

# The Practices of Hong Kong Primary Physical Education Teachers after Four Years of Teaching

## 香港小學體育教師四年教學後的實踐

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### Abstract

Teachers may change their teaching practices and develop differently during their teaching lives. Occupational socialization model was used as the theoretical framework of this study. The purpose of this study was to examine the teaching practices of three primary physical education teachers after four years of teaching and seek explanations for the practices. A mixed-methods approach was used to collect data in the study. The participants were videotaped and observed teaching four ball game lessons in their own schools. The lessons were coded using the Physical Education Teacher Assessment Instrument. Data generated were compared to lessons observed four years before using the same categories. Qualitative data were collected through lesson observations and interviews before and after they taught. Constant comparison and analytic induction were used to organise and categorise the data. The trustworthiness of the study was established by using triangulation, peer debriefing and member checking. The results indicate that the teachers adjusted their teaching focus and modified their practices after four years. Explanations are given here for the modifications of practice. The findings provide invaluable information for physical education teacher educators in the preparation of both pre-service and in-service physical education teachers.

Key words: primary physical education teachers; teacher development; teaching practices; occupational socialization; teaching experience

### 摘要

本研究旨在探討三位小學體育教師四年教學後的教學實踐。資料以混合研究法蒐集。參與者會被觀察錄影四課球類教學。教學以體育教師評估工具分析。數據會與四年前所觀察比較。質量數據是透過課堂觀察及教學前後訪談收集。資料以持續比較及分析歸納組織和分類。研究信實度以三角檢正、同儕審視和參與者檢核建立。結果顯示四年後教師調整修改教學焦點及實踐，研究員探討其調整實踐原因。此等為培育職前和在職體育教師的寶貴資料。

關鍵詞：小學體育老師；教師發展；教學實踐；職業社會化；教學經驗



## Introduction

Teachers may change and develop differently throughout their careers. Studies indicate that most teachers encounter professional developmental challenges in their teaching careers that prompt them to modify their practices as dictated by the influence of personal and organizational environmental factors (Dowling Naess, 2001; Lynn & Woods, 2010; O' Sullivan, 2006). Educators identified some teachers learn at workplace and change their practice of teaching. Hodkinson and Hodkinson (2005) described some of the main ways teachers learn at school and identified different dimensions which interact in influencing the nature of workplace learning in their study. The teachers in the study were found learn and develop in workplace while teachers' learning is in the form of both construction and participation in schools.

Within the learning and teaching process, socialization has assisted teachers to learn through the mechanisms of training and social patterns (Macdonald, Kirk, & Braiuka, 1999). The occupational socialization model has been used in physical education (PE) to examine the socialization process into teaching and practice of PE teachers (Lawson, 1983a, 1983b). Occupational socialization has been defined as "all kinds of socialization that initially influence persons to enter the field of PE and that later are responsible for their perceptions and actions as teacher educators and teachers" (Lawson, 1986, p. 107). Researchers have indicated a three-phase process within the occupational socialization model (Lawson, 1983a, 1983b; Templin & Schempp, 1989). These phases are: a) acculturation; b) professional socialization; and c) organizational socialization. Acculturation begins at birth and helps one develop interest in sports and views about PE. Spending hours interacting with parents, siblings, PE teachers and sport coaches during "the apprenticeship of observation" (Lortie, 1975), one further develops their values and beliefs of sports and PE. This exerts a string influence on their beliefs and future practices as a teacher (Curtner-Smith, Hastie, & Kinchin, 2008). Professional socialization refers to the influence of PE teacher education on pre-service teachers. Researchers have commented this may be the weakest form of socialization to have low impact on pre-service teachers as their teaching beliefs have been developed and affirmed through

acculturation (Curtner-Smith & Sofo, 2004; Darling-Hammond & Richardson, 2009). However, evidence shows that teacher education programmes do succeed when faculty are highly credible, non-coaching, innovatively oriented and closely supervise field-based experiences (Curtner-Smith et al., 2008; Stran & Curtner-Smith, 2009). Organizational socialization refers to the impact of school culture on in-service teachers when they first take up the job in school. The beginning teachers are taught about the school culture and responsibilities associated with their role by their experienced colleagues through the "institutional press," which often served to "wash out" any new ideas and practices beginning teachers had learned during their teacher education programmes (Curtner-Smith, 2001; Zeichner & Tabachnik, 1981). This model proceeds based on the interactions and learning among teachers along with their school experiences and settings. The socialization of PE teachers is regarded as a life-long process (Lawson, 1986). PE teacher educators have provided evidence that the perspectives and practices of PE teachers are influenced by different phases of socialization through their careers (Lee & Curtner-Smith, 2011; Templin & Schempp, 1989).

