6).

Practical Reflection

Shan’s reflection was confined to the technical and practical levels. The following observation related to her reflection at a practical level.

Shan reflected that she didn’t know how to teach rope skipping and needed to ask other teachers.

I really didn’t know how to teach them about rope skipping..... I think that I need to ask more teachers how they teach rope skipping in detail because..... (III-RLW-2, p.3).
She evaluated her own teaching performance in the lesson on rope skipping.

*They can achieve the aims in general. My only dissatisfaction with the content is that it is so boring. The pupils can grasp the skills but they are not so happy. And the weather is very hot. They feel very tired (III-RLW-2, p.4).*

She thought her teaching methods were not well organized.

*After completing one part of teaching, I failed to continue another part. It's not that coherent.... I think that I had better ask the pupils not to do so many exercises but more practice for the same activity (III-RTI-3, P.7).*

Another example lay in her analysis of teaching.

*Sometimes, I wonder whether other classes are more lively because I know how to guide them better. I did analyze this.*

After the lesson observation and having viewed the video, Shan found that her teaching was very boring. She considered whether all her teaching had been boring.

*Are the other lessons like that? I felt that it was boring when I watched the video-tape. I don't know whether that lesson in the past was boring or not. Sometimes I think my teaching is no problem because I feel they are happy. But when I was watching the video-tape, how boring it is! (III-RLW-2, p.5).*

From the video observation, Shan considered that her teaching was uninteresting and looked like military drill. She stated.
It is boring teaching rope skipping. I did not think that until I looked at the video-tape. I paid attention to the level of order and control. I feel that it is not relaxed enough. Although they were doing rope skipping separately, they did not work separately enough. They seemed to have rope skipping in a line. When I saw that again, I felt that they were having military drill (III-RLW-2, p.1).

She further emphasized her view.

There is too much stress on skill training in rope skipping (III-RLW-2, p.1).

She suggested two ways to modify pupils’ learning in the lesson on rope skipping.

There are two aspects to be changed. I can let the pupils who play rope skipping well teach the pupils who do not play rope skipping not very well. That is to show them a demonstration and teach them how to do better. It is because they can understand more when they are taught by the other classmates. The other form is to separate them into different levels. Then I can teach the pupils in the lower level. And the pupils in the upper level can play the other games (III-RLW-2, p.3).

She observed that her teaching style in rope skipping was not diversified.

I think that the style might be a little bit traditional. There were no other activities arranged and the pupils just skipped and skipped all the time. It was not varied because the skills were rather difficult to master and I didn’t arrange too many kinds of activities for them (III-RTI-2, P.1).
4.4.2 On teaching

Shan did not think about her teaching at the beginning of the intervention, she only reflected on pupils' clothing, uniform and teaching sequences. There were important changes in her teaching after participating in this project. The designed activities were very monotonous and teaching was very examination oriented. Now she adopted a more flexible and varied teaching content.

Previously, the activities designed by me were very dull. After participating in this project, I am more reflective....If something is not related to some items the pupils can still benefit from them.... I still teach such things. Say, teaching gymnastics. I do not only teach things with terms such as forward roll and backward roll. Skipping, I let them do it. I let them skip with the plastic rope. Right, its more flexible. Previously, I taught what they needed to take the examination. It was quite examination oriented previously. Now we are allowed to have a greater percent of freedom. Some items are compulsory for us to teach and some items are selected by us and are more flexible (IV-FIDI, P.1).

Other examples were mentioned.

When I asked them to play looking in a mirror. I told them to imagine what they usually did when they got up in the morning, like eating breakfast, going to school by bus and created a story while broadcasting the music (III-RTI-1, P.3).

I tried to quote more daily life examples. Therefore, I told them that I was going to teach them to play the bear. The pupils were very
happy to learn this because they understood what I was talking about.... They were very excited and felt happy with it (III-RTI-1, P.5).

Her way of teaching had changed. For example, there was a more relaxing class atmosphere. Pupils were happier and paid more attention to safety precautions.

In her words:

*I realized that I was too strict in the previous two years. Now I change the way I teach this year and find the atmosphere is more relaxed. The pupils are happier and so I ....I don't need to be so strict. The pupils can learn something in a more relaxed atmosphere (III-RTI-1, P.8).*

*I apply more relaxed methods to teach other classes. Because the kids of another class are freer...Someone from the Quality Assurance Inspection observed that class which was very lively.... They were very happy.... (IV-FIDI-P.11).*

Another example was found in the modification of her teaching content.

*I might have also played some music during the warm up exercise. In the beginning, I taught the pupils about the rhythm of skipping....I might have used the metronome and a cassette recorder to record the rhythm (III-RTI-2, P.4).*

*They were not exposed to many kinds of physical education activities. Now they are gradually exposed to more kinds of physical education activities and they like participating in them (II-RLW-2, P.4).*
Her teaching in other physical education classes was also improved after participating in this project.

*Sure, because I teach three primary four classes and two primary two classes. I teach them better than my own class. Every time I have taught my own class first, then I reflect. Therefore, I use the revised methods to teach that class (IV-FIDI, P.5).*

An example was quoted.

*Whenever I discover something wrong with my teaching, I improve it in the teaching of other classes (III-RTI-3, P.9).*

She planned to change her teaching plan in the coming year, especially as a physical education panel member, she was now a representative of physical education.

*I always think that the programme will be revised. The previous programme was simpler. This year, it has added something. I think that it is not adequate and needs to be improved (IV-FIDI, P.10).*

There were also some changes in her confidence in physical education teaching as compared to when she had just graduated.

*Yes, there is. It has improved. Moreover, then, there were certain people to observe my lessons. The inspector felt that my teaching was not bad and O.K. Therefore, I have more confidence to teach physical education. In the past, I thought my teaching was too*
She indicated that she was very scared in the first year of my teaching because I always thought that my knowledge was not that good. I also worried about the pupils’ safety and didn’t understand their standard well. Therefore, I was very, very scared in the first two years. Now I understand that pupils can master certain skills after my teaching. They enhance my self-confidence. Then I won’t be so scared any more (III-RTI-1, p.9).

She none the less emphasized that,

*However, I am still scared, scared of teaching something to the pupils in a wrong way.*

Shan had become slightly more confident in physical education teaching because she thought and reflected more widely.

*May be I think more about things? Sometimes, I make comparison with my previous teaching. I think I really am better now. Although it is not too ideal, I have made improvements. This aspect is better. I think so. In the past, I reflected when I was free. I did not do so when I was not free. Now, I reflect regularly (IV-FIDI, P.11 and 12).*

As mentioned above, Shan could reflect at a technical and practical level. She had changed her teaching behavior. Sadly, on some occasions she could not change her behavior even though she wanted to. It was noteworthy that the ‘traditional’ school
attitudes of her Principal and school colleagues affected her teaching behavior and professional development. The following observations are related to these elements of her work.

4.4.4.2.1 The school Principal’s resistance

Shan wanted to modify the content of her teaching, such that there would be more variety in her approach but she faced resistance from her Principal.

*My teaching lacks variety. I think so. Something I want to teach...For some reasons, someone said, ‘Be careful! It is dangerous!’ Then I was reluctant to give up that approach. Sometimes, I talked with my school Principal to say that I want to teach gymnastics. The primary 6 class, which I taught at the first year, had never used any mats to do things.....I persuaded him to be a bit more flexible. Traditionally, this school doesn’t like practicing gymnastics (IV-FIDI-P.15).*

She persuaded her school Principal to introduce some aspects of gymnastics in extra-curricular activities and summer activities. The Principal commented.

*It was so dangerous! It is easy to hurt their neck bones! (IV-FIDI-P.15).*

Another example of the school Principal’s resistance:

*I have learned rugby so I want to teach it. However, I am not allowed to teach it. The Principal was afraid that the pupils would collide together (IV-FIDI-P.16).*
She quoted another example.

_Sometimes, I do not want him to see some items that I am advised not to teach. If he saw that, he would say, ‘Be careful!’ He does not stop you but he says, ‘Teach carefully!’ Therefore, you hesitate to do so, don’t you? (IV-FIDI-P.17)._ 

4.4.4.2.2 Colleagues’ negative attitudes

The negative attitudes of school colleagues also directly hindered Shan’s capacity to change. For example, her colleagues did not co-operate to modify and diversify the ranking standard in the physical education examination.

_This year, we are only required to test pupils on the same items. Some of my colleagues still complain about this._

_There are some colleagues who only teach basketball and skipping rope (I-Sch)._ 

Shan thought about her teaching and wanted to share her views with others. However, she felt isolated in this endeavour.

_Sometimes, I think I am alone. All along, if I am not told how to do better. I will think the same thing (I-Sch)._ 

She also claimed that the venues for teaching hindered her teaching.
Somewhere near the flower nursery where there is a golden fish basin. I'm always afraid a ball may fall into it when the pupils play ball games. As a result, I have to take special care when I arrange the activities for the pupils. I am also scared that the naughty pupils may cause trouble there. Therefore, I do hope the school may improve the way they make use of their venue for teaching (I-Sch, P.8).

4.4.4.3 On interaction with children

Shan pointed out that previously she was rather harsh towards pupils. A list of examples was revealed during the first two lesson observations.

Her approach with the pupils was serious and stern. She said,

\textit{You should look at me (II-RTI-1).}

She stared at the children and spoke the following words.

\textit{I am talking – do not move far away (II-RTI-1).}

Without any facial expression, she harshly scolded the children who misbehaved in her lesson.

Over the year, she commented that previously she controlled pupils very rigidly in physical education lesson. Now she was more concerned with whether they were involved in class participation. She indicated that she had noticed this change from the second term (i.e. after the second visit). In her words:
Previously, I controlled them very rigidly but.... Now (there is) only one class, which I control very tightly. I know them to be very naughty. However, I manage other classes more permissively than before. For example, they are crazy and shout too loudly. Previously, I hated that. Now, I let them do it. I now see that they are very involved. I started from the second term to hold this point of view (IV-FIDI, P.12).

She further pointed out

During the first year teaching, I said, "I do not allow you to do that. Don't do it like that! Line up! Don't cause trouble!" Now they chat and sometimes are immature. I do not care (IV-FIDI, P.13).

and provided further evidence of changes in her attitude and behavior.

Previously, I stared at everything they did. Now, some activities are ...rather less dangerous. Sometimes, I pretend to look at other things; they continue to play.

Shan also considered the standard of ability of her pupils and modified her teaching accordingly.

I try to modify my teaching according to the standard of the pupils (III-RTI-1, P.6).

She also changed her reaction towards pupils’ behavior. For example,

They rolled down in the ground, turned round and then rolled up
during a competition. Surprisingly, the inspector said, 'Good! They are very involved!' Previously, I would say, 'What's wrong? Are you mopping the ground?' I would not allow them to do this. Now I let them roll. They do not hurt anybody. They themselves imitated a bulky pillar to roll. When they are so excited, they roll in the ground. Now I let them to do these things (IV-FIDI, P.6).

Shan’s attitudes towards children changed after participating in the study. She paid special attention to whether they were happier.

I am more concerned whether they play happily. After I had watched the video last time, I found that they were too tired to skip rope (IV-FIDI, P.4).

During the final in-depth interview, she tried to determine what methods she could use so as not to appear so angry while making the pupils behave better. The following segment was recorded.

In a lesson, I should not be too harsh. Sometimes, I am rather harsh. For some classes, if you do not pay attention to them for a while, they will behave poorly. I try to figure out what methods I need not to get angry and so they behave better. Now I teach boys and girls together. Sometimes when playing football, the girls feel unhappy. Although they need to learn it...I try to figure out which way is better to teach them...May be I should teach certain items to boys and girls separately. The boys master most of the basic skills actually. I let them have a competition. On the other hand, girls continue to practice the skills. I think of it again (IV-FIDI, P.5).

Shan mentioned that her relationship with the pupils had improved.
Our relationship is quite good because I was and am their class teacher last year also this year. I think that our relationship is quite good. They initiate chat with me during break time. Apart from treating me as their friends, they also respect me as their teacher (III-RTI-2, P.6).

I can be myself more, step by step..... I can be not so strict and be more friendly with them (III-RTI-2, P.6).

On the other hand, she emphasized that she would discipline the pupils who might cause trouble.

...caused some troubles I then stared at him and he understood at once what that meant (III-RTI-3, P. 8).

Shan commented that she now seemed to be more involved with her own class during the lesson.

I seemed to be more involved because I seemed to play with them together. I do not know why. I can mix well with the class (IV-FIDI, P.6).

Shan now took pupils’ suggestions into consideration, depending on the situation.

They want to play something, which is more dangerous such as vaulting a box, or something, I say, “we are not allowed to play it till you are more obedient.” When I teach this item, I assign half of them to skip roll and supervise another half to vault. I change according to the situation (IV-FIDI, P.8).
Although all four teachers received the same interventions (in terms of the activities presented to them), some changed more than others and I responded to those different responses accordingly. The following analysis examines the reasons for Shan's changes and highlights the occasions when she could not change.
4.4.5 Why Shan had Changed and Why She was not always able to Change

4.4.5.1 Introduction

Although Shan showed improvement in thinking at technical and practical levels, her changes in teaching behaviour did not keep pace with her thinking. This was especially apparent when her actions were compared with those of Chung and Yum. Developments in reflective thinking and changes in teaching behaviour, thus, varied from one teacher and school to another. However it would be natural to expect individuals having similar academic background and receiving the same level of intervention to develop at roughly the same pace. Shan, like Chung and Yum, was an eager and serious learner. All three teachers had a strong desire to improve themselves. It was therefore initially surprising to find that the development of Shan lagged a long way behind that of Chung and Yum. Below as we explore the reasons for this, our cause for surprise diminishes.

4.4.5.2 School colleagues

When we look at the mix of physical education teachers in Shan’s school it was interesting to find that they fell into two categories, experienced over who had joined the school many years ago or young, beginning teachers like Shan, with less teaching experience. The attitudes of these two categories of physical education teachers were very different. The young, novitiate, physical education teachers did not have much teaching experience. However, they were very supportive and eager to improve. Shan and they worked together for self-improvement. On the other
hand although the experienced physical education teachers had been working in the school for many years, their performance was unsatisfactory, at least in the eyes of the Principal and Shan. They were not willing to take responsibility for physical education teaching in the school. That was the reason why Shan, an inexperienced physical education teacher, was appointed as the physical education panel (subject team leader) in the school. They were also opposed to change and this had a negative effect on Shan’s professional development. More on this issue will be said later. Since the attitudes to teaching of these colleagues was so different from Shan’s, she unconsciously, distanced herself from them instead of actively sharing with them and seeking their advice. These colleagues were a lot older than Shan, so it was difficult for her, a new teacher in the school (at the school for merely two years when this study began), to become ‘one of this group’ and have active collaboration with these colleagues. The flow of experience from more experienced teachers to less experienced teacher, in this case, was jeopardized. Although she had received some support from her less experienced physical education colleagues, Shan had to rely mostly on herself for improvement. She wanted to make changes. However, the changes she could make were limited. With little or no help or advice from an experienced hand Shan could only follow a trial and error approach. This was a slow and painful form of professional development.

Being a serious and eager learner who wished to improve herself, our intervention had helped Shan to reflect on her teaching and it could be seen that, as with like Yum and Chung, it had enhanced her thinking. However, her changes in behaviour were constrained by her inexperience in physical education teaching and the
absence of support from more experienced colleagues.

4.4.5.3 Skill proficiency

Shan had specific problems with teaching physical education. These played an important and negative role in her development. She was not skillful in sport activities. She had found that the teaching methods she learned in her pre-service training in the Hong Kong Institute of Education useful. To a certain extent this had eased the problem. However her lack of professional expertise was still there. The activities she could introduce into physical education lessons were limited to those sports she could do and by the level of her skill proficiency.

4.4.5.4 Lack of confidence in physical education teaching

Shan’s other problem was that she had little confidence in her physical education teaching. She considered herself inferior to her classmates. She also thought that the teacher certificate in education course was not adequate, although it had offered some help in preparing her to become a physical education teacher. In the course of this study she indicated at different times that she was scared when she was teaching physical education lessons. Lack of confidence in physical education teaching worked in concert with poor sport proficiency to press Shan’s physical education teaching in an undesirable direction. The situation would have been improved if there were experienced physical education teachers who could offer her comfort, consultation, support and sound advice. Unfortunately Shan did not receive these, which, as an eager and serious learner she deserved.
It would not be surprising to find a teacher who did not have much confidence in herself and was sometimes even scared in lessons, experiencing difficulties in teaching. Shan’s problems not only affected her performance in teaching, her reflective thinking was affected too. Against this background it was next to impossible for her to engage in reflective thinking in action while she was struggling to overcome her fear of teaching physical education with her limited sport skills. Even when she could sit back and reflect, it would be natural for her to think about her immediate problems, which were about what she should do in lessons and how she could teach better. In other words her reflective thinking inevitably focused on technical and practical matters, as was apparent throughout the lesson of study.

Shan wanted to do well and her pupils to “learn something” in physical education lessons. Like Chung, and Yum, she adopted reflective thinking as a tool for improvement after the reflective thinking intervention. Shan had made changes in her reflective thinking. However these were not reflected in changes in her behaviour, largely due to her lack of confidence in physical education teaching mentioned above. Shan wanted to change in order to improve herself but she did not have the authority to implement changes in areas in which she had little confidence. She had to overcome this psychological hurdle before she could make change. If she could overcome this hurdle and implement change, she could only make small changes at any one time. She feared that the changes she made would be considered ‘wrong’ or their effects not obvious. For a beginning teacher with little practical experiences this was a real possibility. This acted as negative
feedback to Shan. People tend to react better to positive feedback. It requires a lot more effort to make progress if negative feedback prevails. This slowed Shan’s change as well as lowering her already poor confidence. This, in turn, had a negative effect on her future development. Her changes were further limited by her poor skill proficiency and limitations imposed by the school. Therefore her changes in behaviour were slower and lagged behind her progress in reflective thinking.

4.4.5.5 School physical education curriculum

The physical education curriculum at Shan’s school was very rigid and the physical education teachers in the school had to stick to it. Even if Shan wished to make changes in the physical education curriculum, she could not do so on her own. She had to have the consent of all other physical education teachers and all of them had to implement the changes together so that the classes at the same level would have the same curriculum. This ensured no change. Instead of working together and adapting changes to meet ever-changing circumstances, her experienced physical education colleagues were resistant to change. For example, they refused the new teaching schedule recommended by the Quality Assurance Inspector of the Education Department following a school visit. This situation was extremely disheartening, especially for an inexperienced, beginning, physical education teacher like Shan. On the one hand, following her reflective thinking, she had a growing awareness of her shortcomings and what she had to do to change so that her pupils could benefit. On the other hand, she understood well that she had little chance to implement the changes necessary. Her behavioral
4.4.5.6 Venue / facilities

The playground for Shan's physical education lessons was also far from satisfactory. There was a golden fish basin as well as a Buddhist statue next to the playground. She was afraid the naughty pupils in her classes might cause trouble there. She worried that balls would fall into the golden fish basin or damage the Buddhist statue accidentally during ball game lessons. Shan had to take special care when she arranged activities for her pupils. This diverted her attention from teaching to watching out for and preventing accidents from happening. Inevitably, this hindered her reflective thinking during physical education lessons.

4.4.5.7 Summary

The inability to change and the limitations mentioned above combined to act as a powerful force pulling Shan back from changing. She was unable to act in the way she thought was correct. Badly needed help was not at hand. Rather than building her up, her more experienced colleagues were negative forces of discouragement. To a beginning teacher this was heart-breaking. Shan arranged peer observation with her less experienced colleagues in an attempt to discover her shortcomings in teaching, despite the opposition of more experienced colleagues. This was a clear indication of her desire to improve her teaching. But she was bounded by her inexperience, lack of support and advice from experienced colleagues and low self-confidence in teaching. Her development in reflective thinking and the
corresponding changes in teaching behaviour were either constrained or choked in their infancy. This was a tragedy for an inexperienced beginning teacher.
4.5 Individual Case: Ku

4.5.1 Introduction

Unlike the other three cases, very few changes featured in Ku’s teaching after interventions. Ku displayed very limited reflective thinking either at the technical or practical level. Physical education teaching was his lifelong career and he had planned to further his study in the subject. The school in which he was teaching had good sport/physical education facilities and he received positive support from the school and his colleagues. One would expect Ku to change and develop after the interventions. As we shall see, however, he did not. I was unable to identify any changes in his action, behaviour and thinking after the interventions. Therefore, in the following section I concentrate only on his personal characteristics and school context.

4.5.2 Personal Characteristics

Ku’s personal character and the way he perceived himself were some of the reasons for there being little change after intervention. Ku had been a good sportsman throughout his primary and secondary studies. He dreamed of becoming a sportsman representing Hong Kong in international competitions. However, he eventually realized that his dream would never come true. His love for sport activities determined that he would like to become a physical education teacher and he decided that physical education teaching would be his lifelong career.
Hmmm.... at that time.... When I studied in the primary school, I had thought of several careers, like being a sportsman playing football, being a policeman. When I studied in the secondary school, I wanted to be a sportsman playing table-tennis and represented Hong Kong to join some competitions. During my practice of the table-tennis, I knew it was impossible to fulfill my wish. When I studied in form three or form four, i.e. when I started to concentrate myself on the study. Starting from the second semester of form three and I could be promoted to form four, I then thought of being a teacher in future (I-IPP-P.2).

One of his objectives in becoming a physical education teaching was to select and train his pupils to become good sportsmen so that he could realize his dream vicariously through his pupils.

I have just said, I understood that I wouldn't have any further progress in playing the table-tennis then. I wondered whether I could train some pupils who were able to fulfill my wish. This was the kind of thought I had at that time. Now I am trying to do this (I-PPI-P.2).

He thought he was more a coach than a physical education teacher and had not embraced educational purposes. He combined his role as a professional physical education teacher with that of coach. Since the role of a coach is so different from a physical education teacher in aims and purposes (at least in the Hong Kong context where some of the new education-centered coaching philosophies have not yet had impact), this combined role inevitably had negative effects on his professional development as a reflective educator. It was not surprising to find he focused on sport skill, teaching and training as a normal coach would do. Other researchers have similarly revealed that success at sport is often one of the main
reasons why many physical education teachers take up the profession (Hendry, 1975). As such a case, the educational value of physical education hardly came to mind with Ku even after interventions. Even when the educational values of physical education entered his thinking he made little effort to relate them to physical education. His development in physical education was constrained rather than enhanced by these attitudes and his professional development occurred at a crawl. At the same time it is of interest to note that even his three years professional physical education teacher training, including teaching practice supervised by experienced educators in the Hong Kong Institute of Education had failed to change, erode or make more comprehensive his coaching ‘philosophy’ and belief.

4.5.3 School Context

This was Ku’s first year of teaching. He worked in a government-aided primary school, which had been founded more than fifty years. The school was located in a village in Fanling (a new developed town in the New Territories). It was a bi-session school (i.e. morning and afternoon session). The children came mostly from lower class families. The pupils’ academic standards were below average for the whole sector.

The school culture also had a profound influence on Ku especially on the way he approached physical education. He completed his primary studies in the school he was teaching in and he was well accustomed to the school culture. The school had a strong sporting tradition and had achieved good results in inter-school
competitions. The school's physical education teachers invested a lot of effort in training and preparing their pupils for competitions in order to get good results. Given the school's influence and the expectations of his colleagues it was not surprising that Ku diverted his attention to sport activities rather than staying focused on the educational purposes of physical education. He taught physical education in the morning while taking sport training and competition preparation as well as taking six or seven school sport teams to inter-school competitions in the afternoon. Thus, his attention was inevitably diverted from physical education to sport skill training. The school culture was pulling him further towards sport rather than nurturing the value of physical education.

His past experience in the school gained from his former physical education teachers also had a negative impact on his professional development as a physical education teacher. His six years of primary education in a school having a strong sporting culture lead him to believe that sport skill teaching and training were all important in physical education teaching. As a new physical education teacher it was natural for him to model himself on his former physical education teachers and follow in the foot steps of his colleagues in the school. He focused on sport skill, just as his former physical education teacher had done. He trained his pupils in the way he was trained. He was as serious about inter-school competitions as were his previous teachers in his primary school years. Some of his former physical education teachers, were now his colleagues in the school and were models for him to follow. We can conclude then, that his past experience in schooling and his former teachers had seriously affected the way he approached teaching and his professional development, though not in the direction of
becoming a reflective educational practitioner.

4.6 Relationships between Reflective Thinking and Teaching Quality

The above analysis has suggested that there is a relationship between reflective thinking and teaching quality. For Yum, Chung and Shan, who clearly displayed reflection in physical education, there were corresponding changes and improvement in the quality of their teaching; echoing the views of Valli (1992), Tinning (1993; 2002), LaBoskey (1994), Korthagen and Kessels (1999) that reflection and change can go hand in hand. However, it is important to note that these changes and improvements in quality were focused largely on the technical aspects of teaching (such as teaching skill, teaching technique, class management and teaching effectiveness) rather than across the whole frontier of teaching quality. This was in line with their reflection on physical education which also remained focused mainly at a technical level. Teaching quality relating to the educational values of physical education and ethical, social issues remained largely untouched. One may safely assume the participants could only make behavior changes on issues they could think of, or recognize, and since their reflections were mostly at the ‘technical’ level it was natural to expect there would be little, if any, change or improvement in teaching quality with respect to deeper educational values of physical education. However, this is not to suggest, or even hint, that beginning teachers such as Yum, Chung and Shan can not change or improve in teaching quality with respect to educational values. The data in this study merely indicated Yum, Chung and Shan had not yet displayed changes or improvement in teaching quality with respect to such values.
This finding stimulated my interest to uncover the underlying reasons why teaching quality with respect to educational values remained untouched by the participants. What prohibited them from engaging in reflection on educational values? It became increasingly apparent to me that one cannot provide an answer to the above question without an understanding of the social factors and mechanism affecting reflection and its improvement in its authentic settings. In this study, several factors such as the quality of professional training, levels of confidence, the culture of the school, were all important in determining the opportunities for improvement and change. The mechanism of how these factors affected reflection and its development were also revealed and will be discussed in detail in the next chapter.

4.7 Summary of the Chapter

Having compared the changes in reflective thinking and teaching behavior that have occurred thus far, the participants were divided into two groups. Chung, Yum and Shan belonged to one group as they had demonstrated improvement in reflective thinking and changes in teaching behavior while the other group, consisted of Ku only, as he displayed little or no change or development in reflective thinking and teaching behavior. The data suggested their personal beliefs and attitudes towards physical education teaching were major factors contributing to the differences perceived in reflective thinking in combination with a range of 'school factors'. It was highlighted that Chung, Yum and Shan's reflective thinking was focused largely on practical and technical matters. Only occasionally did Chung reflect at a critical level. In this respect we can say that their reflective
thinking had reached an important but 'low level'. Chung, Yum and Shan were beginning physical education teachers, they were at an early stage of the learning curve. They all experienced problems in their teaching and they had to overcome these, hence their reflective thinking focused on immediate practical and technical issues.

Chung, Yum and Shan reported that the reflective thinking intervention had positively influenced their thinking. They indicated that they could reflect more deeply on problems and more comprehensively. They had made changes in their teaching behavior as a result of their reflective thinking. Although most of the changes of Chung, Yum and Shan were different, it is important to note that there were several common elements in the changes made. They all tended to become more child-centered. They also took pupils' ability into consideration. They were more aware of the pupils' performance and responses in their classrooms. At the same time they also attempted to plan or modify their teaching content. Probing further into their development as reflective teachers, it was revealed that Shan lagged a good way behind Chung and Yum in changing her teaching behavior. It was suggested this was due to Shan's limited knowledge and expertise in physical education and sport and difficulties (limited support from) her school context. On the whole, Chung, Yum and Shan had changed after the intervention and it has to be acknowledged that these changes were at least in good measure a product of the intervention programme and the participants' willingness to change.

Further investigating the background of the four participants it was revealed there were several contextual factors affecting their development as reflective teachers
Findings

which influenced their capacity to change their teaching behavior. It was found that the colleagues of the participants had affected their development as reflective teachers. Chung and Yum received positive support from their colleagues and they made the best advances in reflective thinking and behavioral change. However, in Ku’s case, his colleagues were also supportive but not towards the development of more educational thinking and practice. Instead of helping Ku to make progress as a physical education teacher, they channeled Ku further away from this goal. In this context, the powerful culture of coaching and the importance placed on sport performance seemed to prohibit opportunities for reflective thought and action. In Shan’s case, the conservative attitudes of her more experienced colleagues (including the Principal) were negative and served to hinder Shan’s development in reflective thinking and changes in teaching behavior. Clearly, the schools’ culture had an important effect on the participants. It was further suggested that the previous physical education experiences of the participants also had an effect on the development of the participants. The positive physical education experience of Chung and Yum was the driving force behind their quest for improvement. By contrast Shan did not want her pupils to repeat her bad experiences of physical education and sport hence she wanted to improve her physical education teaching. Ku merely tried to reproduce his past experiences with his pupils which was to offer training or coaching to become a sportsman for inter-school competition. In the next chapter, I will develop the issue raised by this data and analysis.
CHAPTER FIVE

DISCUSSIONS

5.1 Introduction

This chapter discusses the relationships between personal/biographical and school factors and reflective thinking. As the research has developed it has become increasingly clear that we cannot understand reflection outside of the context in which it occurs. In Chapter two we noted that the literature on 'reflection' has, perhaps, far too little to say about context and culture. This chapter by contrast, focuses in particular on the reasons why Yum, Chung and Shan's reflective teaching remained at 'low levels' of development. The chapter will be divided into the following four parts: (i) relationships between the desire for professional development and reflective thinking; (ii) relationships between personal and professional qualities and development in reflective thinking; (iii) relationships between school context and development in reflective thinking - touching on relationships between school culture (including in Ku's case, sporting culture), school physical education curriculum, the influence of colleagues and the school Principal on reflective thinking; and (iv) why Yum, Chung and Shan's reflective teaching was not able to develop beyond a 'low level'.
5.2 Relationships between the Desire for Professional Development and Reflective Thinking

Data from this study strongly suggests that Yum, Chung and Shan were eager learners and earnest physical education teachers. They indicated that all three teachers desired to improve themselves in physical education teaching and become ‘good’ physical education teachers. Each demonstrated development in reflective thinking having participated in this study, though Shan’s development lagged some way behind that of Yum and Chung. Ku’s case, in contrast, rested at the other extreme. He combined the role of physical education teaching with sport coaching and showed no sign of development in reflective thinking throughout this study. This strongly suggested that a participant’s attitude towards physical education teaching was an important factor affecting his/her development as a reflective practitioner. Physical education teachers having the desire to become good or better ones showed progress in the development of reflective thinking, especially after engaging in the interventions. On the other hand, physical education teacher having little or no desire to self-improve and enhance their physical education teaching displayed little or no development in reflective thinking, despite the intervention.

Moon (1999) has emphasized that we reflect for a purpose. Research on reflective teaching has suggested that by engaging in a process of thoughtful reflection, teachers can improve their teaching (Gore, 1990; Rovengo, 1992). Some have gone further to suggest that reflective teaching could be used as a tool for teaching improvement (Cruickshank and Metcalf, 1993, Glen, 1995). Yum, Chung and
Discussions

Shan were novitiate teachers in the very early stages of their professional development. They wanted to become good physical education teachers and this desire drove them to improve themselves. They wanted to acquire the means and tools to achieve this, with or without the aid of my interventions which were seen to offer a form of mentoring support which, it was hoped, would promote reflective thinking and improve their teaching. Yum, Chung and Shan reported they had become more aware of their shortcomings through engaging in reflective thinking interventions and they had changed their behaviours accordingly to improve themselves. It had seemed natural for them to adopt reflective teaching having experienced early on the self-improving power of reflective thinking.

Ku was at the other end of the spectrum. Throughout this study he showed neither interest in improving his physical education teaching, nor any sign of development in reflective thinking and teaching. It would be reasonable to expect beginning teachers to want to develop their teaching, or at least to show some signs of having developed and improved after taking part in reflective thinking interventions for a reasonable length of time (about 9 months in this study). It was commendable that Ku had spent time participating in this study even though he was extremely busy with sport skill training. However, despite the interventions, he remained unchanged in his thinking and actions and showed no sign of becoming or wanting to become a more reflective thinker. Ku was heavily engaged with sport training with his pupils after normal school hours and he led several school sport teams into competitions while displaying relatively little interest in the development of his physical education teaching. His focus was diverted away from an analysis of physical education teaching to coaching. In his own words, he indicated he wanted
Discussions

to select suitable pupils for sport skill training and train them to become athletes to represent his schools and eventually Hong Kong in sport competitions. In other words he wanted to become a successful coach rather than a physical education teacher. Indeed he had reduced the role of a physical education teacher to that of a coach. His focus was on coaching, skill training and selection, rather than physical education teaching and its educational values. It was extremely difficult, if not impossible, to motivate an individual such as this to advance in a direction he did not believe, or take pride in. Ku could not be motivated via reflective thinking interventions towards development or improvement in physical education teaching, because his primary concerns were sport skill training and making his dream come true vicariously via the actions of his most 'able' pupils. Although reflective teaching can be used as a tool for teaching improvement, it is meaningless for teachers, such as Ku who have no desire to engage in an analysis of educational processes or improve their teaching. This is not to suggest that Ku was not a good coach or a caring professional. His actions simply illustrate that unless individuals are prepared to adopt the philosophy of 'reflective teaching' and its educational aspirations, interventions of a kind tried in this study are unlikely to succeed.

Research has revealed that teacher education does not greatly change earlier ideas about teaching (Lortie, 1975, 2002) and has little impact on the values, beliefs and attitudes that students bring with them into teacher education programs (Zeichner and Gore, 1990). Ku's case is a good illustration of this. Although the importance of educational values and relevant educational theories were taught in the Physical Education teacher training programme offered by the Hong Kong Institute of
Discussions

Education, these did not significantly change the belief of the participants or their attitudes toward physical education teaching, especially in the case of Ku. In this study it was found that the attitudes toward physical education teaching of the participants were, by and large, the 'product' of their own experiences in physical education lessons when they had attended primary and secondary schools. On the one hand, these past experiences in physical education lessons led Yum, Chung and Shan to improve their physical education teaching when they became physical education teachers, while on the other hand they led Ku in the opposite direction and, as far as physical education teaching was concerned, towards a negative end.

Yum, Chung and Shan had met physical education teachers that they considered 'good' at different times in their primary and secondary education and these good teachers had greatly influenced their attitude towards physical education teaching in the positive direction. They admired them and either consciously or unconsciously had wanted to become, like them, a 'good physical education teacher'. These teachers had become role models for Yum, Chung and Shan to follow. They were inspired by these teachers to becoming good physical education teachers themselves. This was their common goal and achieving this became a driving force that pressed them to improve.

Yum, Chung and Shan had also developed visions of their own derived from their own experiences in physical education lessons. Yum and Chung wanted to replicate amongst their pupils the pleasures that they had experienced as children in them. Yum had enjoyed many good experiences in physical education lessons throughout her primary and secondary school years. She had learned a great deal
and sharing her good experiences of physical education with her pupils and wanting her pupils to learn something in it, as she had done, were her visions when she joined the teaching profession. Chung also enjoyed physical education lessons in his schooling. He admired the harmonious relationship between physical education teachers and their pupils and wanted to achieve the same in his physical education teaching. Shan’s case was very different from Yum and Chung’s. Shan had not had a good experience in her physical education lessons, she was weak educationally and especially in the development of sport skills. She did not want her pupils to learn nothing from physical education lessons as she had done. It was her vision to help all her pupils learn and develop in physical education. These visions had become the goals that all three teachers wanted to achieve and they were willing to make the effort to achieve them. They provided another driving force pressing them to improve their teaching and engage in reflective self development.

In contrast to Yum, Chung and Shan, Ku’s past experiences in physical education lessons had not inspired him towards developing his role as a physical education teacher. Rather, his past experience had propelled him away from the pursuit of educational ideals. He had attended a primary school having a strong sporting culture. During six years there he gradually developed into a ‘top’ sportsman and enjoyed this success. Winning in competition had become his primary goal and was deeply imprinted in his mind. The value of ‘education’ in physical education was a secondary concern or not even a concern. He then attended a secondary school which also had a strong sporting ethic. This served to further strengthen his view that sport skill training was the equivalent of doing physical education.
Though he was introduced to the educational values of physical education teaching in his teacher training programme, it seemed to be of little importance to him and his thoughts were filled with the prospect of engaging in the kind of sport skills training with his pupils that he had enjoyed in his physical education lessons as a child. Some of his former physical education teachers, now his colleagues, were also focused on sport skills training and provided a conservative model for Ku to follow. There was no incentive for Ku to expand his horizons, or think about improving his approach to physical education. It was, therefore, unsurprising that Ku displayed little or no reflective development, or change in his teaching, as he did not have the desire to adopt the approach of an educationalist, at the expense of being a coach, in physical education.

When we compare the four participants it is evident that the development of reflective teaching is, to some considerable extent, strongly determined by the participants’ attitude toward physical education teaching (see also Curtner Smith and Sofo, 2004). Where there is no desire to improve the educational aspects and aspirations of physical education teaching, there is little discernible development in reflective teaching. The data also suggest that the desire to improve physical education teaching is strongly affected by participants’ past experiences in lessons and the peer group culture of the departments or schools that they attended.
5.3  Relationships between Personal and Professional Qualities in the Development of Reflective Thinking

Yum and Chung were eager and earnest learners and both had the desire to improve their teaching. They had enjoyed their previous experiences of physical education lessons as pupils and pupils and had experienced 'good' teachers who they could model and follow. The schools they worked in had warm working atmospheres and they received help and support from their colleagues and / or senior staff. These were text book type ideal settings and it was delightful to observe them. Over the course of the intervention study Yum and Chung had made significant improvements both in their capacity to engage in reflective thinking and in their physical education teaching. By contrast, although Shan also had a strong desire to improve her reflective thinking, her development as a reflective practitioner was less even and marked than that of the other teachers. During the study Shan demonstrated developments in her thinking and improvement in her teaching, though, by contrast with that of Yum and Chung, this had occurred painfully slowly. The personal and professional factors that slowed Shan's development as a reflective thinker were laid bare in this study and are discussed in some detail below.

The data strongly suggested Shan's development as a reflective practitioner was slowed by her limited training and experience of teaching. Shan could see for herself that there were problems in her physical education teaching (see Section 4.4.2). Her own self-evaluation checklist after lessons revealed lack of confidence, even fear of physical education lessons and my lesson observations corroborate
this point. The first few years in teaching are crucial to beginning teachers in which they go through a process of transition from student to teacher. Shan, like a good many other beginning teachers, focused on the immediate problems that she was facing, especially those of control and management, and attempted to solve them. It was, therefore, unsurprising that her reflection concentrated primarily on what she had accomplished in lessons and how it could have been improved. Her reflective thinking took place mostly at a 'technical level'. By contrast Yum and Chung had already achieved a high quality of teaching and had perceived few problems in their physical education classrooms. The stage for further development in reflection was set for them. In this study they demonstrated more reflection at a practical level, Chung even reflected occasionally at a critical level. Given their experience of physical education it was no surprise to observe that Yum and Chung had made significant development in their capacity to reflect while Shan found it very difficult to do so. Plagued as she was by problems in her physical education teaching she lagged behind the others in her capacity to either engage in or develop her reflective capacities.

Shan's lack of knowledge of physical education, her lack of confidence in physical education teaching (see Section 4.4.2 and 4.4.4.2) as well as limited sporting proficiency, combined to further impede her development as a reflective practitioner. Having revealed in the last chapter that personal and professional qualities prohibited and slowed her professional development, we now need to probe deeper into their relationship with the development of reflective thinking.
Earlier I suggested that inadequate knowledge of the subject matter of physical education had hindered Shan’s capacity to think and self-evaluate in the process of reflection. Reflective thinking involves, but is not limited to, asking oneself questions and making self evaluations. Cruickshank and Applegate (1981) suggested that reflection helps teachers to think about what and why things happened. Valverde (1982) suggested reflective thinking involved asking basic questions of oneself. Shulman (1987) further suggested reflection involves “reviewing, reconstructuring, enacting and critically analyzing one’s own class performance.” Providing oneself answers to these questions is a thinking process.

If there are problems in the thinking process, inevitably, reflection is adversely affected. Answering factual questions, such as what has happened in a physical education lesson involves recalling facts from memory. It is more a work of memory than thinking. There are well known means, such as video taping lessons and reviewing them at a later time and journal writing that can facilitate ‘memory work’. Answering analytical questions, such as why things happened (why couldn’t the pupils learn?) is demanding thinking and intensive work. Individuals have to be able to answer analytical questions if they are to achieve developments in reflective thinking, especially at a practical and critical level. To be able to answer analytical questions an individual has to have a thorough knowledge and understanding of the relevant subject matter of physical education (such as motor development, teaching objectives, teaching content, etc.). Knowledge of physical education values as well as relevant subject matter can be used as a guideline or ruler for individuals to answer these questions objectively and to evaluate themselves. Being knowledgeable will enable individuals to think thoroughly, to self evaluate and answer analytic questions in detail. Knowledge understanding of
the values of physical education and its relevant subject matter is needed if meaningful, high quality, reflective thinking is to take place, especially at practical and critical levels.

Shan's reflection was plagued by her limited knowledge of physical education subject matter. Unlike most other physical education teachers she became a physical education teacher because of her unfavorable examination results rather than love of sport activities or the influence of significant adults during her primary and secondary schooling. It would be interesting to further interrogate why Shan, who was so weak in sport skills, chose to become a physical education teacher but it is beyond the scope of this study. Against this background we can speculate that as Shan did not view herself as a prospective physical education teacher in her primary and secondary schooling she did not learn to become a physical education teacher (Feiman-Nemser, 1983) or enjoy an 'apprenticeship-of-observation' (Lortie, 1975) during this time and familiarise herself with relevant actions, values, strategies and other subject matter. Furthermore, her past experience in physical education was not positive. She further indicated she knew little about physical education after completing secondary schooling and had learned very little about its subject matter during these years. Furthermore, pre-service training in physical education was inadequate to prepare Shan for physical education teaching. She took a two year certificate teacher training course at the Hong Kong Institute of Education (see Appendix 1-3) and one elective (choosing one from physical education, arts and crafts, music and English Language). The physical education elective was merely one among four domains / areas (Professional studies in education, curriculum studies, general studies and the
Discussions

elective, physical education) in the teacher training course. The time available for physical education teacher training was very limited and deemed insufficient. To make matters worse a large part of physical education teacher training was devoted to sport skill training. Teaching time for the subject matter of physical education besides sport skill training was far from adequate and could not prepare Shan as a capable, educationally informed, physical education teacher. Her negative past experiences in physical education, her inadequate physical education teacher training and knowledge and understanding of physical education teaching were consequently reflected in her perspective of herself as a physical education teacher (see Section 4.4.2). Armed only with limited knowledge and understanding of physical education subject matter, her ability to self-evaluate and to ask and answer basic questions of herself was impeded. This slowed and sometimes prohibited altogether further advancement in her ability to reflect even at technical level.

Reviewing and critically analyzing one’s actions involves identifying both the positive and the negative factors that facilitate or prohibit actions. In other words reflection involves an identification process. An individual has to persist with positive actions and factors while, at the same time, taking corrective actions against the negatives ones in order to improve oneself. Thus identification process is especially important for individuals’ professional improvement and development. Identifying negative actions and factors could be viewed as a process of problem identification. Individuals have to be able to identify the problems they are facing before they can take appropriate remedial action and improve themselves. However, this study revealed that there was no guarantee that
individuals could always ‘correctly’ identify problems that they were facing. The ability to identify problems was clearly of fundamental importance in reflection, especially for teachers such as Yum, Chung and Shan, whose reason for engaging in reflection was professional development. It is not too difficult for an individual to discover surface problems if she or he is willing to spend time and effort reviewing what has just been accomplished in teaching. However, individuals need to uncover underlying problems for reflection to occur at a higher level. But how can an individual effectively and professionally identify underlying problems if they do not have a thorough understanding of professional knowledge in the relevant subject area, in this case physical education? Since Shan had limited training in physical education and an inadequate knowledge of the subject area it was reasonable to expect that her ability to identify underlying problems would be weak and her development in reflective thinking was hence impeded.

It was further suggested that Shan’s weakness in sport skill proficiency had adversely affected the thinking and identification processes mentioned above, further slowing the development of her reflective thinking. She was, after all, a beginning physical education teacher. Although there are many aspects to physical education teaching, a large part of Shan’s teaching was devoted to sport skill teaching such as teaching pupils how to play rope skipping and basketball. Sport skill teaching and related issues made up a significant part of her reflection. However, in order to answer basic questions and evaluate herself with respect to teaching sport and skill issues, such as how well did the pupils learn a particular skill or why the pupils could not play the sport correctly, or whether there were alternative methods of teaching the sport or game. Shan needed to be, if not
skillful, then certainly very knowledgeable. Lacking both sports skill and knowledge limited her development as a physical education teacher.

Reflection does not merely consist of thinking, or asking and answering basic questions of oneself, identifying problems and taking into consideration positive and negative actions and factors, and their consequences (Dewey, 1933). It is suggested that in reflection an individual should be able to make rational choices and be responsible for those choices (Ross, 1987). Therefore, one might say reflection is associated with choices of actions and executing the chosen actions. The choosing of actions and executing the chosen actions are important, integrated parts of reflection. There would be no improvement in physical education teaching and professional development for an individual if no action was chosen and executed. In other words 'reflection' would be meaningless to an individual (in this study Yum, Chung and Shan) who employed it as a tool for improvement and development, if self-evaluation and problem identification were not followed by choosing and executing appropriate actions. It was, therefore, to be expected that if actions chosen could not be executed, acted upon, or were hindered, all subsequent progress in the reflective thinking process would be impeded. It was further argued that the actions chosen and the execution process could both also be adversely affected by the individual's knowledge in physical education and their sport skill proficiency.

Writers as diverse as Dewey (1933), King and Kitchner (1994) and Moon (1999) have each suggested that reflection involves mental processing on issues that have no obvious solution. In other words, it would be unlikely that there would be a
single or definite answer to an issue reflected upon by an individual. It could also be that there might be more than one solution to an issue or problem identified in a reflective process and that a practitioner had then to choose the most appropriate or what appeared to be the most appropriate solution for implementations.

Knowledge of physical education and sport skill proficiency blended together to both give form and set limits to the choices available to individuals. The conceptual tools that individuals could call on and choose to use to effect change were limited by the range available in their conceptual toolboxes. Likewise, the choices of actions available to individuals were limited by their knowledge of physical education and their skill in sport. For example, Shan discovered that her lessons in teaching rope-skipping were considered boring but that choosing an alternate method to teach rope-skipping was impossible because she had not been provided with alternatives in her teacher training, nor did she have skills to do well at rope-skipping herself. She could not simply ‘choose’ more appropriate forms of action because she had neither the skills nor the knowledge so to do. Tell (2001) stated that in her view, good teaching relied on whether teachers have a deep and flexible understanding of what they are teaching.

Once an individual has discovered the range of action available to them, the next question would be how to choose the ‘right action’ in respect of the perceived problem. Dewey (1963) claimed that reflection might lead to positive or negative results. In other words, reflection did not guarantee that the actions an individual choose to implement would improve their teaching or bring about positive learning outcomes. An individual could choose the correct actions and, equally well, make
the wrong choices from those available. This issue was further complicated for beginning physical education teachers, such as Shan, who did not have much practical experience to call on to aid decision making. Researchers (Lortie, 1975, 2002; Deal and Chatman, 1989) have suggested that beginning teachers learn mostly by trial and error. They trial chosen actions from what is available and implement the chosen ones. There would be errors (failures in choosing the appropriate actions and/or implementing chosen actions correctly.). It might safely be assumed that if one knows the subject well then one has a better chance of taking the 'right' actions. By the same token experienced individuals have a better chance of choosing appropriate actions to improve their teaching in physical education if their knowledge of physical education is good. Positive outcomes from reflective teaching serve to motivate this further development and improvement. This formed a positive feedback loop and promoted reflective thinking in the cases of Yum and Chung. By contrast, a limited knowledge of physical education lowered the chance of choosing the appropriate actions, that is, it was more likely to lead to an 'inappropriate' choice and no improvement or even harmful results. In such cases one had to make a second or more trials in order to put things right. For example, Shan chose to teach rugby with lower primary pupils on a concrete playground which could be considered an inappropriate choice of action. She was stopped by her Principal (i.e. no improvement) and she had to make another choice of action. Or, again, she chose to teach rope skipping, which was thought to be beyond the normal capacity of her pupils and did not produce the outcome she desired. Such events would be expected slow an individual's reflective development, as happened in the case of Shan.
Shan approached the final hurdle in her path toward professional development via reflection after struggling through the obstacles mentioned above. The final hurdle facing Shan was to execute her choice of actions. Execution of chosen actions was a very important step in the process of reflection. It meant changes in teaching behaviours. However it is worth noting that choosing appropriate actions did not automatically imply that changes associated with them would bring about improvement in teaching. This depended on how well these changes were implemented.

Shan’s reflection remained essentially at a technical level; her teaching and the problems she identified and her choice of actions and associated changes were focused mostly on the skill elements of her teaching. The changes that Shan could introduce into her teaching of skills were adversely affected by her limited sport skill proficiency. Her lack of confidence in physical education teaching then came into play as a negative force to further reduce the effectiveness of the changes in her teaching. Even though Shan might make the correct choice of action, the changes in physical education teaching made might not produce the positive results she expected due to her lack of confidence in physical education and limited sport skill proficiency. Shan’s lack of confidence in physical education teaching meant that she easily developed self doubt that further reduced her confidence in reflection when the changes made did not produce the desired positive results. This formed a cycle of failure and a negative feedback loop which inhibited further developments in reflective thinking. Shan’s case serves to illustrate well a complexity in the relationships between professional knowledge,
skill and organizational context, that is not always fully recognized in the literature on reflective teaching.

5.4 Relationships between Reflection and School Context

5.4.1 Introduction

Schools are microcosms of society. Each is unique even though it might be situated physically next to another. A school has its own culture, ideology, strengths and problems. The composition of the school’s teachers and pupils will be different for different schools. Lawson (1989) points out that a school is a workplace that processes both its teachers and pupils. It is, therefore, understandable that the behaviour of teachers and pupils in a school are affected and altered by workplace conditions and may have a profound effect on teachers’ professional development. Various researchers such as Lortie (1975, 2002), Van Maanen and Schein (1979), Lawson (1983a, 1983b, 1989), Lawson and Stroot (1993), Templin (1986, 1989), Zeichner and Gore (1989), Liston and Zeichner (1990), and Sparkes (1992c) have expended much effort trying to explore how teachers are affected by the workplace conditions of schools. Their efforts have yielded some understanding of the relationships between workplace conditions and teacher actions. For example, Van Maanen and Schein (1979) and Lawson (1983a, 1983b, 1989) have documented the mechanisms by which teachers are socialized into school culture and sub-cultures; how teachers respond differently to such processes; how colleagues exert conflicting pressure to influence fellow teachers (Carew and Lightfoot, 1979; Metz, 1978); and how teachers’ work is influenced
by significant evaluators (Zeichner and Tabachnick, 1983, Connell, 1985). From this research it is reasonable to conclude that the professional development of teachers, especially beginning teachers, such as the participants of this study, is likely to be strongly affected by a school’s workplace conditions. As we have seen, Yum, Chung and Shan employed reflection as a tool to aid their professional development as teachers. It was observed that the nature and content of their reflection was affected by the cultures of the schools in which they worked. The dynamic interaction between each school’s ‘culture’ and the development of their reflective thinking will be discussed below. Although the relationships between personal and professional qualities of the participants and the development in their reflective thinking were discussed fairly independently in section 5.3, there was clearly a complex interplay between these qualities and school contexts. The nature and complexity of this interplay will also be discussed below.

5.4.2 Effects of the physical education curriculum on reflective thinking

The study has suggested that the physical education curriculum and the way it is implemented in some schools can create ‘role confusion’ between physical education teaching and sport skill coaching (see Chapter 4). This, for example, had led Ku away from physical education teaching and strengthened his belief in sport skill coaching to a degree that prohibited development in reflective thinking. It had also reduced Shan’s attention to the educational components of physical education teaching and pushed her towards teaching sport skill. She was increasingly adopting the role of a coach rather than that of the physical education teacher she was supposed to be. The proposed curriculum for physical education in the
Discussions

primary school (see Appendix 5-1) suggested by the Curriculum Development Council, (Curriculum Development Committee, Hong Kong 1995). Education Manpower Bureau (EMB, former Education Department) of the Hong Kong Government called for teaching several sport skills (athletics, games, gymnastics, dance and swimming) and the need to transmit 'the values of physical education' through teaching sport skills. The EMB specified what sport skills a school should teach but not the 'values of physical education' which were left to the school to interpret and the physical education teacher to implement in physical education lessons. In practice physical education lessons were usually grouped into units (usually 4 - 6 lessons in a unit, 35 minutes per lesson) and one sport skill would be taught in a unit. Alternatively, schools could adopt two units at the same time so that two different areas were taught respectively during the two physical education lessons of the week. Though teaching objectives in physical education were apparently stated in the Syllabus for Physical Education in Primary One to Six (see Appendix 5-2), it was left to the individual physical education teacher to decide how to incorporate values into physical education lessons. The way physical education lessons were organized tended to make it very difficult for teachers to realize these aims. A typical physical education lesson in a primary school was allocated a 35-minute session. This had to include lining up in the classroom, walking to the playground/gymnasium, packing up after the lesson, lining up again and returning to the classroom. Allowing time for a 'warm up' and 'closing activities' teachers had merely twenty minutes available for physical education teaching or practicing skills and movement in each 35-minute physical education lesson. The size of the class in primary schools in Hong Kong further worsened the situation. A typical class in a primary school has around thirty-five to forty pupils.
This meant a typical physical education teacher had to teach thirty-five to forty individuals from different backgrounds and different abilities in learning sport skills, in a short twenty minute session devote most, if not all, of the time available to teaching sport skill. Any observation of physical education teachers discharging their duties would conclude that they were coaching sport skills in their schools rather than teaching physical education. These institutional circumstances, particularly the pressure to deliver 'skills', were a major contributor in Ku and Shan mixing their role as professional physical education teachers with sport skill coaching. All four participants had to spend most of the time not in physical education teaching but teaching sport skills, with adverse effect on both the physical education curriculum and their reflective thinking. These adverse effects on Ku and Shan were much more severe than on Yum and Chung, as we argue below.