## Physical Education in Hong Kong

Since Hong Kong has launched a programme of education reform in 2000, the teaching of PE in schools sustains dramatic changes, shifting the teaching focus from skilled oriented content and direct teaching to alternative teaching and the whole person development of the students (Curriculum Development Council CDC, 2002). The Curriculum Development Council identifies physical education as one of the eight Key Learning Areas (KLA) (Eight KLA: Chinese Language Education, English Language Education, Mathematics Education, Personal, Social and Humanities Education, Science Education, Technology Education, Arts Education and Physical Education) and five essential learning experiences (Five essential learning experiences: Moral and civic education, intellectual development, community service, physical and aesthetic development, career-related experiences) in the curricula of Hong Kong's schools (CDC, 2002). PE is "education through the physical" and it purports to provide students with quality educations



that nurture overall development and life-long learning capabilities through a variety of physical activities (CDC, 2002). In this context, the aim of physical education programmes in schools is to contribute to students' physical, intellectual, social, and moral development while strengthening their learning-to-learn capabilities in terms of generic skills such as collaboration, communication, creativity, critical thinking, and problem solving. This cultivation of students' learning-to-learn skills is also regarded as important for producing life-long learners (Education Commission, 2000).

As suggested in the Curriculum Guide (CDC, 2002, p. 16), primary PE teachers had been required to help students "develop locomotor movement skills, stability movement skills and manipulative movement skills through fundamental movement activities and physical play" in Key Stage One (ages 7 to 9); "to develop basic skills in at least eight physical activities from not less than four areas" in Key Stage Two (ages 10 to 12); and "to promote an active lifestyle among their students, cultivate their generic skills, and enhance their value, attitude and knowledge" at all ages and times. Students are focused on learning motor and sports skills and developing physical fitness in physical education lessons (Physical Education Section, 2013). The PE teachers were advised to adopt different teaching approaches to address diversity learning needs of students. In a recent review of the implementation of the PE curriculum in Hong Kong, it has been found that Hong Kong primary PE teachers commonly adopt skill-based approach and multi-activity models with short teaching units to teach different sports activities in schools (Li et al., 2011). The Hong Kong primary PE teachers may need to re-consider their teaching practices with respect to the learning needs of their students in schools.

### **Teaching Excellence and Experience of Practice**

Instructional experience seems to have some link with excellence in teaching (Berliner, 2004; Schmidt, 2010). Some educators affirm that teachers become more proficient with years of experience (Bell, 1997; Siedentop & Eldar, 1989). Ward and O'Sullivan (1998) added that experience is a necessary condition for developing competence and expertise in teaching. The findings consistently produced by studies on expertise in various fields have indicated that a teacher required

years of experiences towards expertise (Berliner, 2004; Ericsson, Krampe, & Tesch-Romer, 1993; Kalinowski, 1985). However, experience is not a sufficient condition for both competence and expertise as some do not learn from their experiences (Berliner, 1987). Schmidt (2010) argued that meaningful learning from all types of teaching experience appeared to be fostered by a balance between doing (action) and undergoing (reflection), both individually and in community.

Nevertheless, studies results have demonstrated that teachers with more experience have comparatively better performance than those with less classroom or field practice (Chen, 2002; Graham, French, & Woods, 1993). Local physical educators have also indicated that experienced teachers display relatively more effective teaching behaviour than their less experienced counterparts (Cruz, 2000; Ha, 1996). It is likely teachers change their practices when gaining more experience of teaching. However, most of these studies were conducted using cross-sectional designs, such that the researchers compared the teaching of novice and experienced groups, hence the results generated did not give a full picture of the influence of school instructional experience on the practice of teaching. Besides, some experienced teachers did not give effective teaching performance after years of teaching. As such, there is a need for longitudinal study to examine the extent to which the pedagogical practices and teaching beliefs have remained with beginning teachers as they develop into more experienced teachers. Therefore, the investigator of the study attempted to analyse the practices of three primary PE teachers on their instructional behaviour over a four-year period. Two research questions were set to guide the inquiry of the study: 1) What were the teaching behaviour patterns and beliefs of the three primary PE teachers after four years of teaching? 2) What were the reasons that led to the current practices and teaching beliefs of the three primary PE teachers?

This longitudinal study was expected to generate results that would explain whether there were changes in practices in a span of four year and the reasons lead to the ultimate practices. There have been no recent studies that have investigated the practices of primary PE teachers over a period of multiple years in Hong Kong. This information is invaluable to teacher educators tasked with helping pre-service and in-service teachers overcome problems to expedite the process of producing competent teachers.



## Method

For the purposes of this study, the investigator employed a mixed-methods to address the research questions. The quantitative method addresses the data captured by the observation instrument, the Physical Education Teacher Assessment Instrument (PETA) (Phillips et al., 1986). Teaching is a complex, dynamic activity that occurs in an intricate environment (Shulman, 1987). Quantitative data alone cannot fully account for the practices of PE teachers. The qualitative methodologies used in this study serve as an alternative means of providing further information on the teaching process and the factors that influence teaching practices in an authentic setting. Several data collection techniques were adopted: pre-lesson interviews, post-lessons interviews, and the taking of field notes during observations.

This study combined two complementary research methods, namely quantitative and qualitative. They can provide the valid and reliable data necessary to answer the proposed research questions (Patton, 2002).

## Participants

The participants were graduates of the two-year, full-time certificate programme in primary education that had majored in PE from a local teacher education institution. They had earned their Qualified Teacher Status by completing the programme four years before and their teaching practices were studied at that time during their final year of teacher training and reported in another study (Cruz & Li, 2008). They were full time PE teachers teaching in local primary schools when they were taking part in this study. They taught other teaching subjects, such as general studies and Chinese in schools as well. The pseudonyms Kei, Sze, and Ling are used throughout this study to protect the participants' identities. From the data generated in previous study (Cruz & Li, 2008), all participants were reported to be active in sports during their schooling. Kei has been an active sportsman since primary school education. He played football, table tennis, track and field and participated in inter-school competitions during his secondary education. He is a qualified football coach and has coached for some years. Sze has been active in sport activities and working as a volunteer Taekwondo and table tennis coach. She was also a volleyball team member in primary school and played school team basketball and

table tennis in secondary school. She was once selected in Hong Kong team of Taekwondo. Participation and success in school sports events made her feel comfortable and choose a teaching career related to the sports field. Ling has enjoyed and been active in sport activities since she was a primary school student. She participated in extra-curricular sport activities and sport competitions. She won some medals in school sports day and swimming gala. She is especially interested in dancing and has continuously received training in this area. The participants were rich in sporting experiences. All of the participants had gained four years of experience teaching PE when they were invited to take part in this study. Informed consent was obtained from the teachers and their principals before commencement of the study. The demographic information and related schools of the participants are presented in Table 1. The Ethical Committee of the Institute also approved the ethical policies on the use of human subject of the study.

## Procedure

The data collection procedure was the same as in a study conducted four years before (Cruz & Li, 2008). The PE teachers were videotaped during four lessons in which they taught ball game activities as to understand the teaching practices of the participants. More teaching lessons were observed when compared to the previous study conducted. Ball game activities are the most common teaching content in the PE classes of Hong Kong primary schools. The initial study was prompted by the interest of the investigator and the purpose of unifying teaching content because the activities taught in PE classes were limited to ball game activities at that time. The participants were strongly requested to use their usual teaching methods during the videotaped lessons. Two video cameras were set up unobtrusively and filmed the lessons using a wide angle. Filming began when the teacher and the first student entered the instruction area and continued until the students were dismissed. For the purpose of this study, the recording of each lesson was coded using the revised version of the PETA (Phillips et al., 1986). This instrument helps capture how teachers spend allocated time using different instructional and managerial teaching behaviour (see Table 2). Because this instrument was specially developed for studying teachers' and students' behaviour in a PE setting, it was considered the most appropriate instrument for this study. To establish the accuracy and consistency of the systematic observation procedures, the



intra-observer reliability was checked using the method recommended by van der Mars (1989). A research assistant was trained and supervised by the principal investigator to get familiar with the observation system (PETA) and the coding procedure for the instrument. The observer practiced by watching and coding a videotaped lesson with the reliability percentages ranged from 86.9% to 100% and surpassed the accepted limit of 80% recommended by van der Mars (1989) in the intra-observer agreement before starting to code the videotaped lessons.

The investigator also arranged pre-lesson interviews with the participating teachers to understand their beliefs and knowledge about the content they intended to teach and to gather feedback on the conceptions about teaching PE and the perceptions about their roles as PE teachers. The pre-lesson interviews were semi-structured, open-ended, and featured the same questions used in the previous study. All of the pre-lesson interviews were audio-taped to provide verbatim transcriptions for analysis. The pre-lesson interviews were conducted in the participants' school at their convenience and they lasted between 30 and 45 minutes.

Subsequently, the investigator acted as a non-participant and observed the lessons (Bogdan & Biklen, 2007). He made field notes on the activities of the participants during the observations from both studies that were recorded in the form of a field journal. After the lesson observations, these field notes were expanded, transcribed, and commented on by the investigator. The field notes were also used as an additional data source for triangulation to provide supportive findings, validate results, and draw conclusions.