Ku taught sport skills in physical education lessons and coached different sport teams after normal school hours. In his eyes there was virtually no difference between physical education teaching and coaching sport skills, except that he had to coach thirty-five to forty pupils in physical education lessons whereas class size was usually much smaller in sport skill coaching. Ku conflated his role as a professional physical education teacher with that of a coach in physical education lessons as well as training sport teams for competition after school. In this process the physical education curriculum and how it was implemented in school served to strengthen Ku's belief that physical education was equivalent to sport skill coaching and it led him further away from the educational elements of physical
Discussions

education teaching and toward sport skill coaching. It had also stopped him engaging in reflective thinking in physical education, as outlined in Section 5.2.

It was further suggested that the strong skills element in the curriculum of physical education and how it was implemented in Hong Kong had diverted Shan’s attention away from physical education values and channeled her toward sport skill teaching, limiting her development in reflective thinking. Like other physical education teachers in Hong Kong she had to devote most of the time available for physical education teaching in teaching sport skills. Consciously or unconsciously Shan’s attention in physical education teaching was increasingly directed away from physical education towards sport skill teaching. Like Ku, Shan combined the role of a professional physical education teacher with that of a coach. Her development as a reflective thinker was obstructed by the narrow emphasis of the physical education curriculum that interacted with her poor sport skill proficiency, lack of confidence in physical education teaching and problems in physical education teaching. As Shan’s attention was directed to how to teach sport skills or related matters in physical education lessons her reflection in physical education was also channeled to technical matters such as how to make her pupils learn the skills of rope skipping. Her reflective thinking was slowed by these factors.

The physical education curriculum and its implementation also acted in concert with Shan’s vision of physical education to further impede her development as a reflective practitioner. Shan indicated she ‘wanted to teach her pupils something in physical education’, such as, how to master certain types of sport skill and acquire knowledge of physical education. It was this vision that drove Shan forward to
develop her reflective thinking. However, it was suggested that the same vision that drove Shan forward to improve herself and develop reflective thinking impeded and placed limits on her capacity to develop reflective thinking. Shan’s attention in physical education teaching was drawn away from educational values and toward sport skill teaching. In this context her vision became ‘teach pupils sport skills in physical education lessons’. Her vision was being distorted by the demands of the curriculum and her limited skills as a teacher. Her efforts guided her steadily toward sport skill teaching and further away from physical education teaching and educational values. Therefore it was not surprising to observe that Shan’s reflective thinking was narrowed and concentrated mostly on sport skills teaching and related organizational matters.

Like Ku and Shan, Yum also had to devote most of the time available for physical education teaching in teaching sport skills. However, her development in reflective thinking was faster and the scope of her reflective thinking was broader than Shan’s. Each participant was unique and it is unfair and inappropriate to compare Yum with Shan directly as Yum had problems of her own and did not experience the problems found in Shan’s school. However, as Yum had a vision similar to Shan, she also ‘wanted to teach her pupils something’, it was of interest to investigate why the narrowing effects of the physical education curriculum on Yum were not as serious as in Shan’s case. It was suggested that Yum was also channeled by the physical education curriculum toward sport skills teaching and it was evident from the data collected that her reflective thinking mainly remained at a technical level. As far as her vision of physical education was concerned, to ‘teach her pupils something’, such as how to master certain types of sport skill and
acquire knowledge of physical education, was the primary goal for physical education, a goal shared by Yum. At the same time Yum had a further vision in physical education, to share her enjoyment and experiences in physical education with her pupils that counteracted the narrowing effects of the curriculum and allowed her to make further developments and achieve a broader scope in her reflective thinking. Yum, like Shan, had to invest heavily in sport skills teaching in order to achieve her goal in ‘teaching her pupils something’. At the same time Yum had to curtail her other aims in order to reach her second goal. Yum had to evaluate herself against the second goal hence some of her attention was withdrawn from sport skills teaching toward other aspects of physical education. In this sense her reflective thinking was re-focused on physical education and its values. This encouraged Yum to develop her reflective thinking over a broader range of issues. In summary, Yum, like Chung who had a completely different vision in physical education, had a struggle between the adverse effects of the physical education curriculum and her visions for and beliefs in physical education. On the one hand the physical education curriculum had limited her reflective thinking to a technical level but on the other had ensured that her visions and beliefs in physical education were brought back to physical education values and enabled her to advance her reflective thinking.

5.4.3 Effects of school culture on reflective thinking

Organizational socialization refers to the ‘process by means of which prospective and experienced teachers acquire and maintain a custodial ideology and the knowledge and skills that are valued and rewarded by the organization’ (Lawson,
Discussions

1983a p.4). Lawson further pointed out that organizational socialization is intended to let new teachers learn the school's organizational culture (Lawson, 1989 p.149). In this perspective new teachers are the target for organizational socialization; it is the way in which the school 'helps' new teachers to 'learn the ropes' (Van Maanen and Schein, 1979) and become accepted in and accustomed to the school. In Woods' (1983, p.8-9) view 'culture' represents 'distinctive forms of life, ways of doing things and not doing things, forms of talk and speech, patterns, subjects of conversation, rules and codes of conduct and behaviour, values and beliefs, arguments and understandings'. Feiman-Nemser and Floden (1986, p.315) pointed out that in many studies culture is assumed to 'provide a common base of knowledge, values and norms for action'. Sparkes (1989, p.317) too, has argued that 'culture structures the world we perceive and the way we think'. It is apparent then, that socialization into a school's culture and learning, accepting and internalizing its values and morales, implies that a change in beliefs and teaching behaviours is required. It is, therefore, unsurprising that sometimes there is conflict between a beginning teacher's beliefs and the established school culture; as was clearly demonstrated in Shan's case.

From this perspective it was argued that adapting to the school culture could have a profound effect on the development of an individual, in this case, as a professional physical education teacher. It was therefore further suggested that the participants of this study were beginning physical education teachers at the early stage of their career development and that the school culture affected their capacity to engage in reflective thinking, especially in the case of Chung and Shan who
Discussions

wanted badly to employ reflective thinking as a tool for teaching improvement and professional development.

Although all of the schools in which these teachers worked tried to socialize their new teachers into their culture, individual teachers responded differently to the pressures they met. Some teachers accept, others adapt to the school culture. Lawson (1989) pointed out that some teachers will not accept parts or all of the school culture. Data collected in this study echoed Lawson’s viewpoint. Each school is unique and has its own culture. This study has revealed that the schools that the participants worked at had different cultures and the reactions of the participants to a school’s socialization processes were different and distinct. Ku and Chung adapted well to their school’s culture, however, this did not mean professional and reflective thinking development were facilitated in such contexts, as was demonstrated in Ku’s case. School culture facilitated professional and reflective thinking development in Chung’s case but impeded or inhibited them in Shan and Ku’s cases. The details of how school cultures affected the development of reflective thinking among participants are discussed below.

When one looked into Shan’s case we witnessed a struggle between school culture, or, more precisely, the physical education department’s culture within the school and Shan’s belief in physical education. The school in which Shan worked had a weak sporting culture. There was only one sport related extra-curricular activity, Chinese dance and even this could be viewed as a cultural activity rather than sport activity. The school did not participate in inter-school sport competitions. Its physical education teachers were either young and beginning or those who had
Discussions

been teaching physical education in the school for a long time. The culture of the school and the department was best represented by the later category of teachers, unwilling to put in extra time and effort and refusing to join the physical education panel, taking responsibility for it in the school. They took a recreational approach in physical education and some of them went even further by teaching only one or two sport skills in a class per year. Shan considered that these physical education teachers did not take pride in being physical educators and they did not take physical education teaching seriously (see Sections 4.4.2 and 4.4.4.2) and showed no desire to learn or improve their teaching resisting change. In other words, the school culture did not take physical education seriously, it was considered a marginal subject. It did not promote professional development in physical education and changes were not welcome. Although the schools and Shan’s physical education colleagues did not deliberately socialize Shan into the school’s (sport) culture, it was evident that the school’s narrow and limited view of physical education had adverse effects on Shan’s development as a reflective teacher.

Shan worked in isolation of the rest of her physical education colleagues and had a high degree of autonomy in what she could do within her classes within the existing curriculum. However, when Shan tried to make or suggest changes beyond this invisible boundary, she immediately met strong opposition from her colleagues and even from the Principal of the school (see Sections 4.4.4.2.1 and 4.4.4.2.2). For example, she wished to introduce a greater variety of sport skills into physical education, however, she had no autonomy in the physical education curriculum and could not do so without the consent of all other physical education colleagues and/or the Principal. Shan’s physical education colleagues represented
discussions

the school's mainstream physical education culture and were against this change. This was not an isolated example but, rather a typical case demonstrating how the school's physical education culture framed Shan's opportunity in this respect. In Section 5.3 of this chapter it was suggested that reflective thinking would be meaningless if it was not reflected in behavioural change. In this study some of Shan's reflective thinking, especially those changes involving her physical education colleagues, were rendered meaningless because she was prohibited from making the corresponding changes. The physical education culture of the school had stopped Shan from making changes, thereby making her reflective thinking meaningless and impeding further development as a reflective teacher.

The school's physical education culture not only made Shan's reflective thinking meaningless, it also deterred Shan from engaging in further reflective thinking on issues that involved herself and her physical education colleagues. On the one hand, Shan realized that she had to implement changes in order to improve her physical education teaching while, on the other, she knew she would meet opposition from physical education colleagues who represented the more conservative physical education culture of the school especially when the changes she suggested involved her colleagues. Although in this study Shan displayed much courage in making or suggesting changes despite the opposition she met (see findings, Sections 4.4.3, 4.4.4.2.1 and 4.4.4.2.2), psychologically the inability to make the necessary changes ultimately cast doubt in her mind and thwarted further changes that involved her physical education colleagues. This process, in turn, deterred her from further reflective thinking.
Van Manen and Schein (1979) have suggested that new teachers may develop custodial, content innovative, or role innovative orientations which are linked to different organizational socialization tactics. In 5.2 of this chapter it was revealed that Shan had a desire to improve her physical education teaching. Data collected clearly pointed out that she refused to accept the physical education culture of her school that did not promote professional development. Instead she chose to develop an innovative orientation and reacted against the school’s physical education culture which she considered undesirable. Shan’s position was made more difficult after she was appointed the officer of physical education by the Principal. Being the officer of physical education in the school Shan assumed responsibility for physical education and this placed her in conflict with her physical education colleagues. Shan’s desire was to lead improvements in physical education and to become a ‘good’ physical education teacher herself. Shan stated that she wished and had tried to make changes to improve physical education teaching in the school. She went even further by trying to cultivate a ‘new’ physical education sub-culture in the school. Shan proposed changes in physical education in the school but her physical education colleagues repeatedly refused to execute them. She found herself in a conflict with her colleagues over the improvement of physical education teaching and felt that she did not have the upper hand. It could be argued that Shan was too ambitious and wanted to make too many changes too quickly. In this sense, she tried to induce a radical change in the existing school’s physical education culture rather than a more gradual evolution, though she was totally unaware of the implications of this strategy. Historically, all revolutions have faced strong opposition from the mainstream culture as well as from those who do not welcome rapid change. Shan’s case was
no exception and she confronted stubborn resistance from her colleagues. Clearly it may have been strategically better if she had taken a longer period of time to evolve change in the physical education culture of the school rather than rebel against it. As it was, her radical strategy had deprived Shan of time and effort and diverted attention from her development as a reflective thinker.

Lawson (1989) pointed out that although all the teachers in a school might acquire the school culture, some would not accept and internalize all or some parts of it and amended or new versions of culture would appear and form the basis for new sub-cultures in the school. Shan’s case echoed Lawson’s viewpoint. Shan did not accept the school’s physical education culture although she did not explicitly express this view. In this study Shan rather than adapt to the school’s physical education culture that she considered undesirable, she attempted to cultivate a sub-culture in physical education among the ‘new’ physical education teachers. Cultivating a sub-culture within a well established mainstream culture is a difficult task. One has to put in tremendous time and efforts in order to achieve this. This further deprived Shan of time and effort to develop her reflective thinking.

Ku’s case was totally different from Shan, though the culture of the school that Ku taught at also adversely affected him. The primary and secondary schools Ku attended had a strong sporting culture. Over many years at these schools Ku was trained to become an athlete and developed a dream that one day he might represent Hong Kong in international sport competitions (see findings, Section 4.5.2). He later realized his dream would never come true so that he decided to become a physical education teacher with a vision: to make his dream come true.
Discussions

through his pupils. After Ku graduated from the Hong Kong Institute of Education he started his career as a professional physical education teacher in the school where he received his primary education, a school that had a strong sporting culture and did well in inter-school sport competitions. Ku was so familiar with school and its sporting culture that there was no difficulty in his being socialized into and internalizing it. He was heavily engaged in preparing sport teams for inter-school sport competitions which indicated that he had immersed himself into the school's sporting culture seamlessly.

Unfortunately, as far as physical education was concerned, the school's sporting culture led Ku to conflate the role of professional physical education teacher with that of sport coaching. The sporting culture of the school also served to strengthen Ku's belief that physical education teaching was equivalent to sport skills coaching. Both the physical education curriculum and the school's sporting culture directed Ku toward sport skills teaching and training. In Ku's world the school became the venue for sport skills teaching and training, and he identified his primary role in the school as a sport coach rather than a physical education teacher. With his attention directed toward sport coaching rather than the educational values of physical education, Ku was not inclined to engage in reflective thinking.

It was further suggested that the school's sporting culture blended extremely well with Ku's vision and diverted him further away from the role of a physical educator. The school's sporting culture provided Ku with an excellent opportunity to select suitable pupils and train them to become athletes in an attempt to realize his vision. There was no incentive for Ku to divert his attention toward physical
Discussions

education teaching and its values, as development as a reflective, professional physical education teacher was in his view at the expense of coaching sport skills, preparing sport teams for inter-school sport competitions. One always reflects for a purpose (Moon, 1999) and in Ku’s case he had no intention to improve in physical education or develop as a professional teacher, therefore it was not surprising that unlike other participants in this study, he did not employ reflective thinking as a tool for improvement. The school’s sporting culture worked hand in hand with Ku’s vision to prohibit his development as a reflective practitioner.

For Shan and Ku, then, their schools’ cultures were negative factors inhibiting the development of their reflective thinking in very different ways. Chung’s case, in contrast, revealed how a school’s culture could be a positive factor facilitating the development of reflective thinking in physical education. Chung reported his school had a strong physical education culture. Physical education was taken seriously by the teachers in the school and measures were taken to ensure that physical education would not be hindered in its development. The school demonstrated its support for physical education by approving funding to purchase the necessary teaching resources for physical education. During interviews Chung indicated that he appreciated the school’s positive attitude toward physical education and adapted to the school’s culture with respect to physical education without any problem. He was socialized into the school’s strong, child centred, educational culture and respected physical education, like the rest of his colleagues. He was encouraged by the school culture to take physical education seriously and was willing to make improvements in it. Chung’s religious convictions further strengthened his desire to do his very best in his work for all
Discussions

pupils. This desire combined with the school's serious attitude towards physical education provided the motivating force for Chung to improve his teaching. It was natural for Chung to adopt reflective thinking as a tool to improve his teaching in physical education after participating in the reflective thinking interventions and, as a result, he had experienced development in his thinking in physical education.

This study, has also revealed that the 'personal' beliefs of participants acted to strengthen or counteract the effects of school culture on reflective thinking. The beliefs of Ku and Chung served to strengthen the effects of school culture on reflective thinking, though in Ku's case it led him away from improvement in physical education teaching whereas, in Chung's case, it paved the way toward professional improvement and reflective thinking. Shan's case was different. Shan's belief in improvement in physical education teaching counteracted the negative influences of the school's physical education culture and kept her on the path toward improvement and reflective thinking in physical education. From this discussion it can be seen that, as far as development in reflective thinking is concerned, school culture could be viewed as a double edged sword. Thus echoes Sparkes's (1989) view that culture can constrain and enable us at the same time. On the one hand it inhibited and impeded development in reflective thinking (Ku and Shan's cases) yet on the other it facilitated development in reflective thinking (Chung's case). As mentioned earlier (and with notable recent exceptions; see Curtner-Smith and Sofo, 2004, McNeill, et al., 2004) there is little in the literature on reflective teaching that adequately teases out relationships such as these.
5.4.4 Effects of colleagues on reflective thinking

A number of studies (Lortie, 1975; Copeland and Jamgochian, 1985; Denscombe, 1985, Templin, 1989) have pointed out that teachers usually work in isolation. Templin (1989) for example, viewed that teachers usually fail or succeed alone. He (1989) further pointed out "teachers rarely engaged in activities where personal and professional support for one another is given or whereby pedagogical problems may be solved" (p.197). In this perspective, it seems, colleagues have little influence on the professional development of a teacher let alone their reflective thinking. However, this is not to suggest that the influence of colleagues should be neglected in understanding how teacher socialization affects reflection amongst teachers and the reflective activity of beginning teachers in particular. In Section 5.4.3 of this thesis it was suggested that the socialization of teachers might have a profound effect on the development of a beginning teacher's reflective thinking. Studies by Denscombe (1980) and Nigris (1988) indicate that the influence of colleagues needs to be taken into account in understanding teacher socialization in spite of an ethos of privacy and individualism within many schools. Templin (1989, p.182) also points out that 'one's colleagues have the potential to be a very important supportive networks'. This suggests that the influence of colleagues needs at least to be considered in understanding how teacher socialization affects the reflective thinking of beginning teachers. This study has unveiled some of the mechanism by which a teacher's reflective thinking is affected by their colleagues. The influence of colleagues is closely tied to the socialization of teachers into a school's culture and practices. However for the
sake of clarity, the mechanisms of how colleagues affect (frame, facilitate and limit) reflection are discussed independently below.

It has been suggested (see findings, Sections 4.4.3, 4.4.4.2.1 and 4.4.4.2.2) that the problematic relationship between Shan and her more experienced physical education colleagues had adverse effects on her development as a reflective teacher. It was evident that Shan did not cross, as far as physical education was concerned, the inclusionary boundary mentioned by Lawson (1989, p.150) and she was not 'accepted' by her more experienced physical education colleagues who represented the school’s mainstream physical education culture. Shan was, therefore, isolated from her more experienced physical education colleagues. She did not accept the school’s conservative mainstream physical education culture and attempted to rebel against it and cultivate a sub-culture of change among the new physical education teachers. In so doing Shan was further isolated by her more experienced physical education colleagues and she also distanced herself from them, though she was not always aware of doing this. She tended to discuss teaching matters with her former classmates at the Hong Kong Institute of Education and the novitiate physical education teachers, colleagues at the school (see findings, Section 4.4.5.2), rather than seeking advice from her more experienced physical education colleagues. It was evident that she received minimal, if any, support from the latter. The transmission of knowledge and experiences from more experienced teachers to beginning teacher in Shan’s case was thus severely impaired. It is, perhaps, the nature of human beings to pass their knowledge and experiences from one generation to another. If this process is thwarted each generation has to re-invent what has been invented and investigate
what has already been discovered and understood. In these circumstances progress is likely either to be slowed or curtailed altogether. In Shan’s case the process of acquiring knowledge and experience from more experienced physical education colleagues was prohibited by the isolation between them. In these circumstances Shan tried to share with and seek advice from her former classmates and her less experienced physical education colleagues and she received psychological and moral support from them in this process. However, they were also beginning teachers and had limited teaching experience to share. Shan received, as far as physical education was concerned, only limited meaningful support and advice on her problems from them and progressed slowly and largely alone. It was evident that without support from her more experienced colleagues she had to rely on trial and error in tackling problems, as most other beginning teachers seem to do (Lortie, 1975, 2002; Deal and Chatman, 1989). Learning and making professional development through trial and error was a slow and painful process accompanied by success and failure. It was discussed in 5.3 of this chapter that Shan’s limited physical education knowledge and sport skill proficiency had adversely affected her choice of actions and the nature of change in her teaching. It is therefore further suggested that the lack of support and advice from her more experienced physical education colleagues combined with her weakness in knowledge and sport skill proficiency pressed Shan to commit much of her time and effort in dealing with the management and control problems she was facing. She simply did not have the time and energy for further reflection and the development of her teaching. In summary, the isolation between Shan and her more experienced physical education colleagues had prohibited the flow of knowledge from more
Discussions

experienced to less experienced teachers and this slowed the development of reflective thinking.

By contrast it was suggested that the colleagues of Yum had promoted her development as a reflective thinker. Yum indicated her colleagues were committed physical education teachers and she appreciated the way they discharged their teaching duties. She further indicated her colleagues were models she wanted to follow. It was therefore argued that modeling her colleagues and becoming as ‘good’ a physical education teacher as they were had become a goal Yum wanted to achieve. Her desire to become a ‘good’ teacher was therefore strengthened by the teaching attitude of her colleagues and hence had led her to embrace reflection and employ it as a tool for professional development.

Earlier in this section it was suggested that recent policy developments in the physical education curriculum and its implementation had adversely affected the development in reflective thinking among the participants. However in Yum’s case the effect of her colleagues had counteracted the adverse, potentially narrowing effects of the physical education ‘National’ curriculum. It was argued that Yum was inspired by her colleagues to become a “good” teacher herself. In order to achieve this goal Yum had to devote time and effort in this direction and she constantly evaluated herself against this goal. While the ‘given’ physical education curriculum had diverted her from the educational values of physical education teaching and channeled her toward teaching sport skill, the goal of becoming a ‘good physical education teacher’ helped direct her attention away from teaching sport skills and toward physical education teaching. In this perspective, reflection
was to be a part of physical education teaching and it allowed Yum to make further developments in her teaching and achieve a broader scope in her reflective thinking.

5.4.5 Effects of the Principal on reflective thinking

Zeichner’s (1983a) research revealed there is overwhelming evidence to suggest that, in general, teachers receive very little direct assistance and advice from their supervisors. Zeichner and Tabachnick (1985) further pointed out that teachers can, if they wish, insulate themselves from some of the directives and sanctions of significant evaluators. From these viewpoints, the Principals of schools appear to have little influence on individual teachers or the development of their reflective thinking. However, one cannot completely discard the effects of perhaps the most significant employee of the school. Zeichner and Tabachnick (1985) and Connell (1985) indicated that significant others (for example, Principals, Inspectors) influence teachers’ work. Goodlad (1983) also pointed out that mutual trust between Principals and teachers and support for teachers by Principals are important elements in healthy school workplaces. As Principals are the administrators of schools responsible for its school’s day-to-day operation, one might expect that their attitudes and experiences of duty will have profound effect on workplace conditions and teachers. From this perspective it is further suggested that the Principal of the school potentially has a profound influence on teachers’ professional development, including their development as reflective practitioners. The Principal of Shan’s school certainly adversely affected the development of her reflective thinking.
In Veal's (1988, cited in Deutsch, 1996) study on the relationship between reflection and school context it is suggested that effective leadership in school is required to nurture reflective thinking and he concluded that administrative authorities must 'create structures that encourage reflection'. The Principal, the most senior administrator in a school, is in a position to provide leadership and support, and hence can be considered, in this context, a factor capable of either promoting or inhibiting the development of reflective thinking. In Shan's case the Principal was a negative factor impeding rather than facilitating the development of reflective thinking.

Shan reported that her Principal repeatedly discouraged her from making changes in her teaching, some of which originated from reflective thinking, others not. It was, of course, the duty of the Principal to stop Shan's proposed changes if they would have negative consequences for the pupils, such as playing rugby with lower primary pupils on a concrete playground. Shan's situation would have been improved, however, had her Principal discussed and refined such ideas with Shan so that changes could be accepted by both and embedded in Shan's teaching. For example, Shan proposed to introduce gymnastics to her physical education lessons but her Principal would not discuss how to minimize the chances of her pupils getting hurt and had simply abruptly disapproved of Shan doing so (see findings, Sections 4.4.4.2.1 and 4.4.4.2.2). The net effect was that she could not implement the changes she proposed and this further impeded the development in her reflective thinking, rendering it meaningless. Furthermore, the inability to
implement changes had deterred Shan from further reflective thinking on issues that required approval and support from her Principal.

Organization management theories suggest that managers have to provide leadership and motivate their subordinates (Robbins and Coulter, 1996) if institutions are to operate successfully. The Principal of Shan's school did not provide appropriate leadership or motivate Shan. He provided material support in physical education, such as approving funding to buy teaching material for physical education. However this was inadequate to motivate physical education teachers like including Shan. In her view her Principal's attitude toward physical education and sport activities was negative. He repeatedly turned down her proposals to improve them and this served to dampen her morale and de-motivated her as a physical education teacher. The Principal had reduced the driving force that pressed Shan toward professional development. And as the driving force for Shan's professional development was reduced, so too was the development of her reflective thinking; a tool that she wanted to employ for professional development was hence badly blunted.

Besides de-motivating Shan, the Principal induced conflict between her and physical education colleagues who represented the school's conservative physical education culture by appointing her as the officer of physical education (physical education panel). The details and the adverse effects of this appointment on Shan's development as a reflective thinker were described in detail in Section 5.4.3. It is worth noting, however, that Shan did not seek conflict with her physical education colleagues as it impeded her development as a reflective thinker, and this may
have been avoided had the Principal not appointed her as the panel of physical education (the subject leader of PE). Studies in the United Kingdom and United States have indicated that teacher isolation is often the norm in schools (Lortie, 1975; 2002; Copeland and Jamgochian, 1985; Denscombe, 1985; Templin, 1986). In this case, 'isolation' had allowed Shan to make changes within her classes free from the interference of the physical education colleagues with whom she was in conflict. The evidence suggests, however, that Shan’s reflective thinking would have developed faster and to a deeper level had she not been made the officer of physical education in the school. The managerial decision of the Principal had inadvertently placed Shan in a hostile environment and had impeded her development as a reflective practitioner. Clearly, the Principal of a school is an important factor affecting the reflective development of its teachers. Unless we acknowledge the dynamic relationship between the individual and his or her institutional context we are unlikely to fully understand the ways in which professional development does or does not occur.

5.5 Reasons Why the Participants’ Reflection Focused Essentially on ‘Technical Matters’

Although Yum, Chung and Shan had displayed different degrees of development in their reflective thinking, all shared one thing in common: their reflective thinking remained focused mainly at a technical level. Earlier in this chapter it was suggested that certain factors, critically the national curriculum, had channeled their attention in physical education teaching towards technical matters (i.e. towards teaching skill, management and control). It was also suggested that as
beginning physical education teachers they were going through the transition from pupils to teachers and that this also restrained their reflective thinking at a technical level.