Post-lesson interviews were conducted at the investigator's office within one week after the lessons had been videotaped. The post-lesson interview questions were also semi-structured, open ended, and sought to elicit information from the participants about their a) current teaching performance, b) perceptions of the students' responses, c) and the ways in which their teaching practices had developed. The interviews lasted between 35 and 50 minutes and each was audio-taped and transcribed for further analysis. The pre-lesson and post-lesson interviews were conducted in Cantonese. All interview transcripts were translated and reviewed by a language instructor working in a higher education

institute. The final versions of the transcripts were sent back to the three participants for correcting errors or inaccuracies and before the data were analysed.

## Data Analysis

Systematic observation data generated by the PETA coding procedure were calculated to provide descriptive data for all behaviour categories within the observation instrument. These descriptive data allowed comparisons to be made to the results collected four years before and other related studies.

The qualitative data were collected from interview tapes and the field notes made during lesson observations. The analysis of these data was based on inductive analysis, constant comparison, and coding procedures (Corbin & Strauss, 2008). Specifically, the analysis of the teaching perspectives of the PE teachers included the following dimensions: conceptions about teaching physical education, lesson preparation, decision making during lessons, and current teaching behaviour and practices. Through an inspection and the careful reading of the data, key text segments or meaning units were identified within the data. They were then analysed and labelled. Meaning units containing comparable information were then categorized and grouped into themes. The investigator then sought and ascertained the dominant trends and patterns within the study as a whole.

To establish the trustworthiness of the results, several strategies were used (Lincoln & Guba, 1985): triangulation, member checks, and peer debriefing. Findings from the pre- and post-lesson interviews and lesson observations were compared to and contrasted with cross-check data and interpretations. A comparative analysis of different sources with consistent findings and good explanations for the differences in data from divergent sources has been shown to strengthen the credibility of a study's results (Patton, 2002). When doing the checking, all interview transcripts were returned to the participants for verification of their accuracy before the data were analysed. Only minor revisions were made before the data analysis. For the purpose of peer debriefing, an experienced qualitative research colleague was invited to read and comment on the preliminary analysis and interpretation of the data (Merriam, 2009).



## Results

The data generated in this study reflect the current practices and beliefs of the three primary PE teachers studied along with the factors that influence their teaching practices. When comparing the teaching behaviour patterns that resulted from the present study to those obtained four years before, the findings indicate that the three participants increased the time spent on instructional behaviour from 65.66% to 74.6% and lowered the time spent on managerial behaviour from 34.34% to 25.4% after four years of teaching. Monitoring behaviour was the activity that received the highest percentages at 45.05%, whereas motivational feedback had the lowest percentage at 0.5% within the instructional behaviour categories. The time spent on these two activities was nearly the same as in the previous study. In the managerial behaviour categories, the participants spent the most time on activity organisation with a slight drop to 14.99% from the previous study and the least amount of time on other tasks, which remained almost the same at 0.26% after four years. The time spent on performance feedback within the instructional behaviour categories had doubled to 11.11% while the time spent on the remaining individual managerial behaviour activities had lowered. Physical educator suggests that teachers spending a relatively large proportion of lesson time on instruction and relatively less time on class management are more successful in terms of enhancing the students' skill learning (Curtner-Smith, 1994). Others also agree that teachers spend a minimum amount of time on managerial behaviour activities and make use of the extra time to provide short and explicit demonstrations with appropriate information will give students more time to practice skills and improve learning (Byra & Coulon, 1994). The participants in the present study allocated about 75% of their lesson time to instructional behaviour and 25% to managerial behaviour. The qualitative data also indicate that the participants improved their class management and instruction skills. Detailed information about their teaching competence is presented later in this study. A comparison of the mean percentages of time spent by the three participants on the different instructional and managerial behaviour indicated in the PETAI across a total of twelve lessons that include those studied four years before are shown in Table 3.

The analysis of the field notes and interview data collected in the present study provides insight into how the three participants conceived, planned, and taught their lessons after four years of teaching. With regard to the participants' practices and beliefs, two main themes emerged from the analysis of the field notes and interview texts: a) focus in teaching, and b) teaching competence.

### Focus in Teaching

The participants expressed significant concern about whether their students were learning and cared enough about whether learning was taking place in their lessons that how the students learn and respond was the focus of their teaching. At the beginning of their careers, they only concentrated on presenting the learning activities and the flow and fluency of the lessons. They all admitted that four years of teaching experience had taught them to adjust their practices according to the learning responses of the students. At the time of this study, student learning was their major teaching focus. They also revealed that "what to teach" and "how to teach" were both governed by the students' characteristics and learning abilities. This change of focus can be seen in the following responses:

*I have modified the learning activities when compared to my first teaching of this content. Based on the understanding of the students' abilities in the past years, I need to modify the learning activities to more simple tasks (Ling, pre-lesson interview 2).*

*Though we have a common teaching schedule and content in my school, I need to modify my teaching according to the students' ability and skill level. Sometimes I need to think out how to motivate them to learn according to their needs (Kei, pre-lesson interview 4).*

### Teaching Competence

The three participants studied demonstrated confidence and competence in their teaching practices. Teaching styles, pedagogical settings, classroom management, and instruction were the major instructional features identified and there were modifications in their practices compared to their performance as observed four years before.