The first few years of teaching is crucial to beginning physical education teachers, they are transforming themselves from pupils to professional physical education teachers. Lawson’s (1989) research has shown that despite teaching practice and course work in teacher training programs that is intended to facilitate the transition from student to teachers, an ideal induction into physical education teaching rarely occurs. Beginning teachers experience reality shock, role conflict, isolation and washout effects (Lawson, 1989; Stroot, Faucette and Schwager, 1993). Some beginning teachers progress through this transition and become professional teachers while others will not. There is no statistical data on the attrition rates among beginning physical education teachers in Hong Kong. Schlechty and Vance’s study of teachers in Florida, USA (1983) indicated that some 40-50% of teachers quit teaching in the first few years of teaching. This seems to suggest the situation facing beginning teachers is far from favourable and they have to struggle to survive the transition from pupils to teachers. Shan’s case clearly illustrated these difficulties. In transition a beginning physical education teacher has to put into practice what they have learnt about physical education from the many years as a pupil and student as well as from teacher training programmes. They then have to refine their teaching techniques when necessary and according to ‘local’ institutional circumstances. Indeed, studies indicate that prospective physical education teachers start to learn and familiarise themselves with physical education teaching while they are school pupils (Wright and Tuska, 1967; Lortie,
Discussions

1975, 2002; Feiman-Nemser, 1983; Schemmp, 1989) and that teacher training programs seem to have little influence on them (Lortie, 1975; Bullough and Knowles, 1991; Evans, 1995; Placek, 1995; Evans, Davies & Penny, 1996; Green, 1998; Curtner-Smith, 1999). However, as prospective teachers learn about physical education teaching when they are pupils, they acquire the perspective of pupils rather than of the teachers they intend to become, and they learn under specific conditions that mostly will not be the same as the conditions they have in their teaching. The beginning physical education teacher on the one hand has to teach (and manage) their pupils while on the other hand practice teaching and test out the new techniques they learn from different sources. They are learning to teach in situ and have to adapt and adjust their teaching accordingly.

Reflective thinking was employed by Yum, Chung and Shan to discover their shortcomings and they made plans to remedy them in order to improve their teaching. Inevitably their reflective thinking was shepherded towards a technical level as they struggled to meet the demands of survival in difficult and challenging circumstances. Expectations on beginning physical education teachers' teaching are high in Hong Kong; they are given 'normal' teaching loads and class sizes and are expected to deliver physical education teaching like these more experienced. They have to demonstrate themselves as capable and cross the 'functional boundary' so that they will be accepted by their colleagues (Lawson, 1989). Inevitably, these expectations exert pressures to focus on physical education teaching and improve it, at a time when the teachers themselves are more concerned just to survive. Reflective thinking is, inevitably at this stage, channeled narrowly towards a technical level.
For beginning physical education teachers their first hurdle is survival and getting through the transition from student to teacher. Finding out how good or bad one’s teaching is, or reflecting on educational values, is relatively meaningless when the main priority is survival as a teacher. It is therefore to be expected that beginning physical education teachers will not make significant developments towards higher reflection levels (practical and critical levels) until they feel they can survive and have successfully made the transition from pupils to teachers. Despite the shortcomings discovered through reflective thinking, Yum and Chung were confident in their physical education teaching and displayed much more reflective thinking at a practical level than Shan. Shan’s lack of confidence and problems in physical education left her struggling to make the transition from student to teacher; hers was a constant struggle ‘to survive’.

Van Manen (1977) suggested that these are three levels of reflection and this study supports his view. From the above discussion we can see that there is a hierarchy in the development of reflective thinking closely related to Van Manen’s reflection structure. At the bottom is reflection focused on teaching mainly at a technical level. At this level the beginning physical education teacher employs reflective thinking as a tool to develop and refine their teaching skills in order to make the transition from student to teacher and become accepted as a capable teacher. This is essential for their survival as a teacher. Beginning teachers are likely to stay at this initial level until they feel comfortable within the wider culture of the school. Only then are they likely to advance to higher levels of practical or critical reflective thinking. Yum and Chung were confident in their physical education
teaching and had the desire to improve themselves. They displayed more reflective thinking at a practical level than Shan and were gradually making the transition to higher levels in the reflective thinking development hierarchy. This is not to suggest that a rigid boundary exists between different levels. For example, although Shan's reflective thinking remained for most of the time at the initial level we can find instances of her thinking reflectively at a practical level.

5.6 Summary of the Chapter

In summary, Yum, Chung and Shan were beginning teachers in the transition from pupils to teachers. They employed reflection as a tool to discover their shortcomings in teaching and refine their teaching skill so as to survive this transition. Their reflection focused mainly on what they could accomplish immediately in lessons and remained essentially at a technical level. Based on the work of Van Manen and the above argument, a reflective thinking development hierarchy is hypothesized and the participants are said to be at the initial level. It is further hypothesized they will be able to leave the initial level and move up (or along) the reflective thinking development hierarchy if they survive the transition, feel comfortable with their teaching and continue to have the desire for further development in their career. However, it is also suggested that the achievement of such progress is not entirely an individual or personal matter. There is a complex interplay between a teacher's aspirations and school cultures, and the dynamic between these forces has to be considered if we are to understand why it is that some teachers continue to develop professionally while others do not and may chose to drop out of the system altogether.
6.1 Relationship between Reflective Thinking and Teaching Quality

This study suggests that there is a relationship between reflection and teaching quality with respect to physical education. For the participants in this intervention study who engaged in reflection in and on physical education (Yum, Chung and Shan) there was a corresponding improvement in their physical education teaching. They discovered and recognized shortcomings in their teaching and made changes to remedy them and improve its quality. However, their reflection remained essentially at a 'technical level' and focussed especially on how to teach sport skills; underpinning 'educational values' remained largely untouched and unchanged. Participants in this study appeared not to be able to improve their teaching quality with respect to physical education educational values and other critical issues via reflective thinking. This ran counter to Tinning's (1992a) view that reflection can bring about critical thinking. Why was this the case? As the research progressed it became clear to me that in order to answer this question we need to answer a prior question: what are the factors affecting reflection and its development among beginning physical education teachers?
6.2 Factors Affecting Reflection and Its Development

In this study several personal and school factors affecting reflection and its development were identified. In Chapter five how these factors affected reflection and its development among the participants was discussed serially. However, there is a complex interplay between these factors. For example, the effects of school organizational socialization, colleagues and Principals on participants' reflection and its development were closely related and interacted with the participants' personal beliefs in physical education either to slow or promote reflection and its development. Together they formed part of the social and cultural fabric of teachers' working terrain.

6.2.1 The desire for professional development on reflective thinking

The data has strongly suggested that beginning teacher's reflective thinking and its development is, to some considerable extent, strongly determined by their attitudes towards physical education teaching, and that such attitudes are often the product of the conservative socialisation previously experienced in schools (see also Curtner-Smith and Sofo, 2004). If teachers have the desire to improve educational aspects of their physical education teaching, is likely that they will develop their reflective thinking especially if they are encouraged to do so by taking part in a programme, such as that in this study and if they experience early successes in self-improvement. For those who do not want to improve the educational aspects of their physical education teaching, such as Ku in this study, reflective thinking promotion programmes will not succeed.
Moon (1999) suggests that one always reflects for a purpose. Yum, Chung and Shan employed reflective thinking as a tool or means for professional development and improvement in their physical education teaching. There appeared to be close links between their reflection and professional development amid an array of situational factors that positively or adversely affected them.

6.2.2 Reflective thinking as a chain of processes

As a result of this study I would suggest that it is productive to conceptualise reflection as a 'chain of processes'. These processes are: analytical thinking, choosing appropriate actions and action execution (Diagram 6-1). In reflective thinking the first process in the chain is analytical thinking where individuals think about what and why things happened, asking basic questions and critically analyzing and evaluating their own classroom performances (Cruickshank and Applegate, 1981; Valverde, 1982; Shulman, 1987) and identifying problems to be faced. This is followed by choosing appropriate actions to remedy shortcomings and other matters revealed to improve teaching quality. Without such choice and action reflective thinking is rendered meaningless. It is unlikely that there are single or definite answers to issue reflected upon (Dewey, 1933; King and Kitchner, 1994; Moon, 1999). Faced with a range of possible actions one has to choose what appears to be the most appropriate. These are not 'free' choices, they are likely to be framed by the expectations, values, mores and attitudes prevailing within the cultures of departments and schools. The final process in reflective thinking is execution of chosen actions. Choosing and executing the appropriate
action may not automatically result in improvement in teaching quality. It depends on how well they are executed.

Diagram 6-1: Reflective thinking as a chain of process

6.2.3 Personal and professional qualities affecting reflective thinking

This study has also clearly illustrated that personal and professional qualities strongly influence reflective thinking and its development. Shan's weakness in physical education teaching was linked to her poor knowledge of physical education and other relevant subject matter, poor sport skill proficiency and lack of confidence in physical education teaching worked together to adversely affect her thinking and the direction of its development. Her reflection was largely focused at a technical level and her analytical thinking was hindered. Her weakness in physical education teaching also expressed itself in the action execution process. Even when Shan chose an appropriate action to remedy her shortcomings, her teaching was poor and rendered her reflection useless.
Knowledge of the values and subject matter of physical education affected reflective thinking and its development, acting as a guideline or ruler for individuals in evaluating their actions objectively in the analytical thinking process. Because Shan’s knowledge of physical education values and relevant subject matter was weak, her capacity to reflect on what lay beneath the surface of practice was also limited. Problem identification will depend on knowledgeability, essential for meaningful, ‘high quality’ reflective thinking to take place. Reflective teaching programs alone are, unlikely to be able to provide this knowledge base. Without ‘effective’ initial teacher education (giving more time to its subject matter, more time for practice and more time for reflection) reflective teaching is unlikely to either develop or occur.

Besides influencing the analytical thinking process, knowledge of physical education values and relevant subject matter also affect ability to choose appropriate actions among these available. They both give form and set limits to the choices available to individuals. Teachers cannot choose more appropriate forms of action if they do not have the knowledge to do so. One can choose the ‘right action’ via reflective thinking and bring about improvement in teaching quality and, equally well, choose the ‘wrong choice’ that renders reflective thinking useless. Shan’s case displayed clearly how her limited knowledge of physical education and relevant subject matter adversely affected her reflective thinking and its development.

Skill proficiency was also identified as another important factor affecting reflective thinking development in physical education especially among beginning
teachers. In the first few years of teaching as a beginning teacher is going through the transition from student to teacher, his or her reflective thinking concentrates on technical matters that mainly concern teaching skills, as he or she struggles to meet the demands of survival as a physical education teacher often in difficult and challenging circumstances. A large portion of teaching time is inevitably devoted to teaching the more obvious and tangible indices of 'achievement' in physical education lessons, sport skills. Poor sport skill proficiency, demonstrated in Shan's case, thus hinders the analytical thinking process and the capacity to choose appropriate actions. Since a large part of the changes in teaching behaviour occurred in teaching sport skill, poor skill proficiency will inevitably adversely affect the execution of chosen actions and hence impede reflective thinking and its development.

6.2.4 Effect of physical education curriculum on reflective thinking

It is evidently the case that the physical education curriculum and how it is implemented in Hong Kong has an adverse effect on beginning teachers' reflective thinking in physical education and its development. In Hong Kong it specified the sport skills to be taught while values are left to schools to interpret and individual teachers to implement. The situation is worsened by large class size (about thirty-five to forty) and limited 'teaching time' (about twenty minutes) in physical education lessons. Most, if not all, of which has to be devoted to sport skills. This causes 'role confusion' between physical education teaching and sport skill coaching and, as the cases of Shan and Ku have clearly shown, this had adverse effects on the development of educational values. This 'role confusion' channels
attention away from physical education toward ‘coaching’ and skills teaching. Personal teacher beliefs may strengthen or counteract, the adverse effects of these tendencies.

6.2.5 School culture

Sparkes (1989) has argued that culture can constrain and enable at the same time. This study suggests that school culture is a double edged sword that can both promote or impede the development of reflective thinking.

Shan’s case revealed that physical education was not respected in the culture of the school, did not promote professional development and impeded the development of reflective thinking. By contrast, Chung’s case illustrated that when physical education was taken serious in the school and professional improvement in physical education was promoted individuals can be motivated to engage in professional improvement via reflective thinking, especially after taken part in a reflective thinking promotion programme. Ku’s case was different from that of Shan’s and Chung’s. His school had a strong sporting culture and at helped direct his attention from the complex business of physical education teaching to sport skill coaching. There was little evidence of reflective thinking in his physical education. In these three cases we can see that the attitude of schools toward physical education teaching not only affecting the professional development of their teachers, but also serving as an important factor affecting their reflective thinking.
Conclusions

Shan's case revealed that even when change is accepted as a result of reflective thinking it is not always possible to implement because of resistance in school culture and the constraints of collegial relationships. In effect, the 'action execution process' in reflective thinking cannot be considered independently of the school culture if it is to have 'success'. Inability to make changes arrived at via reflective thinking inevitably deters future reflective thinking.

Lawson (1989) pointed out that some teachers will accept or adapt to their schools' cultures while others will not. This study endorsed his point of view. It revealed that teachers do not always accept school culture but struggle against it, as in Shan's case. But it was a struggle that deprived her of much of time and effort that otherwise could be used for reflective thinking. However, it is also important to note that accepting school culture, as in the case of Ku, does not necessarily facilitate reflective thinking and its development. The 'personal' beliefs of the teacher may serve to strengthen or counteract the effects of school culture on reflective thinking and its development. Future research on reflective teaching may need to consider much more seriously both the content of school cultures and the beliefs of individual teachers if it is to fully appreciate how and why change does, or does not occur.

6.2.6 Colleagues

This study disclosed some of the mechanisms by which teachers' reflective thinking is affected by their colleagues. The isolation of beginning teachers from their more experienced colleagues may have profound effects on their professional
development, prohibiting the flow of knowledge and experience from more experienced to less experienced teachers. In this case the isolated, beginning teacher has to rely mostly on trial and error, a slow and painful process that is accompanied by success and failure, to tackle the problems in their teaching. This problem is amplified when one's knowledge of physical education values and relevant subject matter is weak and/or sport proficiency is poor, such as the case of Shan. Teachers have to commit much of their time and effort to handle management and control problems, inevitably depriving them of time and effort that could be used more productively for reflective thinking. Clearly, reflective thinking and the professional development of a beginning teacher may be impeded if they are isolated from their more experienced colleagues. This raises questions as to how we conceptualise ‘the reflective teacher’. Much of the reflective teacher literature portrays this figure as a ‘lone actor’, whereas the data from this study suggests that we need to view or locate them in a network of relationships. Thus we need to consider how we are to encourage ‘reflective teaching’ within and amongst a network of supporting relationships in situation, rather than how we effect change in teachers acting alone. Interestingly, the work of Lave and Wenger (1991) on ‘situational learning’ and ‘communities of practice’ may offer some way of better conceptualising and developing relationships such as these (Kirk and Macdonald, 1998, Kirk and Macdonald, 2001, Kirk, 2003).

This study also revealed that colleagues, especially those having a positive attitude towards physical education teaching, can act as role models for beginning teachers. Modeling ‘good’ teachers to become a ‘good’ teacher oneself can be a goal pursued by beginning teachers. It may help them to embrace reflective thinking
and employ it as a tool for professional development. It is further suggested that role modelling may counteract the adverse effects of a restrictive national physical education curriculum and turn beginning teachers’ attention from coaching sport skill towards educational values in physical education, enabling them to develop higher levels of practical and critical reflection.

6.2.7 Principals

This study has shown that school Principals can impede the development of reflection amongst their teachers in three ways. Firstly, Principals can limit the choice of changes that teachers can implement in their teaching, affectively setting limits to processes of choosing appropriate actions rendering reflection meaningless and deterring further reflection. Secondly, Principals can de-motivate their teachers and reduce the emotional force that motivates and drives them to engage in professional development, in turn impeding their reflective thinking and its development. Thirdly, they can so change the workplace conditions of a school that they become unfavourable, or even hostile to reflective thinking. In this study the effect of Shan’s Principal was identified in as a negative factor. This is not to conclude that Principals are always so as Veal (1988 cited in Deutsch, 1996) acknowledges. How, or if, Principals and ‘significant others’ are to be included in the promotion of reflective thinking is matter rarely considered in the literature but, on the evidence of this study, should be a matter of priority in future research.

Leadership is an important and essential element in organisations’ success. It is usually contended that Principals are critical forces in leadership issues in schools
Conclusions

(King, Ladwig & Lingard, 2001, cited in MacDonald, 2003). Hayes et al. (2001) refers to ‘productive leadership’ for improving schools and motivating teachers to accept professional development that, hopefully, will also promote reflection and its development in the authentic school setting.

Data from this study indicates school Principals are important in influencing reflection and its development amongst teachers. Can they promote reflection, especially on the critical issues that Van Manen (1977) considers to be desirable forms of reflection amongst their teachers? If so how? I would contend that Principals should be educators and should focus on, or at least pay attention to, matters related to educational values, promoting ‘education’ in schools, helping teachers to develop reflection on critical issues. However on the contrary, Smyth et al. (2000, p.52) indicated the tendency for Principals to shift from the roles of ‘educational leader, professional leader, curriculum leader and fellow unionist’ to become ‘employer, entrepreneur, and business manager and line manager’ in search of market share. In such contexts the attention of Principals focus more and more on teaching effectiveness and public examination results that appeal both to parents and education authority that emphasizes knowledge delivery. This will inevitably channel teachers’ reflection to ‘technical issues’ and impede its wider development. It might be argued that it is time we turned the tide and brought back educational values that physical education deserved and promoted reflection on critical issues among physical educators. The Principals of schools may serve as leaders in battles for advocating more education-oriented values provided. They consider themselves to be worthwhile educators rather than simply employers or line managers and providing leadership in their schools that enable teachers to care
more for educational values in their teaching, rather than just 'delivering knowledge'. Reflection, both at practical and critical levels, would thus be promoted and teaching quality at all levels improved.

6.3 Beginning Teachers' Reflection Focused on 'Technical Matters'

The cases of Yum, Chung and Shan suggest that transition from student to teacher reflection remains at a technical level, though it is far from smooth not every beginning teacher negotiate it successfully. In order to survive it novitiate teachers may employ reflection as a tool to discover their shortcomings and refine their teaching skill. However, reflection at a practical level to explore how 'good' or 'bad' one's teaching is and critical reflection on educational values are going to be of secondary concern when one's main priority is survival as a teacher, especially in contexts where the desire to judge and evaluate performance is powerful and endemic. Understandably the reflections of beginning teachers are directed away from educational values toward technical concerns. In respect of this we have to ask, whether the promotion of critical reflection is a reasonable goal, at least in the early phases of promoting reflective thinking. How are reflective thinking exercises to be structured knowing that, in the first instance, beginning teachers are going to be concerned primarily with technical and, perhaps only thereafter, practical concerns.

Curtner-Smith and Sofo's (2004) recent study of the influence of a critically oriented PETE program on pre-service physical education teachers has indicated that such programs have virtually no impact on the thinking and actions of pre-
service teachers towards ‘critical issues’, such as elitism, racism, classism and sexism, at least in the short term. They too found that beginning teachers were more concerned with survival, classroom control and management, than with more lofty educational ideals. The above discussion echoes this view and is also supported by Jones (1989), O’Sullivan and Tsangaridou (1992) and Curtner-smith (1996). Curtner-Smith and Sofo (2004) also suggested that physical education pre-service teachers at the early stage of their teacher training find it very difficult to understand critical issues in physical education. Their arguments resonate with my earlier suggestion that knowledge and understanding of the subject matter of physical education frames and either limits or facilitates the reflective capacities of its practitioners. Beginning physical education teachers are, of course, at the early stage of their teaching career and they may have limited ‘life experience’. This may make it difficult for them to understand the complexity of critical issues in physical education let alone internalize them as part of their subject knowledge. It may, then, be very difficult to promote critical reflection through appropriate physical education teacher education programs, especially if we fail to accept that educational change is likely to take many years to occur. Promoting critical issues in physical education in teacher education programs may be both desirable and worthwhile after beginning teachers have survived initial transition from student to teacher and gained more life experience.

This study also provides some endorsement for the ‘reflection level structure’ suggested by Van Manen (1977) and it is further suggested that there is a hierarchy in the development of reflective thinking and that there are different levels in this hierarchy. However, this is not to suggest there are rigid boundaries between
different levels. Rather, beginning physical education teachers operate at the initial level and employ reflection as a tool to develop themselves and refine their teaching skills. At the initial level they reflect mainly on technical aspects of their teaching. However, whether they will be able to leave this level and move up (or along) the reflective thinking development hierarchy, having survived transition from student to teacher, become comfortable with teaching and desire further development of their physical education teaching careers, may depend on constraints or opportunities available in the social context of their schools. How is the reflective practitioner to deal with these constraints if they are not recognised and dealt with explicitly in reflective teaching innovations or in the mainstream of initial teacher education?

6.4 Further Reflections on Methodology

In Chapter one I mentioned there were limitations in the methods employed in this study while also outlining how I tried to avoid them having significant adverse effects on this study. As the study proceeded, however, more limitations that might have distorted the findings of the study emerged and these are discussed in the text below.

It has to be acknowledged that, for pragmatic reasons, the data collection took place over a relatively short period of time. Yet Yum, Chung and Shan all suggested that, following further reflection, they wished to implement changes into their teaching in the following academic year. I could not observe the changes that they wanted to implement or determine whether they were going to occur or
improve their teaching, with positive or negative impact on their further reflection. The duration of data collection was, arguably, not sufficient for observing the development of deep change, such as those in personal beliefs in physical education that may take months, if not years, to occur. In this respect the findings of this study may be distorted and have to be read with caution, though the detailed evidence provided in previous chapters is, I argue, strongly indicative of the processes by which change either does or does not occur. In theory one can lengthen the duration of data collection but in practice this may create other problems, not least; in the recruitment and attrition of participants, resistance from their schools and changing school conditions. As a researcher I had to strike a balance between these dilemmas and determine a reasonable length of time for data collection. There is no easy trajectory of decision making and action given the demands of pursuing a PhD part time and the inherent vagaries of qualitative research.

Another limitation in data collection must also be noted. In this study background information about school culture and its physical education sub-culture and attitudes of colleagues and Principals were collected through participants. I believe they reported what they believed was true about their schools' colleagues and Principals but their opinions were my sole source of data on these matters. For example Shan reported that the attitude of her colleagues and her Principal were very conservative. Were her colleagues and Principal actually conservative or was Shan's view biased or distorted by her circumstance and position as a novitiate teacher, or for reasons not yet uncovered? Given the emphasis placed on reflection and intervention in this study there was little opportunity to 'triangulate' the data
further by searching for a variety of other people’s views. ‘Truth’ in this study, therefore, rests heavily on the ‘shared understandings’ constructed between the researcher and the participants (see Sparkes, 1992b, Denzin and Lincoln, 2000). It is suggested that in future research, background information on the schools, their teachers and Principals should not be collected solely through participants voices; rather, researchers should also collect as much information as possible from participants’ colleagues and Principals in order to register ‘other’ representations and interpretations of the situation, to avoid bias and present a more comprehensive view of a particular setting or situation.

The interviews might well be another area of further limitation on this study. I was aware that interview questions might be biased and dominated by my views leading participants to think in predetermined directions. In the spirit of doing qualitative research I wanted to ‘bracket’ my opinions as much as possible in order to explore participants’ points of view. Precautions were exercised when preparing questions for interviews so that they would avoid bias and imposition of my personal views. However, during interviews, when I asked questions beyond those prepared or when I was probing deeper into a specific issue, my personal view of physical education teaching, influenced by being a pre-service physical education teaching practices supervisor for about four years prior to data collection, inevitably come into play, though I was not aware of this at the time. This might have lead participants to reflect on issues I was interested in while other issues important to them were not reflected on and reported. This might have distorted findings. The ‘trustworthiness’ and ‘authenticity’ of data was always, thus, an issue (Denzin and Lincoln, 2000). In future studies it may be more productive if
participants write a reflective journal before interviews and the researcher then interviews the participants based on the journal they write. In this way the chance of imposing the personal view of the researcher can be minimized.

The effects of the reflective thinking interventions used in this study also deserve further discussion. The interventions promoted reflection among participants (Yum, Chung and Shan) who, having experienced success in self-improvement via reflective thinking early on, had the desire to improve the educational aspects of their physical education teaching. School life is busy in Hong Kong and it is evident in this study, though I did not report this explicitly in Chapter four, that participants were pre-occupied with extra-curriculum activities and or further studies (pursuing degree studies). This also constituted part of the reasons why some participants dropped out of the study and others could not be selected to participate in the third and final phases. The interventions provided the opportunity and time, essential for participants to reflect on actions in their physical education teaching. To this extent they were useful in promoting reflection among beginning physical education teachers.

One of the reflective thinking interventions employed in this study took the form of workshops that were intended to introduce participants to theoretical aspects of reflective thinking and, especially, different levels in reflection (see Appendix 3-14). It is to be acknowledged that I might have imposed my personal views on reflective thinking onto the participants by conducting these workshops in the way that I did. Although one can take precautions when preparing and reviewing 'materials' for such events to minimize the intrusion of one's viewpoint on the
exercise, it is, perhaps, neither possible, nor wholly desirable to eradicate this 'effect' altogether. I was, after all, in the business of Teacher Education and professional development. I was aware of the potential adverse effects of imposing my viewpoints unconsciously and that I might have over emphasized issues in reflection I was most interested in and led participants in a certain direction, perhaps, for example, towards 'skill delivery', that I was not aware of. It may, in future intervention exercises be more productive to prepare more detailed 'materials' and invite participants both before and in the workshop to discuss what they hope to learn about reflection from these 'materials' and then explain what they do not understand. In doing so, my personal views would, at least, be minimized and not imposed on the participants. In Chapter five we saw that a number of adverse influences such as the curriculum and surviving the transition from student to teacher confined and framed the reflective thinking of participants to technical matters in physical education. Arguably, without the reflective learning workshops they might not have been able to reflect on practical or, in Chung's case, critical issues in physical education at all because their focus was so set on technical issues and their awareness of practical and critical issues was low. In this respect, whatever the fears expressed above, the workshops proved effective in prompting the participants to reflect at a practical level.

Furthermore, whereas at that onset of the study, the content (lesson preparation, performance, teacher attitudes and knowledge) of the teaching evaluation checklist (TEC) was based on the evaluation forms used in student-teacher teaching practice to which I added numerous items about values in and towards physical education. All these items may have lead the participants in a certain direction, though the
purpose of the form was to help the participants to reflect on their teaching.

Video-taping participants’ physical education lessons for them to review later can, on the one hand, promote reflection on what participants do in lessons; on the other, it also channels their reflections toward issues related to their teaching. It is evident from this study that participants could reflect on their lessons in more detail after reviewing video recordings, but that they reflected mostly on their teaching skill and other technical matters. Given the viewing angle of the video recorder used in this study and in order not to disturb lessons, I could only video-tape events that happened around participants, rather than all of the events of those lessons. I hesitated to move around the venue, though sometimes I did, and I was some distance away from participants and voice recording was not good, especially on small group tuition when the volume of their voices was low. In reviewing video tapes, participants could see what they did and the events that happened beside them rather than the whole picture of lessons and what and how they communicated with their pupils. These limitations of video-taping might have lead them to think that emphasis in the research was on technical elements in teaching, though this was not my intention. However video-taping proved a good method of recording what had happened in lessons and was useful in data analysis. In this respect I suggest one might productively use video-taping lessons for data collection and data analysis purposes but do not recommend it for participants to review their teaching if the purpose of the study is to include more than just a discussion of technical matters.

All forms of data collection have their limitations and none is capable of offering
more than a partial insight into any given social world. Although there were shortcomings in the methods used in this study and finding might, hence, be considered either ‘distorted’ or incomplete, the richness of the data presented me to claim that they both reflect and represent what occurred in intervention exercises and provide reasonably ‘reliable’ and ‘trustworthy’ data for further analysis (Denzin and Lincoln, 2000).