### **Teaching styles**

The lesson observations revealed that the participants had maintained the teacher-directed styles identified in the previous study. Telling and showing were the common strategies and they usually did most of the talking. In the lessons, they first demonstrated as skill and then their pupils practiced it: “Kei explained, instructed and demonstrated the skill (dribbling). The class then split in pairs and practiced the skill (dribbling)” (Kei, field note 1) and “Ling gave a demonstration of the (dig) movement and emphasized several major teaching points. The class then spread out and started practicing the skill (digging)” (Ling, field note 3). The participants explained that this direct approach was based on safety concerns and students’ attitudes towards learning. Kei stated, “[I]f the teaching content involves much safety issues, such as teaching gymnastics, I will give more explicit instruction and adopt a direct teaching approach”. However, the participants also claimed to adopt a discovery and inquiry approach. Kei explained, “Teaching games for understanding and discovery approaches would sometimes be used in my teaching, however, I had to give much instruction”. Sze shared a similar view: “I sometimes adopt inquiry approach in teaching ball game activities. I would provide opportunities for my students to explore how to apply rules and tactics in games but this approach would lead to more confusion at the end”. The participants also adopted different teaching strategies that varied according to the nature of the lesson’s content but it seemed that there was room for improvement when trying these approaches.

### **Class Management and Instruction**

The participants had improved their classroom management abilities compared to four years before and emphasised the importance of class discipline. Preventive management strategies were adopted and routines and regulations were established at the beginning of the semester. In addition, they had adjusted their task presentation both verbally and visually through explicit explanations and demonstrations. Their expectations of their students were clear and consistent and hand signals and grouping strategies were commonly used in the lessons. The participants demonstrated organization skills with short transition times between activities. They also asked students to assist with equipment dispersal and return and devoted little time to students’ off-task

behaviour by actively supporting student learning. They maintained proactive control over class time and space and exhibited energetic and enthusiastic behaviour in their teaching, as evidenced by the following interview and observation responses:

*For grouping, I start to train the pupils at the beginning of the semester ... for example, my pupils need to understand my hand and whistle signal... this kind of routine training needs to be established at the very start of the semester (Kei, pre-lesson interview 2).*

*The teacher monitored the class learning performance and gave feedback to the pupils once she found errors of the students’ performance ... The class management was exceptionally good (Sze, field note 3).*

Overall, the participants displayed improvements compared to the previous observations. Their teaching practices bore the two distinguishing characteristics of competent teachers as described by Berliner (2004): they made conscious choices about what they were going to do and could determine what was important to the operation of their classrooms. The second major focus of this study is to seek explanations for the noted modifications of the practices. The analysis of field notes and interview data collected helped generate such answers and several major themes emerged: 1) professional development, 2) passion in physical education, 3) workplace influence, and 4) teacher education and experience.

### **Professional Development**

The participants did not stop their professional studies during the four years it took to conduct both studies. They enhanced their subject knowledge by attending related degree programmes, postgraduate programmes, and professional development courses. The main purpose of this on-going professional development was to upgrade their knowledge and competence and they underscored the significance of attendance, which assisted the improvement of their teaching practices. The following comments illustrate the participants’ perceptions regarding professional development:



*Through teaching, accumulating experience, attending coaching courses ... sharing with colleagues, I think these help improve my teaching (Kei, post-lesson interview 3).*

*[S]eeking colleagues' advice, reading references, attending professional development courses, Education Bureau Summer School for PE teachers ... these help to renew my PE knowledge ... I may also take some courses to learn new sport skills... this year I take rope skipping (Ling, post-lesson interview 4).*

### **Passion in Physical Education**

All of the participants clearly loved and enjoyed teaching PE. They all spent a great deal of time training sports activities in school and tried their best to perform honourably in their role as PE teachers. They were concerned with the quality of their teaching and the success of their students and continuously showed a great desire to improve their practices. They adopted different strategies, such as rewards, demonstrations, and videos to create a sense of achievement and a positive learning environment that aroused the interests of their students. Their teaching practices were well appraised by parents, students, and colleagues:

*I use rewarding as they may feel it is an honour to be rewarded by the teacher ... try to give them successful feeling and make them have interest and motivation in learning ... I like teaching PE very much (Ling, pre-lesson interview 2).*