6.5 Implications and Recommendations

Ten years ago Tinning, Kirk and Evans (1993) wrote that research on the relationships between reflective thinking and physical education teaching quality with respect to physical education educational values was virtually nonexistent. There has been very little research in this area since then and it would still be true to say that this relationship remains virgin territory. This study has unveiled, to a very modest degree, some of the complexity in the relationships between the reflective thinking of beginning teachers and physical education teaching quality with respect to the promotion of educational values.

Tsangaridou and Siedentop (1995) in their review of reflective thinking indicated that empirical work on reflection via at an embryonic stage and focused on preparing reflective teachers and reflective thinking promotion. In contrast, this study has expended much of its effort on unveiling factors affecting reflective thinking in physical education and its development in ‘authentic’ settings. It has attempted to illuminate the mechanisms by which these factors affect reflective thinking and its development in the context in which it occurs. Several factors,
including personal and professional qualities, curriculum, school culture, colleagues and the behaviour of Principals were identified and discussed as affecting reflective thinking and its development. None of these factors acted alone to affect it, rather there was complex interrelation between them. An individual factor can either reinforce or counteract the effect of others. However, it is in the dynamic between them that future research insights are to be found. Research might also focus on the following:

1. Data from this study indicates that beginning teachers struggle to survive the transition from student to teacher and this struggle restrains their reflection to a technical level. Investigating the dynamic relation between reflective thinking and teaching quality, in experienced physical education teachers may yield a better understanding of this issue. We may be able to interrogate and register this dynamic more easily and clearly through the actions of experienced teachers, ‘free’ of the worries of the inexperienced.

2. In this study several school factors (school’s organizational socialization and characteristics of colleagues and Principals) have been shown to affect reflective thinking and its development. However schools are micro-societies and surely there will be many more factors within them that are potentially relevant. Further work is needed to uncover these factors to yield a better understanding of how reflection and its development can occur in authentic settings.
3. The culture and other social features of 'wider' society will surely affect beliefs and behaviours, including those of teachers. In this study the effects of these factors were not taken into account in understanding reflection and its development. Indeed, too rarely are such factors considered in the literature. It is suggested that research into how cultural and social factors of wider society affect reflective thinking and its development is needed in order to yield a thorough and more complete understanding of our concerns.

4. The way that Principals manage their schools has a profound effect on teachers' professional and reflective thinking development. Further research on the effects of Principals and school management makes on reflective thinking and its development is needed.

5. A reflective thinking 'development hierarchy' has been hypothesized and beginning teachers are said to be at the initial level in the hierarchy. It is recommended that further empirical and conceptual work should be done on this hierarchy in order to yield further insights and understandings of reflective thinking development.

6. Finally, I started this research some seven years ago. In that time my thinking on reflection and teaching has changed. My personal reflection 'end-piece' on the whole experience was shared in the following chapter.
CHAPTER SEVEN

PERSONAL REFLECTION

At first I was dismayed at the findings of this study. I began this study believing that I could, and would, have an impact on teachers' thinking and action. However, despite my best intentions and concerted effort, participants' reflection remained largely focused on technical matters, such as teaching skill and effectiveness, as did their improvement in PE teaching. Despite my interventions, that were intended to promote their capacity to reflect, only rarely did they achieve a level of practical or critical reflection that Van Manen (1977) considered most desirable. In spite of this, I continue to hold the view that creating a 'reflective practitioner' as part of professional development is a worthwhile goal in teacher education. At certain points in this study the inability of participants to develop significant reflection at practical and critical levels cast serious doubt on my belief in reflection but, as the study progressed and I learned more about the factors affecting reflection, my confidence in its power and potential as a 'tool' of and for teaching was gradually restored.

Beginning physical education teachers, such as the participants in this study, learn much about the subject matter of physical education through their previous experience in physical education lessons and physical education teacher education but this 'knowledge' is clearly inadequate to help them deal with the variety of situations that arise in schools. They have to employ some 'method' that may or may not be reflective, to help identify and solve problems that they face and to
refine their teaching skills. In Chapter five I argued that transition from student to
teacher often takes place in a hostile environment and involves a struggle to
survive. I remain convinced that in this context reflection can be a valuable tool for
improving teaching, though at this stage its focus is almost inevitably going to be
upon technical matters. Shan, in particular, in this study clearly demonstrated that
reflection in and on their physical education teaching had helped them to survive
as teachers, though they were not always aware of this. This suggests that it is
important for physical education teacher education programs to promote reflection.
Furthermore, this study has suggested that unless physical education teachers are
equipped with reasonable teaching skills and 'teaching effectiveness' to ensure
'sport skill delivery', they are unlikely to also be able to teach or pursue
educational values. Reflection on technical matters in physical education is an
important element in improving 'teaching quality' with respect to educational
values. If the beginning teacher survives as a physical education teacher and gains
experience they can, under favorable conditions, develop reflection at practical and
critical levels.

I have no doubt that physical education teachers who have desire for further
professional development will consciously or unconsciously employ reflection, at
least at a technical level, to improve their teaching. But how can physical
education teachers develop reflection at practical and critical levels to improve
their teaching quality with respect to technical matters in physical education and
educational values? Unfortunately, school circumstances are often far from ideal as
far as reflection and its development in physical education are concerned. School
settings in Hong Kong are far from favorable to the nourishment of reflection and,
in certain respects, can even be considered hostile to its development in physical education. Not all reflective practitioners can advance along the 'reflection development hierarchy' and become practical or critical practitioners, improving their teaching quality with respect to both technical and educational values in physical education. Unfortunately, school culture, physical education curriculum and attitudes of colleagues and Principals cannot be changed by individuals acting alone. Neither can the factors affecting reflection and its development be changed overnight, by revolution; but teacher education may be able to improve it step by step, slowly, by evolution.

Throughout this study the term 'teaching quality' in physical education has been used to refer both to technical matters in physical education teaching and its educational values. I further argued that an emphasis on technical matters should not be at the expense of educational values and vice versa. We need to balance the treatment of technical matters and educational values of physical education in our education system. In Hong Kong the situation is often less than ideal and educational values do not receive the attention they deserve from physical education teacher education programs. For example, I received my physical education teacher education about 18 years ago in Hong Kong (Teacher Certificate for a qualified teacher) and 14 years ago in the United Kingdom (a Bachelor of Education). I recall spending a great deal of time on sport skill training, especially in physical education teacher training in Hong Kong. I was taught aims and purposes of physical education rather than its educational values. I discussed earlier (Chapter 2) that not all aims and purposes of physical education are of educational value and I found myself graduating from my initial physical
education teacher education programme without a clear picture of what educational values were in physical education. The situation in Hong Kong has not changed much other than more sport science related contents (sport physiology, anatomy, sport psychology, nutrition, biomechanics, health and fitness, etc.) being introduced into the physical education teaching programs offered by the Hong Kong Institute of Education, where most students in Hong Kong receive their physical education pre-service training (see Appendix 7-1, Bachelor of Education program). This will only lead physical education teacher education programs moving further away from educational values. They are now dominated by 'sport skill delivery' and we should not be surprised to find beginning physical education teachers, such as the participants in this study, focusing their attention and reflection on technical matters related to teaching sport skill. However, educational values in physical education teacher education are easier to advocate than to express in practice, as Curtner-Smith and Sofo (2004) and this study has shown. Despite these difficulties we should continue to emphasize the educational values of physical education though it may be becoming even more difficult to ensure their expression in physical education, given recent changes in our education system.

In Hong Kong, as in the United Kingdom, physical education is treated as a 'non core' subject (Evans, 1998; Penny, 2004). Shan's case demonstrated that physical education does not attract much attention from some school Principals. Schools may care for achievement in interschool sport competition but this is not physical education and carries little, if any, educational value. In Hong Kong primary school physical education teachers usually also have to teach other subjects. In this
context physical education teachers ‘naturally’ divert their attention from physical education to other ‘core’ subjects they teach, or to interschool competitions in order to survive in schools and draw the attention of their Principals for possible promotion and advantage. Viewed from this perspective it will be difficult to promote reflection in and on physical education beyond the technical level in the school setting.

School Principals play an important role in promoting or impeding reflection and its development. In my view, Principals should ensure balance believe technical matters and educational values and seek to improve teaching quality in terms of both. If Principals have their eyes on issues related to educational values in physical education their teachers will be encouraged to divert at least some of their attention from technical aspects of teaching toward them. However, recent developments in Hong Kong may not be conducive to this happening. As reported elsewhere (Smyth et. al. 2000, p.52) instead of paying more attention to how educational values are realized in teaching in their schools, Principals are gradually becoming more administrative, more like chief executive officers or line managers than educators. As schools in Hong Kong compete for pupils (especially as the birth rate in Hong Kong is low and government is cutting back on funding by closing down surplus schools) and more resources are being sought from government in order to survive, it will not be surprising to find increasing numbers of Principals diverting more of their attention toward pupil academic achievement in order to win favor from both parents and government. MacDonald (2003) in his study of the implementation of ‘rich tasks’ in a school, hinted that Principals and their leadership play important roles in the implementation of change. Without the
blessing of Principals the chance of promoting reflection and its development seems remote.

I have tried to paint a complex picture of reflection and its development. Clearly, we cannot revolutionize the current education system overnight but we can generate interest in educational values among educators and perhaps reorient our education system toward bringing back educational values. Although the situation we are facing is disconcerting, it is by no mean hopeless. Researchers such as Tinning, Kirk and Evans (1993, 2002), Carr (1989, 1996), Stones (1994) and others have advocated a place for educational values in our education system. Researchers such as these are the conscience of our education system and our teacher education should equip more young people to become likeminded, serious and thoughtful physical educators rather than just 'sport skill deliverers'. For this to happen teacher training institutions must recruit students because of their potential teaching quality rather than their coaching or sport skills (Curtner-Smith and Sofo, 2004). In doing so we can perhaps train young people to become reflective practitioners. Later this may bear fruit in bringing back educational values to our schools as they in turn are promoted to become Principals and other senior staff in the school.

Recently the Curriculum Development Council, under the Education Manpower Bureau (EMB, former Education Department), responsible for curriculum development in Hong Kong, has initiated a series of curriculum reforms and introduced at the same time the Basic Education Guide (2002). Its school curriculum framework indicated three interrelated components: (1) key learning
areas; (2) generic skills; (3) values and attitudes. It proposed a set of values and attitudes to be incorporated into the school curriculum (see Appendix 7-2). These include some critical issues in physical education that, hopefully, may draw the attention of schools towards values in physical education. Unfortunately the Curriculum Development Council did not explicitly express how to incorporate these values into the schools' curriculum. Moreover, they are not reflected in physical education key learning areas (Appendix 7-3). Like the physical education curriculum suggested by the Curriculum Development Council discussed in Chapter 5, these values are left to schools to interpret and implement. Given the circumstances described in this study I do not have much hope that this will occur. However, more optimistically it may be a step in the right direction by the Education Manpower Bureau, former Education Department to take measures to raise the profile of educational values. The outcomes of this curriculum reform are not yet clear but I sincerely wish that it achieves at least some modest success in returning educational values to our education system. Government has also started to advertise on television that parents should not merely care for the academic achievement of their children, defined narrowly in terms of examination results. Although it may not be the main aim of such advertising to promote aspects on education beside 'knowledge delivery', it will surely raise the interest and awareness of educators and others and encourage them perhaps to probe deeper into the nature and purpose of our education system.

Education is more than knowledge delivery and schools are more than factories that reproduce knowledge among their pupils. Recently I came across a banner at a secondary school on which the school boasted of the achievement of its pupils in
public examination in order to attract new pupils. One day, perhaps, when I visit that school again I will see another banner boasting that the school cares for the academic and the physical, social, moral and spiritual achievements of all its pupils.
Appendix 1-1: Course Preamble for PE in the Teacher Certificate Course (Primary), Hong Kong Institute of Education (1996-2000)

1) **Introduction**

To improve the education for our children, there is a need for better educated teachers. B.ED. degrees emerged in the UK in the late 60s in response to such need. They are regarded as professional degrees and are different from the traditional academic degrees. Professionals nowadays are more informed and supported by a wide scope of knowledge and theoretical backup. HKIED, formed in September 1994, is an endeavour to establish a centre of excellence in teacher education. It aims to produce teachers who are academically sound and professionally capable. The Department of Physical Education is charged with the mission to foster educated professionals in physical education.

2) **Mission of the Hong Kong Institute of Education**

Education Commission Report (ECR) No.5 (1992) maintains that teaching, as a profession, includes “knowledge and skills which can be acquired by formal study and the application of well-founded principles.” The overall charge of the Hong Kong Institute of Education, as it has always been for colleges and skills” that are “useful in delivering their services to students”.

In order to fulfill the immediate needs as well as to pave teachers for further professional and academic advancement as prescribed by ECR No.5, such a teacher-training programme should be:

1) designed to meet the needs of schools;
2) academically rigorous to enhance professional practice;
3) to enable the teacher to receive further professional development.

3) **Physical Education in HK Primary Schools**

Physical Education is accepted as an essential component in schooling. It is stated in the “Guide to the Primary Curriculum” (Curriculum Development Council, 1992) that aims related to physical development is:

To encourage children to develop their physical and social skills and to guide them to make good use of their leisure and attain a well rounded life.

PE curriculum in Schools that two lessons per week have to be assigned to physical education, that a quality programme has to be introduced to allow sufficient physical activities for all students. The overall aim of physical education as stated in syllabuses for primary schools:

1) To improve the organic system, the neuro-muscular system, and physical fitness of pupils through physical activities.
2) To develop pupils’ desirable social attitudes and patterns of behaviour such as fair play and good sportsmanship.
3) To help pupils to understand the importance of co-operating with others in
communal life and to foster them with the sense of responsibilities and belonging through teaching of team games.

4) To cultivate pupils' sense of aesthetic appreciation and to enrich them with knowledge of elegant posture and movements through teaching of dance and gymnastics.

5) To cultivate pupils' powers of observation, analysis, judgement and creativity in the process of participation in activities.

6) To stimulate pupils' interest and desirable attitudes towards physical activities and to encourage them to take part in sports, physical training and recreational activities actively and regularly.

At the present, the content of the PE curriculum covers a wide range of activities, mainly fitness activities and sports together with gymnastics and dance. The content may, and definitely will, change with time. However, a general physical developmental pattern is identifiable.

The above illustration suggests a general guide line for PE content selection. This is presented in diagram as follows:

Plays/Spontaneous physical skills Pre-School

Fundamental movements

Games

Sports for Leisure/ Secondary School
Sports for Competition

(Modified for Schools Sport Forum, 1988)

The current trend is to build into the junior primary school PE curriculum a segment of Fundamental Movement which will focus on the development of basic motor skills via the teaching of dance, gymnastics and low-organisation games.

4) The Needs of Schools

Schools need teachers that are equipped with the understanding of the school's purposes, organization, curriculum and pastoral arrangement; an ability to teach the subject efficiently; the ability in planning and implementing the curriculum; against different environment (NATFHE, 1982). A diversified curriculum is therefore needed not to produce educated persons who happen to teach but competent teachers who are educated. Courses for physical education teachers have to be geared to the professional needs with improved academic background. Professional in a wide range of physical skills and sports is also essential to a successful physical education teacher. For most cultural subjects at school level the activities themselves (first order activity) are the main concern. The describing, discussing and theorizing of the activities (second order activity) shall serve to enhance participation and performance.
5) Professional Development

What PE teachers need is the mastery of the basic and current skills and knowledge of their subject areas and the ability to disseminate them with the best effectiveness and efficiency. Effective in that pupils acquire what they are supposed to acquire, is means meets ends. Efficient in that pupils can master the knowledge and skill to a reasonable standard in the shortest possible time.

It is the competence in manipulation of the curriculum process that justifies the professional status of teachers. The simplest curriculum process includes the identification of valuable objectives, the choice of materials, the mastery of practical work also contributes to develop an important aspect of a professional teacher in physical education, the professional ethos. Apart from the knowledge and ability to teach in the class context, a professional PE teacher is expected to serve as a precept who exhibits positive attitude towards physical activities. He/She will have to be a fair referee in a match, a good coach in the arena and a capable sport organizer in after school hour sport activities. All these have to be fostered and consolidated via actual participation. By actual participation in sports, pre-service teachers learn to become good members of a team, the characteristics of a good coach, the procedures of organizing a game, protocol of a competition and most all the sportsmanship that must be passed onto our pupils. As such, in sports activities at intra-mural and intercollegiate levels. To apply learned knowledge and skills, they will be initiated into adopting an active role in the organization of intra-mural sport activities.

As part of the professional ethos, teachers in PE are also expected to possess certain knowledge and skills in first aid and life saving. Student teachers will have to acquire accredited qualification in these two areas by the end of the TC programme.

Whereas the focus for non-professional degrees is strictly academic that for professional degrees must be professional studies. The various disciplines such as philosophy, sociology, physiology etc are not only contributory but the sole constituents of an academic pursuit. In professional degrees, however, academic study and practical work (skill proficiency) adopt a secondary and contributory position. The relationship of the three is depicted below:
Appendices

Professional:
Curriculum Issues
Instructional Theory
School Administration
Professional Ethos

Academic studies:  
Educational studies*
Physical Education Theory
Sports sciences

Skill Proficiency:  
Physical & Health Fitness
Fundamental Movement
Games
Aesthetic Movements
Education camp

*Offered by the Education Department

(modified from Best, 1980)

appropriate teaching strategies, and the administration of valid evaluations. However, no curriculum is meaningful if isolated from a particular culture. The culture of the whole nation such as the sport ideology, and that of a particular society such as the expectation of the parents, will inevitably influence the PE curriculum. PE teachers must be sensitive to the kinds of culture in which he/she is to work.

6) Academic Studies

Physical Education. Over the past half a century, has developed into a cross disciplinary subject (Brooke and Whiting, 1975; Renshaw, 1973) borrowing upon disciplines such as philosophy, physiology, psychology, sociology, biomechanics, etc. There is now a rich body of knowledge centering around intentionally organized physical activities involving major muscle groups of our body.

An understanding of there disciplines will enhance professional practice. Professionals with knowledge of motor and developmental psychology will be able to appreciate the process of skill acquisition, and hence, become more efficient in skill instruction. Knowledge in anatomy and physiology will alert professionals of training also borrow heavily on this area of studies. Knowledge in biomechanics will enable professionals to identify the most efficient movement pattern for a particular person under particular conditions. Philosophical and sociological inquiries provide grounds for reflective thinking over, and attach meaning to, human movement.

Apart from contributing to developing sound professional practice, academic study also stand on its own as a worthwhile pursuit. Further studies along any of the above mentioned disciplines are meaningful pursuit at graduate and doctoral level. However, academic study under the professional context shall serve prima facia to enhance professional development.
7) The importance of practical work, physical skills in our case, is often stressed in a professional degree. The word practical is used to mean (a) the experimentation or observation of the activities; (b) the actual participation in the activities. Whilst the necessity of (a) is obvious, the need of (b) needs further justification. As a professional in PE, the ability to perform certain skills on is an advantage. It motivates the students and would be able to quicken the process of skill instruction. By going through the progressions of skill acquisition in certain sports, one will become aware of the essence of the activities. One will be alert of possible errors and potential dangers en route to success. This will allow the professionals to be more flexible in designing instructional programmes for a wide range of ability groups. Practical work in the later sense may not a logical necessity but it is certainly psychologically desirable.

8) The Teacher Certificate and Bachelor of Education
In a two + two system, there is an exit point at the end of the second year. To ensure that teaches who choose to exit by the end of the second year can be effective curriculum deliverers at the primary level, i.e. novice teachers or advanced beginners in Berliner's terms (1985). Candidates of the TC programme are required to attend all courses. A wide range of physical skills and sports will be taught together with the related teaching progressions. A Fundamental Movement unit forms the core the programme. Only a minimum amount of academic knowledge, such as Foundations and Principles of PE (the basic framework to guide the teaching of physical education in schools), basic Anatomy and Physiology (contributing to the understanding of safety and principles of training methodology), Developmental psychology and Motor Learning Theory (contributing to the understanding of skill instruction), is included.

Depending on individual talent and effort, advanced beginners and competent teachers will probably be the aim of the B.ED. programme. In depth studies in sports sciences, educational theories, research methodology, advance professional practice and pedagogy, specialized area of skill proficiency and the development of reflective thinking will be left to the B.ED. programme.

The time available for practical work skill proficiency, is extremely limited. A choice between "specialist" and "generalist" has to be made. The clarification on the term "practical" in previous paragraphs has some implication here. May be the limited time should be used to develop the basic skills and related teaching pedagogy. Skill proficiency will be left to individual effort during their free time. To ensure that a minimum standard is achieved, skill assessments will be enforced for each physical activities taught.

(Source from the Course Handbook, Department of Physical Education, HKIEd, 1996-2000)
Appendices

Appendix 1-2: Background of the Hong Kong Institute of Education and teacher training programme in the year of 1994 and 2000

The Hong Kong Institute of Education was founded in 1994 and it was originally merged from the former colleges of education and the Institute of Language. It is a government-funded institute of teacher education. It provides initial teacher training courses as well as professional advice and support to the professional community. It is responsible for providing training to student-teachers from pre-school level to secondary level. Fifth form students can be admitted for a three-year teacher training program whereas students at matriculation level can be admitted for a two-year teacher certificate program. The program named as ‘the Certificate in Primary Education course’ aims to prepare fifth form and seventh form graduates to become qualified teachers in primary schools. The program provides students with an understanding of the theoretical formulation of education, professional skills and general knowledge. The structure of the training program includes five domains, namely curriculum studies, academic studies, professional studies, general education and practicum. In curriculum studies, student-teachers have to study three to four primary curriculum subjects. They are subdivided into core teaching subjects and elective teaching subjects. Physical education is one of the elective teaching subjects. In Hong Kong, physical education is accepted as an essential component in schooling. Schools are advised to have two physical education lessons per week, which is approximately sixty minutes for primary schools. The content of physical education curriculum covers a wide range of activities: games, gymnastics, dance, fundamental movement, athletics and fitness activities.
Appendix 1-3: Two-year Certificate in Education course (Primary) PE course outline, 1997-1999

Aim: To provide students with the scientific and pedagogical foundations of physical education, and the skill proficiency necessary for teaching physical education at primary school.

Objective:

1. To provide students with the scientific and pedagogical foundation of physical education.
2. To provide students with the knowledge and skills necessary for the implementation of the physical education curriculum for primary school as advised by the Education Department of Hong Kong
3. To enhance students’ repertoire of exercise, sport skill proficiencies and related teaching techniques and progressions appropriate for primary school pupils.
4. To enhance students’ understanding of the principles and foundations of physical education necessary for the pursuit of degree programmes.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Module</th>
<th>Unit</th>
<th>C.P</th>
<th>Hour</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Studies</td>
<td>PE Curriculum</td>
<td>- Curriculum Theory</td>
<td>2</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Evaluation for Primary School PE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- PE Administration in Primary School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teaching Techniques in PE</td>
<td>- Motor Learning Theory</td>
<td>2</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Teaching methods in PE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Studies</td>
<td>Skill Proficiency(I)</td>
<td>- Dance</td>
<td>3</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Gymnastics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skill Proficiency (Lower Primary)</td>
<td>- Fundamental Movement</td>
<td>2</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Skill Proficiency</td>
<td>- Athletics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Swimming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Physical Fitness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Outdoor Pursuit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sports Science</td>
<td>- Foundations &amp; Principles of PE</td>
<td>2</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Anatomy &amp; Physiology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Requirements:
1. Students will have to participate in a three-day outdoor camp.
2. Students will be required to attend a 6 credit equivalent extended programme in sports training.

N.B: C.P denotes credit points, 1 cp = 15 teaching contact hours

(Source from Course outline <1997-1999> of the Department of Physical Education, the Hong Kong Institute of Education)
Appendix 1-4: Preparatory year for three-year Certificate in Education course (Primary) PE outline, 1996-1999

Aim: to provide students with the necessary knowledge and practical experience in physical education to pursue the two-year Certificate in Education Programme with physical education as one of their elective subjects.

Objective:
1) To provide students with the fundamental knowledge of physical education
2) To provide students with skills and abilities in physical education and selected individual and team sports
3) To develop students' aptitude and professional interest in physical education

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Module</th>
<th>Unit</th>
<th>C.P.</th>
<th>Hour</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Studies</td>
<td>Foundation Knowledge</td>
<td>Sports in Society</td>
<td>2</td>
<td>30</td>
<td>Preparatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to Sports Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill Proficiency</td>
<td>Athletics</td>
<td>2</td>
<td>30</td>
<td></td>
<td>Preparatory</td>
</tr>
<tr>
<td>(I)</td>
<td>Dance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gymnastics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill Proficiency</td>
<td>Swimming</td>
<td>2</td>
<td>30</td>
<td></td>
<td>Preparatory</td>
</tr>
<tr>
<td>(II)</td>
<td>Team Ball Games (2 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Racket Ball Games (1 item)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.B: C.P. denotes credit points, 1 cp = 15 teaching contact hours

After the preparatory year, the students will take the two-year Certificate in Education Course (refer to appendix 1-3)

(Source from the Course outline <1996-1999> of the Department of Physical Education, the Hong Kong Institute of Education)
Appendix 1-5: Two year Certificate in Education course (Secondary) PE course outline, 1997-1999

Aim: To provide students with scientific and pedagogical foundations of physical education, and the skill proficiency necessary for teaching physical education at secondary level

Objective:
1. To provide students with the scientific and pedagogical foundation of physical education.
2. To provide students with the knowledge and skills necessary for the implementation of physical education curriculum for secondary school as advised by the Education Department for Hong Kong.
3. To enhance students’ repertoire of exercises, sport skill proficiency and related teaching techniques and progressions appropriate for secondary school pupils.
4. To enhance students’ understanding of the principles and foundations of physical education necessary for the pursuit of degree programmes.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Module</th>
<th>Unit</th>
<th>C.P</th>
<th>Hours</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Studies</td>
<td>Theory in Motor Learning</td>
<td></td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Teaching Techniques in PE</td>
<td></td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Foundation and Principles of PE</td>
<td></td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Basic Curriculum Studies in PE</td>
<td></td>
<td>1</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Evaluation for Secondary School PE</td>
<td></td>
<td>1</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PE Administration in Secondary Schools</td>
<td></td>
<td>1</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Academic Studies</td>
<td>Skill Proficiency I</td>
<td>A choice of four activities - Swimming, Badminton, One Creative Movement, and one Team Game</td>
<td>3</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Skill Proficiency II</td>
<td>A Choice of three activities - Two team Games and Outdoor Education</td>
<td>2</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Skill Proficiency III</td>
<td>A Choice of three activities - One Dance Activity, Gymnastics and Athletics</td>
<td>2</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Basic anatomy and physiology</td>
<td></td>
<td>1</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

N.B: C.P. denotes credit points, 1 cp = 15 teaching contact hours

(Source from the Course outline < 1997-1999> of the Department of Physical Education, the Hong Kong Institute of Education)
Appendix 3-1: Sample for Daily Reflectivity Checklist (I-DRC)

(I) How often do you think the following questions for a physical education lesson?

The respondents are requested to put a (✓) against either one of the following items: ‘often’, 'sometimes (stms)’, ‘rare’ and ‘no’.