*Using students to demonstrate and video might help to attract students' attention ... among all teaching subjects, I like teaching PE most, maybe I like sports (Kei, pre-lesson interview 3).*

*We won the Tung Wah Joint Schools football competition this year ... in fact, I spent much time training the team for these past years ... I was also happy to receive thank you cards from parents and students for my teaching ...colleagues appreciated my teaching and sought help from me... I will keep on exploring and reflecting how to give better performance (Kei, post-lesson interview 4).*

### **Workplace Influence**

The contextual factors of each school played an important part in influencing the teaching practices of the participants. Similar supportive working environments were found among the PE teachers in this study. They were all supported in their professional development by their school principals and were allowed to try new teaching ideas in their lessons. The schools they served also supported the development of extracurricular sporting activities and participation in inter-school sports competitions. The facilities and PE equipment in their schools were adequate for teaching and sports training. Their students' positive learning responses were a major source of motivation that drove the participants to improve the quality of their teaching:

*The school encourages students to participate in inter-schools sports competitions ... the afternoon session of each day is reserved for students to have extracurricular activities ... school facilities and equipment is good enough for teaching PE (Sze, post-lesson interview 1).*

*When I found the students were getting more interest in learning sports activities or improving their skills ... I am getting more confidence and energetic in teaching PE and training the school teams (Kei, post-lesson interview 2).*

*The school culture also affects my teaching in the past few years, for example, the school principal emphasizes good class management in teaching, then I need to manage and control my students well in class ...usually students are the motivator of teacher, their positive responses will influence my emotion and practice (Ling, post-lesson interview 3).*

### **Teacher Education and Experience**

The participants appreciated their learning experience in PE teacher education and indicated that most of the strategies they applied were learned from their teacher education programmes. They agreed that their teacher education programmes had given them basic teaching competence and the post-lesson interview data confirm that most of the strategies employed during the observations were either learned in their teacher training or gathered from their four years of teaching experience. All of the participants treasured their school instructional experiences and claimed that they had been



able to apply and modify what they had learned based on classroom experience, which helped them improve their teaching practices through experience and reflection. Instructional experience also helped them increase their related practical professional knowledge, which translated into better performance. Another gain was that all of the participants accepted innovative ideas and dared to try new practices in their schools and these opportunities to explore, practice, and reflect helped them polish their teaching skills. The following remarks reveal that instructional experience played an important role in developing effective teaching practices:

*I always apply what I learned in the teacher education to teach my lessons ... for example, gymnastics is one of the typical topics that I learn most from my teacher education ... I modified my teaching based on my past teaching experience (Ling, pre-lesson interview 2).*

*Based on past teaching experience and what I learned in the teacher education to design the learning activities (Kei, pre-lesson interview 1).*

## Discussion

The major purposes of this study were to examine the teaching practices of three primary PE teachers after they had gained four years of instructional experience and to determine the reasons for these practices. The results of this study illustrate the influence of occupational socialization on the practices of PE teachers. The past sporting experiences and the love of sport of the participants had been influential of their taking PE teachers as careers (Curtner-Smith, 2001; Curtner-Smith, 2009; Dewar & Lawson, 1984). These early profound sports involvement would socialize them into particular 'philosophies' of teaching in PE (Dewar & Lawson, 1984). Teachers tended to replicate the kind of PE that they themselves experienced. The significance of teachers' past experiences for current practice was then closely related (Smith & Green, 2004). This might explain why the participants in the present study love teaching PE and coaching sports teams in schools.

Researchers indicate that professional training has little or no impact on the ideologies and practices of PE teachers (Curtner-Smith, 2001; Green, 2002). Green (2002) commented that many teachers practice they

are obliged to practice as part of their training and requirements to become a qualified teacher. This does not necessarily indicate a change of their teaching beliefs and 'philosophies'. They further adjusted their practice and thinking when dealing with the daily contextual constraints during the on-the-job experiences. In the present study, the participants admitted that what they learned from their PE teacher education programmes had helped their practices in schools. They could recall which teaching courses had given insights and directions for their teaching. It seemed that the teacher education programme had exerted certain impact on their practices. At the same time they also emphasized the on-the-job experiences and the effects of their workplace environments had shaped their daily practices. The teachers continued their professional socialization with the on-the-job experiences. They changed their views and practices in accordance with their perceptions of their surrounding contextual constraints (Green, 2002). The significant others in the workplace, such as school principal, colleagues, parents, pupils and school culture, were mentioned by the participants had played a part in shaping their practices in the past years. The results in the present study also support the suggestion that both the 'professional education' and 'organisational socialization' within the occupational socialisation model influence the practices of PE teachers (Cruz & Li, 2009; Smyth, 1995).