<table>
<thead>
<tr>
<th></th>
<th>often</th>
<th>stms</th>
<th>rare</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Before lesson</strong>, how often you think the following aspects fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>During lesson</strong>, how often you think the following aspects fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>After lesson</strong>, how often you think the following aspects fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Before lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. management skill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>During lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. management skill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. <strong>After lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendices

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>d.</strong></td>
<td><strong>Teaching aids</strong></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td><strong>During lesson</strong>, do you use appropriate methods &amp; motives for pupils' participation in lesson?</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td><strong>Before lesson</strong>, how often you think of pupils' enjoyment in lesson?</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td><strong>During lesson</strong>, how often you think of pupils' enjoyment in lesson?</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td><strong>After lesson</strong>, how often you think of pupils' enjoyment in lesson?</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td><strong>Before lesson</strong>, how often you think of this is a pleasant physical education lesson?</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td><strong>During lesson</strong>, how often you think of this is a pleasant physical education lesson?</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td><strong>After lesson</strong>, how often you think of this is a pleasant physical education lesson?</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td><strong>Before lesson</strong>, how often you think of what do pupils learn in the lesson?</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td><strong>During lesson</strong>, how often you think of what do pupils learn in the lesson?</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td><strong>After lesson</strong>, how often you think of what do pupils learn in the lesson?</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td><strong>Before lesson</strong>, how often you think of the purposes / aims / objectives of the lesson?</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td><strong>During lesson</strong>, how often you think of the purposes / aims / objectives of the lesson?</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td><strong>After lesson</strong>, how often you think of the purposes / aims / objectives of the lesson?</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td><strong>Before lesson</strong>, how often you think of the educational role of the lesson?</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td><strong>During lesson</strong>, how often you think of the educational role of the lesson?</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td><strong>After lesson</strong>, how often you think of the educational role of the lesson?</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td><strong>Before lesson</strong>, how often you think of pupil's behavior?</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td><strong>During lesson</strong>, how often you think of pupil's behavior?</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td><strong>After lesson</strong>, how often you think of pupil's behavior?</td>
<td></td>
</tr>
</tbody>
</table>

### (II) Intrinsic & extrinsic value of PE lesson

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>What do you think are the intrinsic values of PE lessons? (give examples. …….)</td>
</tr>
<tr>
<td>b.</td>
<td>What do you think are the extrinsic values of PE lessons?</td>
</tr>
<tr>
<td>c.</td>
<td>Do you think that the intrinsic value is more important than the extrinsic value?</td>
</tr>
</tbody>
</table>

### (III) Insight and improvement in teaching

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Does your reflection on your lesson (thinking / evaluation) offer any insight</td>
</tr>
</tbody>
</table>
into your teaching?

b. Does your reflection on your lesson lead to any improvement in your teaching?

(IV) Do you understand the above questions? Any other comments?
Appendix 3-2: Interview questions for participant’s personal and professional development (I-PPD)

1. Briefly describe your learning background (especially the learning of sport activities / physical activity)
2. Do you have any teachers that you particularly respected? What were his / her characteristics and his / her pedagogy?
3. What is your career expectation?
4. Why did you enroll for the teacher education program at the Hong Kong Institute of Education?
5. Is there anyone else who influenced your enrollment? How?
6. Why did you take physical education as your elective subject?
7. Has your attitude to teaching changed since completing the teacher certificate course?
8. Tell me about your learning experience (as a pupil) in sports activities
9. Briefly tell me about your teaching experience (including your current teaching experience, and coach experience, etc.).
10. Tell me something about your attitude towards teaching..
11. Will you continue with your teaching career in the coming five or ten years?
12. Are you involved in further studies right now in order to enhance your professional development?
13. Do you have a plan for further studies in the coming years?
Appendix 3-3: Interview question for participant’s school background and physical education information (I-Sch)

1. Can you briefly tell me something about the PE subject at your school?
2. Is there any PE teaching schedule set up by your school?
3. How long has your school been established?
4. Is it a subsidized school or a private school?
5. Is it a single session school?
6. Can you tell me whether the school pays attention to PE and actively carries out the PE activities during the lesson or after school?
7. Do you think that the school provides enough teaching resources or material for the teachers and assists their PE teaching or the design of the PE subject syllabus?
8. Where do you carry out the training, on campus or booking somewhere else off campus?
9. Does the school or the PE panel arrange the peer teaching observation or do the teachers arrange it of their own accord?
10. Have you ever observed other teachers’ teaching of your own accord?
11. What do you think of the PE teachers’ teaching in this school?
12. Does your school regularly organize the sports day or games day each year?
13. Can you tell me something about the pupils’ academic results and their family background?
14. How about the PE activities that they take part in on campus, or off campus?
15. What activities are provided after class?
16. Do you plan to teach in this school over the next few years or in future?

17. Is there anything you want to add, or have you something to tell me that I haven’t asked you?

Thank you for your co-operation.
Appendix 3-4: Interview questions for reflective thinking interview (II-RTI-1)

1. How did you view this PE lesson? (in what terms? Generally?)
2. How appropriate was your pedagogical content for the pupils?
3. Do you think the content you taught is appropriate? For the range of pupils; the goal of the lesson?
4. Do you think that you are knowledgeable in the subject you teach?
5. Do you think the lesson ran smoothly and had momentum?
6. What did you expect to happen in this lesson?
7. Is pupils' behavior better or worse than previously? Why do you think they are better or worse? How can you improve pupils' behavior?
8. Are the pupils actively involved in activities? If 'no', why? If 'yes', why?
9. How can you motivate pupils' participation in a lesson?
10. How can you enhance pupils' learning and enjoyment in lesson?
11. What do you think of your performance in class? (appearance, voice, preparation, pedagogy, management, etc.)
12. Do you think this is a pleasant PE lesson for pupils?
13. How do you think that you need to modify any part of your teaching?
14. Do you have anything to add in this part relating to teaching in this lesson?
Appendices

Appendix 3-5: Interview questions for reflective thinking interview (II-RTI-2)

1. What do you think of the lesson just now? For example, did any ideas come to your mind throughout the whole lesson?
2. Will you take any follow-up action in the following lesson?
3. How did you view this PE lesson? (in what terms? Generally?)
4. How appropriate was your pedagogical content for the pupils?
5. Do you think the content you taught has appropriate? For what? The range of pupils, the goal of the lesson?
6. Do you think that you are knowledgeable in the subject you teach?
7. Do you think the lesson ran smoothly and had momentum?
8. What did you expect to happen in this lesson?
9. Is pupils' behavior better or worse than previously? Why do you think they are better or worse? How can you improve pupils' behavior?
10. Are the pupils actively involved in activities? If 'no', why? If 'yes', why?
11. How can you motivate pupils' participation in lesson?
12. How can you enhance pupils' learning and enjoyment in lesson?
13. What do you think of your performance in class? (appearance, voice, preparation, pedagogy, management, etc.)
14. Do you think this is a pleasant PE lesson for pupils?
15. How do you think that you need to modify any part of your teaching?
16. Do you have anything to add in this part relating to teaching in this lesson?
Appendix 3-6: Interview question for reflective learning workshop
(II-RLW-1)

1. What are the purposes of PE? Are PE lessons important to your pupils?
2. What's the difference between PE lesson and classroom teaching in other subjects?
3. What do pupils learn in PE?
4. Do you have difficulty in PE teaching, including preparing and performing the lesson?
5. What is quality PE teaching?
6. What do you think is the educational role of PE lesson?
7. What are the criteria for good teaching in PE?
8. Do you have a view on the intrinsic values in a PE lesson (issue, moral issue, ethical issue, way of thinking, etc)? How would you measure these elements?
9. What, in your view, are the things that would help you become a better teacher?
10. Is there anything that I didn't ask about that you think I should know?
11. What didn't I ask about that I should have?
12. Is there anything else that you wanted to tell me that has not come up so far?
13. Do you think there are other things that would lead to self-improvement in your (daily) teaching?
Appendix 3-7: Interview questions for Reflective Learning Workshop (II-RLW-2)

Reflective Journal

Firstly, have you given any thought to your teaching after the last reflective thinking interview? Have any particular questions come to mind?

Secondly, have any ideas or questions come to mind to your teaching, teaching methods, the pupils’ performance, or your teaching goal?

Thirdly, if you have not given any thought to your teaching, are there reasons for this? (i.e. are you satisfied with your teaching or do you have time for reflection, other reasons?)
Appendix 3-8: Sample for Teaching Evaluation Checklist (TEC-P)

[completed by participant]

<table>
<thead>
<tr>
<th>Rating criteria</th>
<th>A = Excellent performance</th>
<th>B = Good performance</th>
<th>C = Satisfactory performance</th>
<th>D = Unsatisfactory performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checklist items</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson Objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson Content (suit pupils' interests &amp; abilities)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation / Motivated pupils participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil participation (keep on task)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil enjoyment (pleasure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson smoothness &amp; momentum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic learning time (ALT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Enough practice in content)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement of objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class atmosphere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management / discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value towards PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of fitness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of skill (learning &amp; mastering motor skill)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of pleasure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall attitude (e.g. teaching attitude)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3-9: Sample for Teaching Evaluation Checklist (TEC-R)

[Recorded by researcher after each lesson observation]

Code No.: _______________ Date: _______________

Class: ______

Aims of the lesson: ____________________________________________

Warm up: ________________________________________________

Skill practice: _________________________________________

Group practice: __________________________________________

Overall remarks: _________________________________________

Venue setting:
Rating criteria

A = Excellent performance  
B = Good performance  
C = Satisfactory performance  
D = Unsatisfactory performance

<table>
<thead>
<tr>
<th>Checklist items</th>
<th>Rating (tick the appropriate box)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>Lesson Objectives</td>
<td></td>
</tr>
<tr>
<td>Lesson Content (suit pupils' interests &amp; abilities)</td>
<td></td>
</tr>
<tr>
<td>Teaching Strategies</td>
<td></td>
</tr>
<tr>
<td>Teaching Resources</td>
<td></td>
</tr>
<tr>
<td>Overall Preparation</td>
<td></td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Motivation / Motivated pupils participation</td>
<td></td>
</tr>
<tr>
<td>Pupil participation (keep on task)</td>
<td></td>
</tr>
<tr>
<td>Pupil enjoyment (pleasure)</td>
<td></td>
</tr>
<tr>
<td>Lesson smoothness &amp; momentum</td>
<td></td>
</tr>
<tr>
<td>Academic learning time (ALT) (Enough practice in content)</td>
<td></td>
</tr>
<tr>
<td>Achievement of objectives</td>
<td></td>
</tr>
<tr>
<td>Timing</td>
<td></td>
</tr>
<tr>
<td>Demonstration</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Class atmosphere</td>
<td></td>
</tr>
<tr>
<td>Management / discipline</td>
<td></td>
</tr>
<tr>
<td>Overall performance</td>
<td></td>
</tr>
<tr>
<td><strong>Value towards PE</strong></td>
<td></td>
</tr>
<tr>
<td>Value of fitness</td>
<td></td>
</tr>
<tr>
<td>Value of skill (learning &amp; mastering motor skill)</td>
<td></td>
</tr>
<tr>
<td>Value of knowledge</td>
<td></td>
</tr>
<tr>
<td>Value of pleasure</td>
<td></td>
</tr>
<tr>
<td>Value of attitude</td>
<td></td>
</tr>
<tr>
<td>Value of creativity</td>
<td></td>
</tr>
<tr>
<td>Other values</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher</strong></td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
</tr>
<tr>
<td>Subject knowledge</td>
<td></td>
</tr>
<tr>
<td>Alert</td>
<td></td>
</tr>
<tr>
<td>Overall attitude (e.g. teaching attitude)</td>
<td></td>
</tr>
<tr>
<td><strong>Overall rating</strong></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3-10: Interview questions for the Reflective Thinking Interview

(III-RTI-1)

1. What do you think were the strong points of your PE teaching in the whole lesson?
2. Why do you think these were strong points?
3. Do you think you can modify parts of your teaching?
4. Would you want to modify any aspect of your teaching? If so, why?
5. Do you think that you need to modify or change any part of your teaching?
6. Do you consider that your teaching was successful in this lesson? If you do, what was it or what were successful factors?
7. What do you think was unsuccessful teaching in this lesson?
8. What circumstances or situations do you think that can affect your successful teaching in this lesson?
9. Did you experience unexpected learning outcomes in this lesson?
10. What actions do you take when you have experienced unexpected learning outcomes?
11. How do you follow up these actions in the PE lesson?
12. Have you ever thought of any other teaching or learning styles that can be applied in this lesson?
13. Have you ever thought of using any other teaching method or style to improve the pupils’ learning?
14. Have you ever thought about the style of your teaching?
15. Do you think that have a style of teaching and would you want to make a
change to that style?

16. Do you think that the content in this lesson was important to the pupils? In what way? What do you think they learnt?

17. Do you think that the content of your teaching exhibited or included something like moral, ethical or social elements?

18. What do you think of your interaction pupils, i.e. the communication or contact with them, in this lesson?

19. Do you think that your teaching went smoothly in this PE lesson? Was the pace of the lesson right to motivate pupils to participate in activities?

20. Do you think that pupils actively participated in the activities in this lesson?

21. Do you think that pupils regarded this lesson as a happy lesson?

22. Do you have anything to add in this part relating to teaching in this lesson?
Appendix 3-11: Interview questions for Reflective Thinking Interview (III-RTI-2)

1. Did you have any thoughts in your mind about your teaching?
2. Apart from......what do you think of the rest of your teaching?
3. How well do you think the lesson went? (If the answer is “well”. Ask, “what was it that made you think it was a good, or bad lesson?)
4. What kind of follow up action are you going to take?
5. What were the strengths in your teaching in this lesson?
6. Which aspect did you think that you should make improvements on?
7. Do you consider that your teaching in this lesson constituted successful PE teaching?
8. Can you think of any circumstances which may affect your successful teaching?
9. Did anything happen in the lesson which you didn’t expect to occur?
10. Do you think that the curriculum content in this lesson was important for the pupils?
11. Do you think that the teaching was carried out smoothly and had sufficient pace?
12. Do you think it is important for pupils to always enjoy lessons?
13. Having completed the teaching in this lesson, do you think that you could make any improvements on it when you look back?
Appendix 3-12: Interview questions for Reflective Thinking Interview
(III-RTI-3)

1. What did you think of the lesson that you have just completed?
2. Before this lesson, have you thought about what you were going to do in this lesson?
3. During this lesson what was in your mind? For example, did any idea appear in your mind throughout the whole lesson concerning teaching, content, pupils etc. other....?
4. Do you think that there were any strong points in this lesson?
5. Do you think that you can improve certain aspects?
6. When you look at this lesson as a whole would you make any changes in any aspect, or follow up action in the following lesson, in respect of what has happened in this lesson?
7. Do you have anything else to talk to me about regarding this lesson?
Appendix 3-13: Interview questions for Reflective Thinking Interview

(III-RTI-4)

1. What did you think of the lesson that you have just completed?

2. Before this lesson, have you thought about what you were going to do in this lesson?

3. During this lesson what was in your mind? For example, did any idea appear in your mind throughout the whole lesson concerning teaching, content, pupils etc. other....?

4. Do you think that there were any strong points in this lesson?

5. Do you think that you can improve on certain aspects?

6. When you look at this lesson as a whole would you make any changes in any aspect, or follow up action in the following lesson, in respect of what has happened in this lesson?

7. Do you have anything else to talk to me about regarding this lesson?
Appendix 3-14: Interview questions for Reflective Learning Workshop (III-RLW-1)

1. From your point of view, what does reflection mean to you?

2. ......Do you think that there are any consequences after you self-examine what you have done?

3. In your teaching experience, do you know when you reflect on your teaching or anything relating to your teaching?

4. Have you ever thought of reflecting before you prepare for teaching, during your thirty-minute teaching or after your teaching?

5. Do you ever think of what has happened in a previous lesson and then prepare your teaching in respect of it. Have you ever experienced reflection, or have any ideas, or thoughts that change your way of teaching?

6. Did you engage in any reflection after class?

7. We may reflect before teaching and have some ideas in our mind or we may reflect during teaching. As a result, your teaching style and method may change during your teaching. After the teaching, you may also reflect or evaluate it. This may help you understand what you should pay attention to or improve next time. When we talk about reflection, these stages are involved. When you reflected on your teaching, were you aware of which aspect you might often think of, like the pupils response, your teaching performance, teaching method or which aspect?

8. The researcher shares with him/her, her ideas about reflection: There are three levels of reflections (technical reflection, practical reflection & critical reflection). Technical reflection may refer to teaching skills or teaching goal. It analyzes whether it is precise and clear, whether I use the proper equipment
in the venue. The second level is practical reflection, which places emphasis more on the analysis. It analyzes my teaching method, my teaching goal, how my teaching behavior affects my pupils. This level pays more attention to the analysis and evaluation. The third level is critical reflection, which is concerned with the relationship between teaching and the moral and ethical standards of my pupils; between teaching and the social life of the community or of the school. It may also be concerned with the relationship between teaching and general education goals in the long term.

9. After I had introduced these three levels of reflection, do you think teachers actually think in these terms? If so, which levels do you pay more attention to or neglect most?

10. Regarding teaching behavior, it is divided into routine teaching behaviors and reflective teaching behavior. Routine teaching behavior concerns the traditional way or the habitual way of teaching. Another situation is that one may be reluctant to change a way of teaching. This behavior is prevalent at present. Do you usually have any routine teaching behavior in your daily teaching?

11. Apart from the routine teaching behavior, there is another kind of behavior, which is called reflective teaching behavior and is more challenging. It is obviously different from that of routine teaching behavior. Why is it more challenging? It’s because the teacher often reflects on his/her teaching goals and outcomes and about the pupils’ needs. The teacher also conducts self-checking on his/her own teaching behavior. When you look back on your PE teaching, do you think that your teaching belongs to the routine teaching behavior or reflective teaching behavior, or do you engage in both, or do you
have other qualities?

12. What kind of attitude do you think that you should have when we talk about reflective teaching?

13. Did you take any follow up actions after your reflective thinking class?

14. An open mind teacher, usually finds way to enhance his/her teaching. This is the attitude that an open minded teacher must have. For example, when your head teacher or your colleagues observe your teaching, or if you are informed that a parent wants to discuss your teaching method, you would accept this and analyze other people's comment in an open minded attitude.

15. A reflective teacher should also have a responsible attitude. If we just casually teach a lesson and don't care about the teaching outcomes, it won't benefit the pupils or the teacher's professional growth. Open-minded, diligent, serious and responsible attitudes are the attitudes that the reflective teacher should adopt. What other methods could enhance your reflective thinking?

16. Generally speaking, do you think that reflection is important to your professional growth?

17. What do you mean by "a good teacher", not only referring to PE teaching? (What are the qualities of a good teacher?.... A bad or difficult pupil?..)

18. To you, who are the best pupils? Who are the worst pupils?

19. Do you have anything to ask about reflection or do you want me to repeat any part of our discussion?
Appendix 3-15: Interview questions for Reflective Learning Workshop

(III-RLW-2)

1. What do you think about your teaching after observation of your lesson through video-taping?

2. Do you have anything more you want to share with me?
Appendix 3-16: Interview questions for Reflective Learning Workshop

(III-RLW-3)

1. What do you think about your teaching after observation of your lesson through video-taping?

2. Do you have anything more you want to share with me?
Appendix 3-17: Interview questions for Final In-depth Interview (IV-FIDI)

1. Do you think reflection is important to you? If 'important', why? If not, why & how?

2. After participating in this reflective teaching project, we had many follow-up discussions or workshops. Do you think you need reflective thinking?

3. Are there any changes in your teaching after participating in this research project? Say, teaching content, curriculum planning, pedagogy, teaching style, class organization and pupils' learning?

4. Is your pedagogical reflection affected after participating in this project? Say, PE lessons, general knowledge or overall teaching.

5. A self-evaluation checklist was given to you after having a PE class observation, did this form affect your PE teaching? While you were filing this in, what were you thinking? What aspects of your teaching were you recalling?

6. Numerous workshops or discussions were provided after each class observation, did those discussions on reflection affect your teaching?

7. Apart from this PE lesson which I have observed, has there been any influence on your PE teaching in other classes?

8. Apart from pedagogical reflection, what other things or factors help or improve your teaching, especially in PE teaching?

9. Do you think that my presence in that PE lesson or my class observation affected your teaching?

10. How do you rate your PE teaching over this whole year?

11. Are there any methods that can help or enhance your pedagogical reflection you think?
12. How do you think the pupils reacted to your teaching methods? Do you think that they are satisfied with or accept your teaching methods and styles?

13. Will this pedagogical reflection help or affect your PE teaching in the coming year, the new school year '2000-2001'?

14. Have you ever thought that you will revise or change your teaching methods or formats in the coming year?

15. In the coming year, you need not join this project. Will it be different without it do you think? Could you think of any method to enhance your reflection in the coming year?

16. Do you think that this project, the pedagogical reflection project has enhanced your teaching?

17. What do you think of the whole project?

18. Is your PE teaching affected by the environmental factors of the school?

19. Do you think that there are intrinsic values in PE teaching?

20. What is an ideal and satisfying PE lesson do you think?

21. In a PE lesson, who are the satisfying and ideal pupils among the pupils whom you have known or you have taught?

22. How about the most difficult or challenging ones? How would you describe the weakest pupil in a PE lesson?
Appendix 3-18: Interventions and activities attended by Chung, Yum, Shan & Ku throughout the four phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Interventions/activities</th>
<th>Chung</th>
<th>Yum</th>
<th>Shan</th>
<th>Ku</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>I-PPD</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I-Sch</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>II-RTI-2</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-2</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>II-RLW-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>II-RLW-2</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-RTI-2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-RTI-3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-RTI-4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>III-RLW-1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-RLW-2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>III-RLW-3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

N.B.: ✓ denoted the participant attended the interviews or activities;

X denoted the participant did not attend the interviews or activities.
Appendix 3-19: Summary of the number of interventions taken by Chung, Yum, Shan and Ku throughout the four phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Interventions</th>
<th>Chung</th>
<th>Yum</th>
<th>Shan</th>
<th>Ku</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>DRC</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>RTI</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TEC (P)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RLW</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>III</td>
<td>RTI</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>TEC (P)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RLW</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

DRC – Daily Reflectivity Checklist  
RTI - Reflective Thinking Interview  
TEC(P) – Teaching Evaluation Checklist by participant  
RLW – Reflective Learning Workshop  

N.B. There was a slight difference in the number of interventions for each participant because of different participant’s availability
Appendix 3-20: Letter to school Principal

To: XX School


Dear Principal,

I, Anita TSUI, am a lecturer at the Hong Kong Institute of Education. I am currently pursuing a Ph.D. program at Loughborough University and undertaking research about pedagogical reflection and teaching quality. This study will hope to impact, enhance and promote qualities of teaching for beginning teachers. Miss / Mr XXX of your school will be invited to participate in the study. I shall visit, observe and video-tape her / his PE lesson once a month from November 1999 to June 2000. It will not interfere with her / his teaching schedule and usual school operation.

I would be grateful if you would grant me access to your school during this lesson. All the information about the school and the teacher will be kept highly confidential. This information is used solely for research purposes.

Please feel free to contact me if you have any further query. I can be reached at 29487843 and my office is at D4-2/F-/12 at the Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, N.T. Hong Kong.

Thank you for your kind attention and support.

Yours faithfully,

Anita K. Y. TSUI.
Appendix 3-21: Sample letter to participant’s consent

Invitation

October, 1999.

Dear Mr / Ms XXX,

I am writing to invite you to participate in my doctoral research. I am currently pursuing a Ph.D. program at the University of Loughborough. The aims of the study are to examine the relationships between pedagogical reflection and teaching quality in physical education for beginning primary school physical education teachers. I shall visit, observe and video tape once a month a PE lesson from November 1999 to June 2000. You will be invited to take part in some interventions about reflection. All the information will be treated as confidential and it will be merely used for the purpose of research. The data will be destroyed after analysis.

Please feel free to contact me if you have any query. I can be reached at 29487843.

Please fill in the attached slip and return it to me at your earliest convenience.

Yours faithfully,

Anita K. Y. TSUI.
I have read the above and agree to participate in this research.

Signature of participant: 

Name of participant: 

Date: 

Signature of the Project investigator: 

Appendices
Appendix 4-1: List of schedule for Chung’s interventions and activities

<table>
<thead>
<tr>
<th>Phase</th>
<th>Code</th>
<th>Interventions / Activities</th>
<th>Remarks</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>A daily reflectivity checklist</td>
<td></td>
<td>16/2/00</td>
</tr>
<tr>
<td></td>
<td>I-PPD</td>
<td>Personal &amp; professional development</td>
<td></td>
<td>16/2/00</td>
</tr>
<tr>
<td></td>
<td>I-Sch</td>
<td>School PE information</td>
<td></td>
<td>15/3/00</td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>16/2/00</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>15/3/00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>16/2/00</td>
</tr>
<tr>
<td></td>
<td>II-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>17/4/00</td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>17/4/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>17/5/00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-3</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>31/5/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>14/6/00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>17/5/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>31/5/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-3</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>22/6/00</td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>Final In-depth Interview</td>
<td></td>
<td>22/6/00</td>
</tr>
</tbody>
</table>
Appendix 4-2: List of schedule for Yum’s interventions and activities

<table>
<thead>
<tr>
<th>Phase</th>
<th>Code</th>
<th>Interventions / Activities</th>
<th>Remarks</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>A daily reflectivity checklist</td>
<td></td>
<td>9/11/99</td>
</tr>
<tr>
<td></td>
<td>I-PPD</td>
<td>Personal &amp; professional development</td>
<td></td>
<td>9/11/99</td>
</tr>
<tr>
<td></td>
<td>I-Sch</td>
<td>School PE information</td>
<td></td>
<td>1/3/00</td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>9/11/99</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-1</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>1/3/00</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-2</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>9/11/99</td>
</tr>
<tr>
<td></td>
<td>II-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>29/3/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-1</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>23/5/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-2</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-3</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>7/6/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-3</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-4</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-4</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>29/3/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>23/5/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-3</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>7/6/00</td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>Final In-depth Interview</td>
<td></td>
<td>24/6/00</td>
</tr>
</tbody>
</table>
Appendix 4-3: List of schedule for Shan’s interventions and activities

<table>
<thead>
<tr>
<th>Phase</th>
<th>Code</th>
<th>Interventions / Activities</th>
<th>Remarks</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>A daily reflectivity checklist</td>
<td></td>
<td>3/12/99</td>
</tr>
<tr>
<td>I</td>
<td>I-PPD</td>
<td>Personal &amp; professional development</td>
<td></td>
<td>3/12/99</td>
</tr>
<tr>
<td>I</td>
<td>I-Sch</td>
<td>School PE information</td>
<td></td>
<td>3/3/00</td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>3/12/99</td>
</tr>
<tr>
<td>II</td>
<td>II-TEC(P)-1</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>II-TEC(P)-2</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>II-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>3/3/00</td>
</tr>
<tr>
<td>II</td>
<td>II-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>30/3/00</td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>3/3/00</td>
</tr>
<tr>
<td>III</td>
<td>III-TEC(P)-1</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>30/3/00</td>
</tr>
<tr>
<td>III</td>
<td>III-TEC(P)-2</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-3</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>19/5/00</td>
</tr>
<tr>
<td>III</td>
<td>III-TEC(P)-3</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-4</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>3/6/00</td>
</tr>
<tr>
<td>III</td>
<td>III-TEC(P)-4</td>
<td>(Checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>19/5/00</td>
</tr>
<tr>
<td>III</td>
<td>III-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>13/6/00</td>
</tr>
<tr>
<td>III</td>
<td>III-RLW-3</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>23/6/00</td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>Final In-depth Interview</td>
<td></td>
<td>23/6/00</td>
</tr>
</tbody>
</table>
### Appendix 4-4: List of schedule for Ku's interventions and activities

<table>
<thead>
<tr>
<th>Phase</th>
<th>Code</th>
<th>Interventions / Activities</th>
<th>Remarks</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I-DRC</td>
<td>A daily reflectivity checklist</td>
<td>No return</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I-PPD</td>
<td>Personal &amp; professional development</td>
<td></td>
<td>3/12/99</td>
</tr>
<tr>
<td></td>
<td>I-Sch</td>
<td>School PE information</td>
<td></td>
<td>5/5/00</td>
</tr>
<tr>
<td>II</td>
<td>II-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>1/12/99</td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-1</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-TEC(P)-2</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>3/12/99</td>
</tr>
<tr>
<td></td>
<td>II-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>III-RTI-1</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>8/3/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-1</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-2</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>5/5/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-2</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-3</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>26/5/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-3</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RTI-4</td>
<td>Reflective Thinking Interview</td>
<td>Video lesson</td>
<td>16/6/00</td>
</tr>
<tr>
<td></td>
<td>III-TEC(P)-4</td>
<td>(checklist for teaching evaluation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III-RLW-1</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>5/5/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-2</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>26/5/00</td>
</tr>
<tr>
<td></td>
<td>III-RLW-3</td>
<td>Reflective Learning Workshop</td>
<td></td>
<td>16/6/00</td>
</tr>
<tr>
<td>IV</td>
<td>IV-FIDI</td>
<td>Final In-depth Interview</td>
<td></td>
<td>26/6/00</td>
</tr>
</tbody>
</table>
Appendix 4-5: Chung’s response to the Daily Reflectivity Checklist

(1) How often do you think of the following questions for a physical education lesson?