The findings of the study indicate that the participants adjusted their practices and gained a great deal of confidence as teachers. Both quantitative and qualitative data generated support that they exhibited planned instructional behaviour and class management skills in terms of time spent and practice within the PE lessons and adopted different teaching strategies that suited the students' learning needs. All of these modifications seem to be related to the accumulation of more instructional experience and professional growth over the four years that lapsed between the first study and this study. The participants admitted that they were able to modify and adjust their teaching because they had repeated their practices so many times. The four years between studies provided the participants with opportunities to practice and acquire new teaching skills and knowledge and these in-field experiences helped them familiarise themselves with lesson content, classroom management, teaching environments, and their students. During the four years between studies they



acquired knowledge about a variety of subjects including content, learning environments, students, general pedagogy and pedagogical content, and the practical experiences of teaching PE in schools. The participants pointed out that it was the teaching experience and personal professional development that had shaped their practices, which especially lends credit to the assertion that “experience is the best teacher” (Goodlad, 1984; Schmidt, 2010).

Nevertheless, experience alone is insufficient to enhance teaching effectiveness because even experienced teachers do not always develop competent practices. Berliner (2004) reiterated that experience alone would not make a teacher an expert, although an expert pedagogue has typically had extensive classroom experience. He highlighted the special role that experience plays in the development of pedagogical expertise when he described the behaviour of expert teachers. He added that the motivation to achieve success and the desire to be excellent are important. The participants in this study possessed strong self-awareness of their efforts to improve. Indeed, reflection and the desire to improve played significant roles in their efforts to polish their teaching practices. These two attributes are closely linked to what Dunn and Shriner (1999) described as deliberate teaching practices, specifically those activities that lead to the development of competence. Such activities are cyclic in nature and call for constant evaluation, revision, and practice. Frequent and mindful engagement in these activities provides opportunities for self-improvement and, according to Dunn and Shriner (1999), the framework of deliberate teaching practices acknowledges the participant’s motivation to choose to improve, learn by experience, and integrate new knowledge into future performance. Finally, a supportive environment is critical if teachers are to maintain their improvement efforts over time. Indeed, the contextual school environments of the participants in this study supported them by allowing them to try new teaching ideas and by providing adequate sports equipment and facilities. The principals at the schools they served also encouraged their attendance at professional development courses and programmes. The principal’s support has been shown to be significant in changing the teaching practices of PE teachers (Faucette & Graham, 1986; Fullan, 1992) and the students’ positive responses and learning attitudes also reinforce the quality of the teaching practices they encounter (Cothran, 2001). Bechtel and O’ Sullivan (2007) described these factors as enhancers that positively affect PE teachers’ practices

and such constant support has been an important element in the professional development of teachers (Patton & Griffin, 2008).

However, readers should interpret the findings of this study cautiously due to its limitations, the most significant of which is the small number of participants. The results generated from so few participants cannot be generalised for other experienced primary PE teachers who received their training from other institutions. To obtain more reliable findings, future research should expand the number of participants to include those that have received educations from different institutions. To understand more about the influence of instructional experience and contextual factors on teacher development, the teaching practices of the participants in future studies should be studied again after several years. A longer period of practice and more prolonged lessons should also be observed and the results obtained could then be compared to the findings of this study to provide a better picture of how PE teachers develop into the different career stages.

The results of this study indicate that classroom teaching experience is vital for the development for effective teaching, particularly class management techniques. Teacher education institutes should extend student teachers’ opportunities to teach, which would allow them to develop their skills. The findings of this study reinforce the notion that contextual environment might influence the practices of teachers. Schools are shown to be complex organizations that have own micro-political structure (Kelchtermans & Ballet, 2002). Teachers need to learn how to effectively navigate the micro-politics of school as evidence indicates that they are not well managed in the micro-political realities of school life (Fernandez-Balboa, 2000). Their practices might not be accepted by administrator, colleagues and students (Smyth, 1995). Most teachers would adjust their practices according to the school contextual conditions and some even changed their workplace after their first year of teaching (Cruz & Li, 2009). Teacher educators should help student teachers understand how contextual factors influence their teaching beliefs and practices before they graduate to minimise or delay the “washout effects” (Curtner-Smith, 2001; Zeichner & Tabachnick, 1981). Pre-service teachers should be prepared to provide instruction related to the reality of school environments. They should be equipped the



knowledge and skills necessary to navigate socio-political factors associated with teaching physical education (Richards, Templin & Gaudreault, 2013). Continuous professional development is important for PE teachers to increase related professional knowledge and teacher educators should affirm the value of continuous professional development and encourage pre-service teachers to attend such programmes after graduation.