The respondents are requested to put a (√) against either one of the following items: ‘often’, ‘sometimes (stms)’, ‘rare’ and ‘no’.

<table>
<thead>
<tr>
<th></th>
<th>Before lesson, how often you think the following aspects fit with pupils’ needs?</th>
<th>often</th>
<th>stms</th>
<th>rare</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>During lesson, how often you think the following aspects fit with pupils’ needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>After lesson, how often you think the following aspects fit with pupils’ needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Before lesson, how often you think of your performance in class in the following aspects?</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Preparation</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Management skill</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Teaching aids</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>During lesson, how often you think of your performance in class in the following aspects?</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Preparation</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Management skill</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>After lesson, how often you think of your performance in class in the following aspects?</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Preparation</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Management skill</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
e. Teaching aids

7. **During lesson**, do you use appropriate methods & motives for pupils' participation in lesson?

8. **Before lesson**, how often you think of pupils' enjoyment in lesson?

9. **During lesson**, how often you think of pupils' enjoyment in lesson?

10. **After lesson**, how often you think of pupils' enjoyment in lesson?

11. **Before lesson**, how often you think of this is a pleasant physical education lesson?

12. **During lesson**, how often you think of this is a pleasant physical education lesson?

13. **After lesson**, how often you think of this is a pleasant physical education lesson?

14. **Before lesson**, how often you think of what do pupils learn in the lesson?

15. **During lesson**, how often you think of what do pupils learn in the lesson?

16. **After lesson**, how often you think of what do pupils learn in the lesson?

17. **Before lesson**, how often you think of the purposes / aims / objectives of the lesson?

18. **During lesson**, how often you think of the purposes / aims / objectives of the lesson?

19. **After lesson**, how often you think of the purposes / aims / objectives of the lesson?

20. **Before lesson**, how often you think of the educational role of the lesson?

21. **During lesson**, how often you think of the educational role of the lesson?

22. **After lesson**, how often you think of the educational role of the lesson?

23. **Before lesson**, how often you think of pupil's behavior?

24. **During lesson**, how often you think of pupil's behavior?

25. **After lesson**, how often you think of pupil's behavior?

---

(II) Intrinsic & Extrinsic Value of PE

a. What do you think are the intrinsic values of PE? (e.g. ...)

   i) **To develop the pupils' potentiality, build up their self-confidence** (e.g. to help those pupils whose academic result is not that good to re-build their self-confidence in the cultural studies);

   ii) **To enable the pupils to learn the skills of getting along with others in the group activities; learn sport skills; and**
iii) To strengthen the pupils' physical ability.

b. What do you think are the extrinsic values of PE?
   i) To provide the pupils with a chance to relax themselves from the intensive study; and

   ii) To enjoy playing sports.

c. Do you think that the intrinsic value is more important than the extrinsic value?
   i) Yes, I do

   ii) It's because the influence of the intrinsic value is more profound than that of the extrinsic value.

(III) Insight and Improvement in Teaching

a. Does your reflection on your lesson (thinking/evaluation) offer any insight into your teaching?
   Yes, it does, e.g. to organize my knowledge and renew the teaching content of each period.

b. Does your reflection on your lesson lead to any improvement in your teaching?
   Yes, it does. It's because my reflection makes adjustment on various aspects, e.g. the pupils' standard, the content for the activities.
Appendix 4-6: Yum’s response to the Daily Reflectivity Checklist

(I) How often you think of the following questions for a physical education lesson?

*The respondents are requested to put a (√) against either one of the following items: ‘often’, ‘sometimes (stms)’, ‘rare’ and ‘no’.*

<table>
<thead>
<tr>
<th></th>
<th>often</th>
<th>stms</th>
<th>rare</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Before lesson</strong>, how often you think the following aspects fit with pupils’ needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>During lesson</strong>, how often you think the following aspects fit with pupils’ needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>After lesson</strong>, how often you think the following aspects fit with pupils’ needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Before lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. management skill</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>During lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. pedagogy / teaching methods</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. management skill</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. <strong>After lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appearance &amp; voice</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. pedagogy / teaching methods</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. management skill</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Teaching aids
- **During lesson**, do you use appropriate methods & motives for pupils' participation in lesson?
- **Before lesson**, how often you think of pupils' enjoyment in lesson?
- **During lesson**, how often you think of pupils' enjoyment in lesson?
- **After lesson**, how often you think of pupils' enjoyment in lesson?
- **Before lesson**, how often you think this is a pleasant physical education lesson?
- **During lesson**, how often you think this is a pleasant physical education lesson?
- **After lesson**, how often you think this is a pleasant physical education lesson?
- **Before lesson**, how often you think of what pupils learn in the lesson?
- **During lesson**, how often you think of what pupils learn in the lesson?
- **After lesson**, how often you think of what pupils learn in the lesson?
- **Before lesson**, how often you think of the purposes / aims / objectives of the lesson?
- **During lesson**, how often you think of the purposes / aims / objectives of the lesson?
- **After lesson**, how often you think of the purposes / aims / objectives of the lesson?
- **Before lesson**, how often you think of the educational role of the lesson?
- **During lesson**, how often you think of the educational role of the lesson?
- **After lesson**, how often you think of the educational role of the lesson?
- **Before lesson**, how often you think of pupil's behavior?
- **During lesson**, how often you think of pupil's behavior?
- **After lesson**, how often you think of pupil's behavior?

### II) Intrinsic & Extrinsic Value of PE

#### a. What do you think are the intrinsic values of PE? (e.g. ...)

To provide the pupils with a chance to develop their potentiality.

#### b. What do you think are the extrinsic values of PE?

To strengthen the pupils' interpersonal skill and their health.
c) Do you think that the intrinsic value is more important than extrinsic value?  
Both are of the same importance.

(III) Insight and Improvement in Teaching

a) Does your reflection on your lesson (thinking/evaluation) offer any insight into your teaching?  
The usual practice of having reflection is to assist the teachers in thinking whether their teaching goal is achieved and not making mistakes too often.

b) Does your reflection on your lesson lead to any improvement in your teaching?  
Yes, it does. It's because I always think of which aspect I need to improve in the course of the reflection.
Appendix 4-7: Shan’s Response to the Daily Reflectivity Checklist

(I) How often you think of the following questions for a physical education lesson?

*The respondents are requested to put a (√) against either one of the following items: ‘often’, ‘sometimes (stms)’, ‘rare’ and ‘no’.*

<table>
<thead>
<tr>
<th></th>
<th>often</th>
<th>stms</th>
<th>rare</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Before lesson</strong>, how often you think of the following aspects to fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>During lesson</strong>, how often you think the following aspects fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>After lesson</strong>, how often you think the following aspects fit with pupils' needs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Instructional design (curriculum planning &amp; allocation)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Instructional content (teaching activity)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Content fit with pupils’ ability</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Before lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Management skill</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>During lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Management skill</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. <strong>After lesson</strong>, how often you think of your performance in class in the following aspects?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Appearance &amp; voice</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preparation</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pedagogy / teaching methods</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Management skill</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Teaching aids</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. **During lesson**, do you use appropriate methods & motives for pupils' participation in lesson?  
8. **Before lesson**, how often you think of pupils' enjoyment in lesson?  
9. **During lesson**, how often you think of pupils' enjoyment in lesson?  
10. **After lesson**, how often you think of pupils' enjoyment in lesson?  
11. **Before lesson**, how often you think this is a pleasant physical education lesson?  
12. **During lesson**, how often you think this is a pleasant physical education lesson?  
13. **After lesson**, how often you think this is a pleasant physical education lesson?  
14. **Before lesson**, how often you think of what pupils learn in the lesson?  
15. **During lesson**, how often you think of what pupils learn in the lesson?  
16. **After lesson**, how often you think of what pupils learn in the lesson?  
17. **Before lesson**, how often you think of the purposes / aims / objectives of the lesson?  
18. **During lesson**, how often you think of the purposes / aims / objectives of the lesson?  
19. **After lesson**, how often you think of the purposes / aims / objectives of the lesson?  
20. **Before lesson**, how often you think of the educational role of the lesson?  
21. **During lesson**, how often you think of the educational role of the lesson?  
22. **After lesson**, how often you think of the educational role of the lesson?  
23. **Before lesson**, how often you think of pupil's behavior?  
24. **During lesson**, how often you think of pupil's behavior?  
25. **After lesson**, how often you think of pupil's behavior?  

(II) Intrinsic & Extrinsic Value of PE lesson

a. What do you think are the intrinsic values of PE lessons? (e.g. ...)  

For example: It enables the pupils to learn skills which enhance their self-confidence (cognitive development). It enables the pupils to understand that learning in PE is a continual process and the skills they learn can be applied life-long. The pupils shouldn't consider the knowledge that they acquire in the PE lesson is very standardized. It enables the pupils to understand the
relationship between health and sport. It enables the pupils to develop their spirit of cooperation and solidarity. It provides a chance for the pupils to learn something in a happy atmosphere and to understand the advantage of doing physical exercise. It enables those pupils, who are weak at academic study, to rebuild their self-confidence and assurance because of their outstanding performance at sports.

b. What do you think are the extrinsic values of PE lessons?
I think that extrinsic value means its apparent value. For example, it illustrates whether the pupils can learn certain sport or PE skills; it assists the pupils to explore their potential in certain sports; and it encourages the pupils to take physical exercise once a week so as to maintain certain amount of exercise each week.

c. Do you think that the intrinsic value is more important than the extrinsic value?
I think that the intrinsic value is more important than the extrinsic value. It's because the intrinsic value enables the pupils to understand the real meaning of sports when they learn its theory in the PE lesson. This influences the pupils longer in their life. Unfortunately and generally, people seldom notice the importance of the intrinsic value of PE. They usually treat the PE lesson as a time for children to have fun if there is no PE lesson, it doesn't matter.

(III) Insight and Improvement in Teaching
a. Does your reflection on your lesson (thinking/evaluation) offer any insight into your teaching?
I treat the PE teaching reflection as a way to improve my teaching method. From the pupils’ performance and the conversation with them, I learn that the contemporary PE lesson isn’t dealt with seriously. I am a bit disappointed about this.

b. Does your reflection on your lesson lead to any improvement in your teaching?
Yes, it does. However, due to the influence of environmental factors, ‘my improvement’ is confined to the teaching skill aspect and is rather superficial because of my limited knowledge.
Appendix 5-1: Proposed curriculum for PE from Syllabuses for Primary Schools Physical Education

Suggested percentage and lessons for each area of activity for each class level in a year

<table>
<thead>
<tr>
<th>Class</th>
<th>Percentage &amp; Lessons Area</th>
<th>I</th>
<th>I</th>
<th>II</th>
<th>II</th>
<th>III</th>
<th>III</th>
<th>IV</th>
<th>IV</th>
<th>V</th>
<th>V</th>
<th>VI</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Athletics</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Dance</td>
<td></td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Games</td>
<td></td>
<td>40</td>
<td>16</td>
<td>40</td>
<td>16</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Gymnastics</td>
<td></td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Swimming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Knowledge in physical education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional item</td>
<td></td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>20</td>
<td>12</td>
<td>10</td>
<td>6</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>60</td>
</tr>
</tbody>
</table>

N.B.
- L denotes Lesson
- % denotes Percentage
- A lesson of physical education is usually 35-minutes in Hong Kong's primary school
- There are approximately 60 PE lessons in an academic year

(Source: Syllabus for Physical Education (Primary 1 – 6) prepared by the Curriculum Development Council recommended for use in schools by the Education Department, Hong Kong, 1995, p.13)
Appendix 5-2: Teaching objectives in physical education

Through physical activities, physical education teachers should ensure that the following objectives can be achieved in carrying out their teaching duties:

1. To improve the organic system, the neuro-muscular system and physical fitness of pupils.
2. To develop pupils' desirable social attitudes and patterns of behaviour such as fair play and good sportsmanship.
3. To help pupils to understand the essentials of co-operating with others in communal life and to foster them with a sense of responsibility and belonging.
4. To cultivate pupils' sense of aesthetic appreciation and to enrich them with the knowledge of elegant posture and movements.
5. To cultivate pupils' powers of observation, analysis, judgement and creativity in the process of participation in activities.
6. To stimulate pupils' interest and desirable attitudes towards physical activities and to encourage them to take part in sports, physical training and recreational activities actively and regularly.

(Source: Syllabus for Physical Education (Primary 1 – 6) prepared by the Curriculum Development Council recommended for use in schools by the Education Department, Hong Kong, 1995, p.11)
Physical Education Major

As required by the government, school physical education has to be taught by professionally trained people. This creates a great market demand for professional physical education teachers in Hong Kong. With committed staff with vigorous academic background, substantial experience in teaching and supervision, strong and well-established links with local schools, first-rated sports facilities, and state-of-the-art sports science equipment, the HKIEd provides a creative and dynamic environment for nurturing physical education teachers. The Physical Education major is designed to enable participants to become physical education specialists. Emphasis will be put on developing adequate skill, knowledge, and attitude for professional primary physical education teaching as well as building good foundation in sports humanities and sports science disciplines for further studies.

Physical Education Minor

As required by the government, school physical education has to be taught by professionally trained people. This creates a great market demand for physical education teachers in Hong Kong. With committed staff with vigorous academic background, substantial experience in teaching and supervision, strong and well-established links with local schools, first-rated sports facilities, and state-of-the-art sports science equipment, the HKIEd provides a creative and dynamic environment for nurturing physical education teachers. The Physical Education minor is designed to enable participants to become professional primary physical education teachers. Emphasis will be put on understanding a wide range of pedagogical approaches and their theoretical underpinnings.

(Source from the website <http://www.ied.edu.hk/acadprog/> of Prospectus Bachelor of Education (Honours) Programmes 2004 Entry, the Hong Kong Institute of Education, April 2004)
Currently Four Year Full-Time Bachelor of Education Programme for PE (Primary) 2003-2004 (Four-year Full-time)

All major/minor cores and subject electives are as follows.

<table>
<thead>
<tr>
<th>Core</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Fitness in School Physical Education</td>
<td>Open Elective</td>
</tr>
<tr>
<td>Humanistic Foundation for Physical Education</td>
<td>Major Core</td>
</tr>
<tr>
<td>Introduction to Physical Education</td>
<td>Major Core</td>
</tr>
<tr>
<td>Introduction to PE and Health Related Fitness</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Introduction to PE and Health Related Fitness</td>
<td>Subject Elective</td>
</tr>
<tr>
<td>Outdoor Education and Environment Awareness</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Activities for Junior Primary</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Activities for Junior Primary</td>
<td>Subject Elective</td>
</tr>
<tr>
<td>Physical Activities for Junior Primary</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Physical Activities for Primary I</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Physical Activities for Primary II</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Physical Activities for Senior Primary III</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Activities for Senior Primary IV</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Activities for Senior Primary V</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Activities for Senior Primary VI</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Education Curriculum Planning</td>
<td>Major Core</td>
</tr>
<tr>
<td>PE Curriculum Planning and Teaching Techniques</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Physical Education for Children with Special Needs</td>
<td>Major Core</td>
</tr>
<tr>
<td>Physical Education for Children with Special Needs</td>
<td>Subject Elective</td>
</tr>
<tr>
<td>Physiological Foundation of PE</td>
<td>Minor Core</td>
</tr>
<tr>
<td>Physiological Principles of Physical Education</td>
<td>Major Core</td>
</tr>
<tr>
<td>Teaching Techniques for Physical Education</td>
<td>Major Core</td>
</tr>
<tr>
<td>Test and Measurement in PE</td>
<td>Major Core</td>
</tr>
<tr>
<td>Training Methods in Physical Education and Sports</td>
<td>Open Elective</td>
</tr>
</tbody>
</table>

N.B. The students will take PE's their major core or minor core. Subject elective and open elective are open for them to choose.

(Source from the website<http://www.ied.edu.hk/pedft_primary_2.html> of the Department of Physical Education and Sports Science, the Hong Kong Institute of Education, May 2004)
Appendix 7-2: A proposed set of values and attitudes for incorporation into the school curriculum, Basic Education Curriculum Guide (2002)

<table>
<thead>
<tr>
<th>Core Values: Personal</th>
<th>Sustaining Values: Personal</th>
<th>Core Values: Social</th>
<th>Sustaining Values: Social</th>
<th>Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanctity of life</td>
<td>Self-esteem</td>
<td>equality</td>
<td>plurality</td>
<td>optimistic</td>
</tr>
<tr>
<td>Truth</td>
<td>Self-reflection</td>
<td>kindness</td>
<td>due process of law</td>
<td>participatory</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>Self-discipline</td>
<td>benevolence</td>
<td>democracy</td>
<td>critical</td>
</tr>
<tr>
<td>Honesty</td>
<td>Self-cultivation</td>
<td>love</td>
<td>freedom &amp; liberty</td>
<td>creative</td>
</tr>
<tr>
<td>Human dignity</td>
<td>Principled morality</td>
<td>freedom</td>
<td>common will</td>
<td>appreciative</td>
</tr>
<tr>
<td>Rationality</td>
<td>Self-determination</td>
<td>common good</td>
<td>patriotism</td>
<td>empathetic</td>
</tr>
<tr>
<td>Courage</td>
<td>Openness</td>
<td>mutuality</td>
<td>tolerance</td>
<td>caring</td>
</tr>
<tr>
<td>Liberty</td>
<td>Independence</td>
<td>justice</td>
<td>equal opportunities</td>
<td>&amp; concerned</td>
</tr>
<tr>
<td>Affectivity</td>
<td>Enterprise</td>
<td>trust</td>
<td>culture</td>
<td>positive</td>
</tr>
<tr>
<td>Individuality</td>
<td>Integrity</td>
<td>interdependence</td>
<td>civilization heritage</td>
<td>confident</td>
</tr>
<tr>
<td></td>
<td>Simplicity</td>
<td>sustainability</td>
<td>human rights and</td>
<td>cooperative</td>
</tr>
<tr>
<td></td>
<td>Sensitivity</td>
<td>betterment of human</td>
<td>responsibilities</td>
<td>responsible</td>
</tr>
<tr>
<td></td>
<td>Modesty</td>
<td>kind</td>
<td>rationality</td>
<td>adaptable</td>
</tr>
<tr>
<td></td>
<td>perseverance</td>
<td>national identity</td>
<td>sense of belonging</td>
<td>to changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>solidarity</td>
<td>open-minded</td>
</tr>
</tbody>
</table>

## Appendix 7-3: Physical Education Key Learning Area, Basic Education Curriculum Guide (2002)

<table>
<thead>
<tr>
<th>Our students</th>
<th>Our teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary 1 – Primary 3</strong></td>
<td><strong>Primary 4 – Primary 6</strong></td>
</tr>
<tr>
<td>◦ Develop basic movement skills and perform sequences of skills with creativity and imagination by means of the Fundamental Movement (FM) approach or other approaches</td>
<td>◦ Develop a balanced PE curriculum with creativity, fun and challenges to enhance students’ development in generic skills</td>
</tr>
<tr>
<td>◦ Have some knowledge of the relationship between physical activities and the development of physical health</td>
<td>◦ Help students develop basic physical movement skills through FM approach and other approaches</td>
</tr>
<tr>
<td>◦ Communicate ideas, feelings, etc. effectively with others in plays, games and demonstrations.</td>
<td>◦ Help students acquire appropriate attitudes and knowledge in health and physical activities</td>
</tr>
</tbody>
</table>

- Learn basic skills of at least eight different physical activities from not less than four core activity areas and engage regularly in at least one PE-related co-curricular activity.
- Understand the relationship between physical activities and health development and the wide range of factors and actions that influence their health status.
- Learn how to respect others’ rights and demonstrate a teamwork and be able to apply decision-making, critical thinking, communication, etc. in different learning situations.
- Develop a balanced PE curriculum in line with the suggested framework and select appropriate tools to assess students’ learning.
- Help students acquire basic competency through the learning of at least eight different physical activities from not less than four core activity areas and develop a habit to participate in at least one PE-related co-curricular activity.
- Offer opportunities for students to participate in modified games, competitions and other health related activities that develop their skills in creativity, communication, critical thinking and health-related knowledge.

BIBLIOGRAPHY


Corwin.


teaching. Reson, Virginia: Association of Teacher Education.


Curriculum Development Council (1995). *Syllabus for Physical Education (Primary 1-6)*. Hong Kong: Education Department.


Curtner-Smith, M. D. (1997). The impact of biography, teacher education, and organizational socialization on the perspectives and practices of first-year physical education teachers: Case studies of recruits with coaching orientations. *Sport,
Bibliography

*Education and Society, 2(1): 73-94.*


Bibliography


Bibliography


Housner, L. D. and French, K. E. (1994). Future directions for research on


Kappa Fastbacks, 499: 3-44.


McKay, J. et. al. (1990). Beyond the limits of technocratic physical education. *Quest, 42*, 52-76.


Bibliography


Bibliography


Bibliography


Bibliography

Mountain View, CA: Mayfield.


Bibliography


Bibliography

New York: Prentice Hall.


Bibliography


Exercise and Sport, 63(2): 179-185.


APPENDICES

CHINESE VERSIONS
## Appendix 3-1: Sample for Daily Reflectivity Checklist (I-DRC)

代號：______________ 日期：______________

(1) 每當任教體育課，你會否時常想起下列問題？

請用「✓」表示下列選擇： “時常”、“間中”、“甚少”、“沒有”。

<table>
<thead>
<tr>
<th></th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 上課前，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃/教學計劃（課程編排及分配）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容/教學內容（主題及教學活動）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 上課時，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃/教學計劃（課程編排及分配）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容/教學內容（主題及教學活動）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. 上課後，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃/教學計劃（課程編排及分配）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容/教學內容（主題及教學活動）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. 上課前，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. 上課時，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. 上課後，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>c.</td>
<td>教學方法（教學技巧）</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>課室管理技巧</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>用具使用</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>上課時，你是否使用合適的方法，激發學生投入學習？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>上課前，你會否時常想起，學生上課時是否快樂？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>上課時，你會否時常想起，學生上課時是否快樂？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>上課後，你會否時常想起，學生上課時是否快樂？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>上課前，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>上課時，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>上課後，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>上課前，你會否時常想起，學生在課堂上學了甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>上課時，你會否時常想起，學生在課堂上學了甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>上課後，你會否時常想起，學生在課堂上學了甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>上課前，你會否時常想起，授課的目的、目標是甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>上課時，你會否時常想起，授課的目的、目標是甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>上課後，你會否時常想起，授課的目的、目標是甚麼？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>上課前，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>上課時，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>上課後，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>上課前，你會否時常想起，學生的品行（品德行爲）如何？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>上課時，你會否時常想起，學生的品行（品德行爲）如何？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>上課後，你會否時常想起，學生的品行（品德行爲）如何？</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(II) 體育課的內在價值和外在價值

a) 你認為體育課的內在價值是甚麼？（請舉例說明）

b) 你認為體育課的外在價值是甚麼？
c) 你是否認為內在價值比外在價值更重要？

(III) 教學的領受與改進

a) 個人對體育課堂的反思（思考/評估），有否為自己的教學帶來甚麼領受？

b) 個人對體育課堂的反思，有否為個人教學帶來甚麼改進？

(IV) 你是否明白以上問題？以上問卷之題目是否清晰？整體而言，你對此份問卷有何意見？

多謝完成此份問卷！祝君教安！
Appendices
(Chinese version)

Appendix 3-2: Sample Interview questions for participant’s personal and professional development (I-PPD)

背景資料

1 簡述你的小學及中學學習背景（特指體育運動的學習）。

2 請描述你最敬愛的老師或啓蒙老師，說出他們的特徵，可被欣賞的地方及他們的教學特色？

3 你自幼的職業願望是甚麼？

4 述說你投入教育事業或教師行業的路程（為何投考香港教育學院？）。

5 你的親友和老師有否影響你投考教院？請詳細說出來。

6 爲何選修體育課？

7 完成證書課程對你的教學及專業成長有何幫助？你對教師的工作有否改變觀念？（特指體育教學）

8 試分享或說出你的體育運動之學習經歷。

9 試分享或述出你的教學經驗。（個別教學經驗，如補習、作教練等及實習課的教學）

10 試分享你的教學工作態度。

11 在未來日子，你會繼續從事教師行業嗎？（十年？二十年等？）

12 你現在正進修有關教學的課程或提昇專業資歷嗎？你計劃將來進修有關課程嗎？

13 你將會進修有關教學的課程嗎？
Appendix 3-3: Sample interview questions for participant’s school background and PE information (I-Sch)

學校體育背景資料

1. 簡述有關貴校的體育科目。
2. 你現任學校之體育課程是否有一套進度表？
3. 貴校建立了多久？
4. 貴校是一所政府津貼還是私立小學？
5. 是半日制學校嗎？
6. 校方是否重視體育課及積極推行體育活動？（包括體育課或課外活動）
7. 校方是否有足夠教學資源協助老師進行體育課教學或推行體育課程？
8. 試評論貴校之場地、教具、器材等水平？
9. 貴校有否安排或自行作同儕（同事）觀課？
10. 請分享同儕（同事）觀課之感受？
11. 你覺得這間學校的體育老師體育教學怎樣？
12. 學校是否定期舉行遊戲日或運動會？
13. 請描述學生之學業成績？學生之家庭背景如何？
14. 學生之體育活動（課內或課外）如何？
15. 學生的課後活動如何？
16. 你計劃將來仍會在這間學校任教嗎？
Appendix 3-4: Interview questions for Reflective Thinking Interview (II-RTI-1)

觀課反思研討會

1. 你認爲這節體育課如何？（從那角度看？一般性？）
2. 教學內容如何切合學生的需要？
3. 你認爲教學內容是否合適這班學生？切合那一方面？學生的程度或授課目的？
4. 你認爲自己對所教的學科有足夠認識嗎？
5. 你認為這課教學是否流暢及有動力？
6. 你預計這節課如何進行？（計劃）
7. 學生的品行比上一堂有進步，還是惡劣些？為何有這種想法？你如何改善學生的品行？
8. 學生是否積極參與課堂活動？如果答案是“是”，為甚麼？如果答案是“否”，為甚麼？
9. 你怎樣推動學生投入課堂活動？
10. 你如何促進學生在課堂上的學習，帶給他們更多的歡樂（開心）？
11. 你認为自己在課室的表現如何？（儀表、聲線、課前準備、教學方法、課室管理等等）
12. 你覺得學生會認爲這是一課愉快的體育課嗎？
13. 如果你再任教此課，你將會怎樣修訂這節課？
14. 有關本節教學你還有其他感受嗎？請說出來。
Appendix 3-5: Interview questions for Reflective Thinking Interview (II-RTI-2)

觀課反思研討會

1. 任教這節體育課後，你的腦海想起甚麼？
2. 因應這些思考或想念，你將會有甚麼跟進？
3. 你認為這節體育課如何？（從那角度看？一般性？）
4. 教學內容如何切合學生的需要？
5. 你認為教學內容是否合適這班學生？切合那一方面？學生的程度或授課目的？
6. 你認為自己對所教的學科有足夠認識嗎？
7. 你認為這課教學是否流暢及有動力？
8. 你預計這節課如何進行？（計劃）
9. 學生的品行比上一堂有進步，還是惡劣些？有何有這種想法？你如何改善學生的品行？
10. 學生是否積極參與課堂活動？請作解說。
11. 你怎樣推動學生投入課堂活動？
12. 你如何促進學生在課堂上的學習和帶給他們更多的歡樂（開心）？
13. 你認為自己在課室的表現如何？（儀表、聲線、課前準備、教學方法、課室管理等等）
14. 你是否覺得學生會認爲這是一堂愉快的體育課嗎？
15. 如果你再任教此課，你將會怎樣修訂這節課？
16. 你還有其他有關本節教學感受嗎？請說出來。
Appendix 3-6: Interview questions for Reflective Learning Workshop (II-RLW-1)

反思工作坊

1. 體育課的目的是什麼？體育課是否對你的學生十分重要？哪方面？
2. 體育教學和其他學科的課堂教學有甚麼分別？
3. 學生在上體育課時，可以學習什麼？
4. 你上體育課時，有沒有任何困難，包括課前準備及課堂上的教學？
5. 體育教學質素包括什麼？（優質體育教學是包括什麼？）
6. 你認爲體育課擔當了甚麼教育角色？
7. 怎樣才算是良好的體育教學標準？（良好體育教學有甚麼標準？）
8. 你是否對體育課有某種內在價值的看法（與健康、道德、創造力、種族、思想方式等有關）？你如何衡量這些因素？
9. 你認為有那些東西，可以幫助你成爲一個更好的體育老師？
10. 你認為有沒有其他可以應用在每日的教學方法，讓你自我改進教學？
11. 你是否有任何話想說，而我沒有問你，但你又覺得我是應該要知道的？
12. 你是否有任何話想告訴我，而你一直沒有機會講？
13. 還有其他東西可以幫助你改善教學？
Appendix 3-7: Interview questions for Reflective Learning Workshop (II-RLW-2)

反思談事

1. 自從上次的反思研討會後，你是否有一些有關教學的意念或看法浮現在你的腦海中？

2. 你有否一些意念或教學看法、教學方法、學生表現和教學目標等的問題呢？

3. 如果沒有這些意念，你是否滿意自己的教學呢？你有否時間作反思？其他原因？
Appendix 3-8: Sample for Teaching Evaluation Checklist (TEC-P)

Code No: ___________ Date: ___________

教師課後自我教學評估
評核指標

A= Excellent performance 優異表現 C= Satisfactory performance 滿意表現
B= Good performance 良好表現 D= Unsatisfactory performance 表現未如理想

<table>
<thead>
<tr>
<th>Checklist items</th>
<th>Rating (tick the appropriate box)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Preparation 課前準備</td>
<td>**** **** **** ****</td>
</tr>
<tr>
<td>Lesson Objectives 教學目的</td>
<td></td>
</tr>
<tr>
<td>Lesson Content (suit pupils' interests &amp; abilities)</td>
<td></td>
</tr>
<tr>
<td>教學內容(適合學生興趣及能力)</td>
<td></td>
</tr>
<tr>
<td>Teaching Strategies 教學策略</td>
<td></td>
</tr>
<tr>
<td>Teaching Resources 教學資源</td>
<td></td>
</tr>
<tr>
<td>Overall Preparation 整體準備</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> Performance 表現</td>
<td>**** **** **** ****</td>
</tr>
<tr>
<td>Motivation / Motivated pupils participation 引起學生參與</td>
<td></td>
</tr>
<tr>
<td>Pupil participation (keep on task) 學生參與</td>
<td></td>
</tr>
<tr>
<td>Pupil enjoyment / pleasure 學生愉快/喜悅</td>
<td></td>
</tr>
<tr>
<td>Lesson smoothness &amp; momentum 課堂流暢及有動力</td>
<td></td>
</tr>
<tr>
<td>Academic learning time (ALT) (Enough practice in content) 足夠學習(練習)時間</td>
<td></td>
</tr>
<tr>
<td>Achievement of objectives 教學目的達成</td>
<td></td>
</tr>
<tr>
<td>Timing 時間</td>
<td></td>
</tr>
<tr>
<td>Demonstration 示範</td>
<td></td>
</tr>
<tr>
<td>Instruction 教學指導</td>
<td></td>
</tr>
<tr>
<td>Communication 溝通</td>
<td></td>
</tr>
<tr>
<td>Class atmosphere 課堂氣氛</td>
<td></td>
</tr>
<tr>
<td>Management / discipline 課堂管理/秩序</td>
<td></td>
</tr>
<tr>
<td>Overall performance 整體教學表現</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong> Value towards PE 體育價值</td>
<td>**** **** **** ****</td>
</tr>
<tr>
<td>Value of fitness 端過此節，學生獲得體能價值</td>
<td></td>
</tr>
<tr>
<td>Value of skill (learning &amp; mastering motor skill)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--</td>
</tr>
<tr>
<td>Value of knowledge 獲得體育知識</td>
<td></td>
</tr>
<tr>
<td>Value of pleasure 獲得喜悅／愉快</td>
<td></td>
</tr>
<tr>
<td>Value of attitude 態度之價值</td>
<td></td>
</tr>
<tr>
<td>Value of creativity 創造力之價值</td>
<td></td>
</tr>
<tr>
<td>Other values 佔有其他價值</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher</strong> 教師方面</td>
<td>**** **** **** ****</td>
</tr>
<tr>
<td>Language proficiency 語言流暢</td>
<td></td>
</tr>
<tr>
<td>Subject knowledge 任教這科之內容知識</td>
<td></td>
</tr>
<tr>
<td>Alert 警覺能力</td>
<td></td>
</tr>
<tr>
<td>Overall attitude (e.g. teaching attitude) 整體教學態度</td>
<td></td>
</tr>
<tr>
<td><strong>Overall rating</strong> 整體評估</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3-10: Interview questions for Reflective Thinking Interview (III-RTI-1)

觀課反思研討會

1. 試說出你覺得這節教學如何？試說出這節課的優點或做得好的地方？
2. 爲什麼你認為這是做得好的地方？
3. 你有否想過要修改這課教學？
4. 回想過來，你會改變這節教學嗎？哪些地方？為什麼？
5. 你想你有需要改變這些教學環節嗎？
6. 你認為這節是成功／理想／做得好嗎？如果“是”，這是什麼？做得好的原因什麼是什麼？
7. 哪些情況／情形是會影響這節課教學的成效？
8. 你認為有哪些因素影響你的教學成效呢？
9. 是否有些不是預期（不是期望）希望的學習成果在這節課出現？如有，又是什麼？
10. 會作一些跟進嗎？
11. 這些跟進是什麼？
12. 在這節教學中，你還可以使用其他形式嗎？（例如：內容、用具、形式）如你想過，哪是什麼？
13. 你想過這裡還有其他教學方法（形式）去教這節課，以可改善學習成果（學習成效）？
14. 你是想過你的教學方法、形式／風格等嗎？
15. 你想過要改變個人的教學方法、形式或風格等嗎？
16. 你認為教學內容對學生重要嗎？為什麼？
17. 這裏是否有一些德育／倫理／其他的事實出現（包含）在這節課之中？
18. 你與學生的互動怎樣？與學生的關係如何？你怎樣促進與學生的
互動？
19. 你認爲這課教學是否流暢及有動力？課堂是否流暢地讓學生參與活動？
20. 學生是否積極參與課堂活動？“是”，為什麼？“否”，為什麼？
21. 你認爲學生覺得愉快嗎？
22. 你是否有其他補充資料想告訴我？
Appendix 3-11: Interview questions for Reflective Thinking Interview (III-RTI-2)

観課反思研討會

1. 是否有些東西在你的腦海中出現？
2. 除了這些......還有其他嗎？
3. 你認爲你的課堂如何?(如果是“好”，為何你認爲是理想，如果是“不好”，為什麼？
4. 你的跟進將會是怎樣的？
5. 你認爲這課教學的優點是什麼？
6. 你會哪些方面作出改善？
7. 你認爲這課是成功的體育課嗎？
8. 你認為甚麼情況會影響你的教學成效？
9. 你沒有期望的事情在這課中，有否發生了？
10. 你覺得這些課程內容對學生是適切／或是重要的？
11. 你認爲這課教學是否流暢？是否流暢地讓學生參與／活動？
12. 你認爲學生時常感覺愉快是重要的嗎？
13. 你認為這課有需要改善的地方？
Appendix 3-12: Interview questions for Reflective Thinking Interview (III-RTI-3)

觀課反思研討會

1. 你對今天的教學／課堂有什麼看法／想法（意念）？整體而言，試分享出來。

2. 在今節課堂之前（例如：即是備課等），你對這節有何看法／意念／想法，或考慮過什麼？

3. 你在課堂中，有否一些意念／想法出現在你的腦海中，試舉出例子。

4. 你想這課有哪些優點？

5. 有否因著這些意念／看法，而作出跟進／改變教學行爲？

6. 下一節或稍後課堂，你會因著想法／意念而作出跟進／延續？

7. 有關今節教學，你還有其他說話／分享嗎？
Appendix 3-13: Interview questions for Reflective Thinking Interview (III-RTI-4)

觀課反思研討會

1. 你對今天的教學／課堂有什麼看法／想法（意念）？整體而言，試分享出來。

2. 在今節課堂之前（例如：即是備課等），你對這節有何看法／意念／想法，或考慮過什麼？

3. 你在課堂中，有否一些意念／想法出現在你的腦海中，試舉出例子。

4. 你想這課有哪些優點？

5. 有否因著這些意念／看法，而作出跟進／改變教學行為？

6. 下一節或稍後課堂，你會因著想法／意念而作出跟進／延續？

7. 有關今節教學，你還有其他說話／分享嗎？
Appendix 3-14: Interview questions for Reflective Learning Workshop (III-RLW-1)

反思工作坊

1. 你個人認為反思是什麼？（什麼意思？）
2. 你認為反思後，會跟著有些後果／事情會發生嗎？
3. 在你的教學經驗中，怎樣情況下才會作教學反思？
4. 你曾否在你的教學準備前教學進行中或教學後作反思？
5. 你曾否因著反思後而改變你的教學呢？
6. 你會在課後進行反思嗎？
7. 當你反思自己的教學時，你會特別留意或關心哪方面（學生反應、教學表現、教學方法、其他方面等）？
8. 研究員分享教學反思列出三種類別：技術性教學反思、實踐性教學反思及批判性教學反思。
9. 以上三種類別的反思你會採用哪種較多或較為少？
10. 研究員分享一般教學行行為分為兩大類：例行性教學及反思性教學行行為。
11. 你的教學是以例行性教學行行為或反思性行行為為主呢？或其他行行為？
12. 你認爲在反思性教學中應該持有什麼態度？
13. 這研習後，你會作一些跟進嗎？
14. 你會接納其他人士的開放性意見嗎？
15. 還有其他方法可以促進你個人的反思呢？
16. 一般來說，你認為反思對你的專業成長重要嗎？
17. 你認爲理想的教師是怎樣的（不只是指體育教學）？（理想教師的素質是什麼？未如理想的學生是什麼？）
18. 對你來說，理想的學生是怎樣的？頑劣的學生是怎樣的？
19. 你對反思有其他看法嗎？
Appendix 3-15: Interview questions for Reflective Learning Workshop (III-RLW-2)

反思工作坊

1. 觀看影帶教學後，你覺得你的教學如何？

2. 你是否有一些東西想和我分享？
Appendix 3-17: Interview questions for Final In-depth Interview (IV-FIDI)

1. 你認為反思重要嗎？如“重要”，為何？如“不重要”為什麼？怎樣看？

2. 自參與這個計劃後，做了不少教學反思活動，你個人認爲需要做反思嗎？
   “有”，為什麼？“沒有”，為什麼？

3. 自參與這個計劃（反思計劃）後，有沒有改變你的教學？（例如：計劃內容、教學、學出學習、課堂教授等）如“有”？哪方面？如“沒有”／“未曾有改變”，那為何？（試找出／探究他們原因？是否有其他阻礙／困難／環境因素／學生因素／其他原因），有什麼原因？

4. 自參與這個計劃（反思計劃）後，有否影響你的反思／教學反思？如“有”，有什麼影響？如“沒有”，為什麼？

5. 每次課後作的自我評估表，有否影響你的教學？“有”，是怎樣的？為甚麼？

6. 每次課後之反思（討論）及工作坊，你覺得對的教學／個人有沒有影響？如“有”，怎樣？如“沒有”，怎樣／為什麼？

7. 除了這班體育外，其他體育班／其他科目也有否因著反思討論及工作坊，影響你的教學中“是”的？為何？為什麼？試述之。如“不是”，為什麼？

8. 除了教學反思外，你認爲還有什麼因素／其他東西幫助／改進你的教學？

9. 置身課室進行觀課，有否影響你的教學反思？如“有”，怎樣？哪些前面的改變會否因我的出現／觀課？

10. 一整年教學中，你認為自己的體育教學如何？有否改進／退步了？

11. 還其他方法能幫助或促進你的教學反思？
12. 你認為學生對你的教學方法有什麼反應？他們滿意或接受你的教學方法或形式？

13. 這個教學反思將會促進或影響你來年的體育教學嗎？

14. 你曾否想過你會修訂或改變你來年的教學方法？

15. 來年，這個計劃完成了，你的教學會否不同？你是否想過一些方法來促進你的反思？

16. 你是否想過這個教學反思計劃能夠促進你的教學？

17. 你認爲這個計劃如何？

18. 整體來說，你的體育教學是否受學校的環境因素影響？

19. 你認爲體育教學的內在價值如何？

20. 你覺得理想的體育課是怎樣？

21. 在體育課中，怎樣才是令你滿意或理想的學生？

22. 你認為未如理想的學生是怎樣？
Appendix 3-20: Letter to school Principal

致 XX 學校

XX 校長台鑑：

本人是香港教育學院講師，現修讀洛芙堡大學（Loughborough University）之體育教學博士學位課程，現正進行一項論文研究，探討新入職體育教師之教學反思與優質體育教學之關係。此研究有助提高新入職體育老師之教學素質及對優質體育教學有重大意義。貴校 XXX 老師被邀請作此研究對象。本人由一九九九年十一月至二零零零年六月期間，每月分別觀察 X 老師任教體育課一節。此觀察將不會影響他們之教學進度及貴校教務之運作。特函望貴校特准本人於上述期間每月到訪及觀課。有關貴校資料及老師姓名將會保密，並只作研究用途。閣下對此研究有任何疑問，歡迎與本人聯絡。聯絡地址及電話如下：香港新界大埔露屏路十號香港教育學院 D4 座 2/F 12 室，聯絡電話是 29487843。

敬祝教安！

徐瓊玉女士

一九九九年十月二十日

副本乙份呈交 XXX 老師
Appendix 3-21: Letter to participant’s consent

邀請書

XXX 老師啓：

本人現正修讀洛芙堡大學 (Loughborough University) 之體育教學博士學位課程，現誠邀閣下參與本人之體育教學研究計劃，作為此研究參與者之一。

此研究計劃的目的是探討本港新入職體育老師之教學反思與優質體育教學之關係。本人將於一九九九年十一月至二零零零年期間每月到訪及觀看閣下任教體育課壹節，並會錄影拍攝該節體育課。課後閣下被邀請參與連串反思研討會及討論等活動。閣下之所有資料及姓名將會保密，並只作此研究之用。資料經研究分析後，將會被消毀。

如閣下對此研究計劃有任何查詢，歡迎致電 29487843 與本人查詢。請於下列空白簽署後，交回本人。

敬祝教安！

徐瓊玉女士啓
一九九九年十月
意願書

本人已明瞭是項研究計劃的目的及願意參與此研究計劃。

參加者簽署：______________  日期：____________________

參加者姓名：______________  此計劃負責人簽署：__________
Appendix 4-5: Chung’s response on Daily Reflectivity Checklists

代號： Chung  日期： 16-2-2000

(I) 每當任教體育課，你會否常想起下列問題？

請用「√」表示下列選擇：“時常”、“間中”、“甚少”、“沒有”。

<table>
<thead>
<tr>
<th>項目</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
</table>
| 1. 上課前，你會否常想起，下列各項內容是否切合學生的需要？
   a. 課程計劃 / 教學計劃（課程編排及分配）
   b. 課程內容 / 教學內容（主題及教學活動）
   c. 內容對學生之程度及能力 |
| 2. 上課時，你會否常想起，下列各項內容是否切合學生的需要？
   a. 課程計劃 / 教學計劃（課程編排及分配）
   b. 課程內容 / 教學內容（主題及教學活動）
   c. 內容對學生之程度及能力 |
| 3. 上課後，你會否常想起，下列各項內容是否切合學生的需要？
   a. 課程計劃 / 教學計劃（課程編排及分配）
   b. 課程內容 / 教學內容（主題及教學活動）
   c. 內容對學生之程度及能力 |
| 4. 上課前，你會否常想起，下列各方面的表現如何？
   a. 儀表及聲線
   b. 課前準備
   c. 教學方法（教學技巧）
   d. 課室管理技巧
   e. 用具使用 |
| 5. 上課時，你會否常想起，下列各方面的表現如何？
   a. 儀表及聲線
   b. 課前準備
   c. 教學方法（教學技巧）
   d. 課室管理技巧
   e. 用具使用 |
| 6. 上課後，你會否常想起，下列各方面的表現如何？
   a. 儀表及聲線
   b. 課前準備
   c. 教學方法（教學技巧）
   d. 課室管理技巧 |
**Appendices**

(Chinese version)

<table>
<thead>
<tr>
<th></th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.</td>
<td>用具使用</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>上課時，你是否使用合適的方法，激發學生投入學習？</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>上課前，你會否時常想起，學生上課時是否快樂？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>上課時，你會否時常想起，學生上課時是否快樂？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>上課後，你會否時常想起，學生上課時是否快樂？</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>11.</td>
<td>上課前，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>上課時，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>上課後，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>上課前，你會否時常想起，學生在課堂上學了甚麼？</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>上課時，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>上課後，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>上課前，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>上課時，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>上課後，你會否時常想起，授課的目的、目標是甚麼？</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>上課前，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>上課時，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>上課後，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>上課前，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>上課時，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>上課後，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(ii) 體育課的內在價值和外在價值

a) 你認爲體育課的內在價值是甚麼？（請舉例說明）
1. 發揮潛能，使他們建立自信（如一些學業成績差，可在體科重拾信心。）
2. 學生在群體活動，可學習相處技巧。

361
3. 學習運動技巧。  
4. 鍛鍊體能。  

b) 你認爲體育課的外在價值是甚麼？  
1. 在家長的課堂中稍作鬆動。  
2. 享受運動的樂趣。  

b) 你是否認爲內在價值比外在價值更重要？  
是，因內在價值的影響性較長遠。  

(III) 教學的領受與改進  
a) 個人對體育課堂的反思(思考/評估)，有否為自己的教學帶來甚麼領受？  
有，例如：可重整個人知識及調節每教節之內容。  
b) 個人對體育課堂的反思，有否為個人教學帶來甚麼改進？  
有，因爲這樣可使我更各方面作調節。例如：程度，教學活動上。  

(IV) 你是否明白以上問題？以上問卷之題目是否清晰？整體而言，你對此份問卷有何意見？  

多謝完成此份問卷！祝君教安！
Appendix 4-6: Yum’s response on Daily Reflectivity Checklists

代號：Yum 日期：9-12-1999

(I) 每當任教體育課，你會否時常想起下列問題？

請用「√」表示下列選擇：「時常」、「間中」、「甚少」、「沒有」。

<table>
<thead>
<tr>
<th>1. 上課前，你會否時常想起，下列各項內容是否切合學生的需要？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. 上課時，你會否時常想起，下列各項內容是否切合學生的需要？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. 上課後，你會否時常想起，下列各項內容是否切合學生的需要？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. 上課前，你會否時常想起，下列各方面的表現如何？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 儀表及聲線</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. 上課時，你會否時常想起，下列各方面的表現如何？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 儀表及聲線</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. 上課後，你會否時常想起，下列各方面的表現如何？</th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 儀表及聲線</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>時常</td>
<td>間中</td>
<td>甚少</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>7.</td>
<td>上課時，你是否使用合適的方法，激發學生投入學習？</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>上課前，你會否時常想起，學生上課時是否快樂？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>上課時，你會否時常想起，學生上課時是否快樂？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>上課後，你會否時常想起，學生上課時是否快樂？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>上課前，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>上課時，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>上課後，你會否時常想起，怎樣才算是一節愉快的體育課？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>上課前，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>上課時，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>上課後，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>上課前，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>上課時，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>上課後，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>上課前，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>上課時，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>上課後，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>上課前，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>上課時，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>上課後，你會否時常想起，學生的品行（品德行行為）如何？</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(II) 體育課的內在價值和外在價值

a) 你認為體育課的內在價值是甚麼？(請舉例說明)
   給予學生發展另一潛能。

b) 你認為體育課的外在價值是甚麼？
   增強學生與人之相處及增強體魄。
c) 你是否認爲內在價值比外在價值更重要？
是同等重要的。

(III) 教學的領略與改進
a) 個人對體育課堂的反思(思考/評估)，有否為自己的教學帶來甚麼領受？
不斷反思有助教學是否達到目的及減少出錯。
b) 個人對體育課堂的反思，有否為個人教學帶來甚麼改進？
有。因爲從反思過程中不斷反思自己需要改善的地方。

(IV) 你是否明白以上問題？以上問卷之題目是否清晰？整體而言，你對此份問卷有何意見？

多謝完成此份問卷！祝君安！
Appendix 4-7: Shan’s response on Daily Reflectivity Checklists

代號：Shan  日期：3-12-99

(1) 每當任教體育課，你會否時常想起下列問題？

請用「✓」表示下列選擇：“時常”、“間中”、“甚少”、“沒有”。

<table>
<thead>
<tr>
<th></th>
<th>時常</th>
<th>間中</th>
<th>甚少</th>
<th>沒有</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 上課前，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 上課時，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. 上課後，你會否時常想起，下列各項內容是否切合學生的需要？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 課程計劃 / 教學計劃（課程編排及分配）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課程內容 / 教學內容（主題及教學活動）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 內容對學生之程度及能力</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. 上課前，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. 上課時，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 用具使用</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. 上課後，你會否時常想起，下列各方面的表現如何？</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 儀表及聲線</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 課前準備</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 教學方法（教學技巧）</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 課室管理技巧</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>e. 用具使用</td>
<td>時常</td>
<td>間中</td>
<td>甚少</td>
<td>沒有</td>
</tr>
<tr>
<td>7. 上課時，你是否使用合適的方法，激發學生投入學習？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. 上課前，你會否時常想起，學生上課時是否快樂？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. 上課時，你會否時常想起，學生上課時是否快樂？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. 上課後，你會否時常想起，學生上課時是否快樂？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. 上課前，你會否時常想起，怎樣才算是一個愉快的體育課？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. 上課時，你會否時常想起，怎樣才算是一個愉快的體育課？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. 上課後，你會否時常想起，怎樣才算是一個愉快的體育課？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. 上課前，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. 上課時，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. 上課後，你會否時常想起，學生在課堂上學了甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. 上課前，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. 上課時，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. 上課後，你會否時常想起，授課的目的、目標是甚麼？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. 上課前，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. 上課時，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. 上課後，你會否時常想起，你的授課擔任怎樣的教育任務？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. 上課前，你會否時常想起，學生的品行（品德行為）如何？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. 上課時，你會否時常想起，學生的品行（品德行為）如何？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. 上課後，你會否時常想起，學生的品行（品德行為）如何？</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(II) 體育課的內在價值和外在價值

a) 你認爲體育課的內在價值是甚麼？（請舉例說明）
我認爲體育課的內在價值，即是其隱性價值，例如：1.令學生因爲學習到某些技能增強其自信心（認知發展）。2.令學生明白到運動是持續和終身合用的，不要把體育課所學到知識，視為很規範性的。3.令學生明白到專業與運動的關係。4.發揮學生團結、合作精神。5.令兒童從快
樂的課堂中，去體驗運動的好處。6.令部分成績差，自卑感重的學童，因爲運動表現方面較突出而重建自信，肯定自我。

b) 你認為體育課的外在價值是甚麼？
我認爲體育課的外在價值即是其表面的價值，例如：1.學生能否學到某些運動、體育技巧。2.協助學生發掘其運動潛能。3.維持每星期約一小時多的固定運動量。

c) 你是否認為內在價值比外在價值更重要？
我認爲內在價值，比外在價值更為重要，因爲我覺得體育課的內在價值，就是令學生能從體育課所學的理論中，明白運動的真正意義，這對學生的終身，有較長遠的影響。不幸地，一般人並不會發現體育課內在價值的重要性。在某些情況下，他們只會視體育課為「兒童遊玩的時間」，就算沒有體育課，也算不了什麼！

(III) 教學的領受與改進
a) 個人對體育課堂的反思(思考/評估)，有否為自己的教學帶來甚麼領受？
本人為為對體育課之反思，有助自己改善課堂上之教學法，從學生表現及其傾談中，亦覺得現今體育課在香港來說，並未能受到重視，有點失望。

b) 個人對體育課堂的反思，有否為個人教學帶來甚麼改進？
有。不過礙於自己的知識有限，有時候，又受著一些外在環境因素的影響，「改進」，通常也只局限於教學技巧方面，比較表面。

(IV) 你是否明白以上問題？以上問卷之題目是否清晰？整體而言，你對此份問卷有何意見？

多謝完成此份問卷！祝君安！