## Conclusion

The PE teachers in this study developed while gaining teaching experience. Practical in-field teaching experience with continuous reflection helps the teachers refine their teaching skills and strategies. While enthusiastic in-service education also promotes professional growth of the participants. Other individual factors, such as personal teaching experience and school contextual environments, also influence teaching practices. Teacher development with respect to learning how to teach appears to be a gradual process that moves from a teacher-oriented focus towards a more student-oriented focus. Teachers seem to be responsible for their own professional growth and development. They may respond differently and develop at their own pace. Teachers are not without challenges within this development process. They need on-going support during their development to achieve expertise.

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**Table 1. Demographic Information for the Three Primary PE Teachers.**

	Participants		
	Sze	Kei	Ling
Sex	Female	Male	Female
Age	26	27	26
Education	BEd (PE)	BEd (Chi)	BEd (PE) MSc (RM)
Teaching Unit	Basketball	Football	Volleyball
Teaching Class in PE	P. 4	P. 5 and P.6	P. 4 and P.6
Class Time	45 mins.	40 mins.	50 mins.
Students	Lower Class	Lower Class	Lower Class
Type of School	Subsidised Organisation Pri. Co-Ed School	Subsidised Organisation Pri. Co-Ed School	Subsidised Organisation Pri. Co-Ed School
School Size	24 Classes	31 Classes	7 Classes
School Location	Tseung Kwun O	Tin Sui Wai	Tai Po
Coaching Experience	Taekwondo Table Tennis	Football	Dance Volleyball
PE Teaching Experience	4 Years	4 Years	4 Years

**Table 2. Definitions of Instructional and Managerial Behaviour Categories coded by the PETAI.**

Instructional Behaviour	
<b>Planned Presentation (PP):</b>	The time used to present planned instructional material to the pupils.
<b>Response Presentation (RP):</b>	The time used to restate, emphasise, or summarise information relative to the aspects of a performance.
<b>Monitoring (M):</b>	The time used to observe the learning environment. This may include some incidental talk.
<b>Performance Feedback (PF):</b>	The time used to provide information relative to the aspects of a performance that is specific to the immediate execution of a skill.
<b>Motivational Feedback (MF):</b>	The time used to provide general responses to a skill attempt.
<b>Teacher Instructional Time (TIT):</b>	The total time the teacher uses to present, monitor, and provide feedback to the pupils and the sum of PP, RP, M, PF, and MF.
Managerial Behaviour	
<b>Beginning/Ending Class (BEC):</b>	The time used to begin the lesson, record tasks, and to end the lesson.
<b>Organisation (O):</b>	The time used to organise for skill development or game play.
<b>Equipment Management (EM):</b>	The time used to obtain, set up, distribute, or collect equipment.
<b>Behaviour Management (BM):</b>	The time used to provide feedback relative to pupil behaviour.
<b>Other Tasks (OT):</b>	The time used for purposes other than class management or instruction.



**Table 3. Comparison of Teacher Behaviour Time Percentages for the Primary PE Teachers across Teaching Lessons over Four Years.**

Year	Sze		Kei		Ling		Mean of All	
	Grad.Yr	4Yrs	Grad.Yr	4Yrs	Grad.Yr	4Yrs	Grad.Yr	4Yrs
<b>Instructional Behaviour</b>	Mean%	Mean%	Mean%	Mean%	Mean%	Mean%	Mean%	Mean%
<b>Planned Presentation</b>	8.75	17.17	9.66	9.31	11.64	14.16	10.01	13.54
<b>Response Presentation</b>	7.07	2.3	3.45	4.43	5.8	6.65	5.44	4.46
<b>Monitoring</b>	49.45	49.16	43.46	46.75	43.76	39.26	45.55	45.05
<b>Performance Feedback</b>	8.34	6.81	0.06	7.2	5.49	19.33	4.63	11.11
<b>Motivational Feedback</b>	0.03	0	0	0.06	0	1.46	0.01	0.5
<b>Teacher Instructional</b>	73.65	75.44	56.64	67.75	66.69	80.86	65.66	74.6
<b>Managerial Behaviour</b>								
<b>Beginning/Ending Class</b>	3.16	2.43	2.59	1.9	1.08	1.02	2.27	1.02
<b>Equipment Management</b>	4.94	6.72	9.3	7.96	14.97	4.71	9.73	6.46
<b>Organisation</b>	16.23	10.14	25.71	21.9	14.73	12.95	18.89	14.99
<b>Behaviour Management</b>	1.79	4.48	5.42	0.61	2.14	0.46	3.11	1.85
<b>Other Tasks</b>	0.2	0.78	0.32	0	0.36	0	0.29	0.26
<b>Teacher Management</b>	26.35	24.56	43.36	32.25	33.31	19.14	34.34	25.4

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