Pre-service PE teachers’ occupational socialization experiences on teaching games for understanding

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Abstract

Background: Teaching Games for Understanding has been promoted as an innovative curriculum model in the past decade in Hong Kong. It focuses on developing pupils’ tactical awareness and decision making capability through integrating the cognitive and contextual dimensions of learning in physical education.

Aims: This article reports a qualitative study of occupational socialization experiences of pre-service physical education teachers on Teaching Games for Understanding.

Sample and methods: Data of 4 final year pre-service physical education teachers with an orientation towards teaching were collected through interviews and writing of reflective journals. Occupational socialisation suggested by Lawson (1983) and the interpretive inquiry perspective were adopted as theoretical frameworks for generating meanings.

Results and recommendations: All participants perceived Teaching Games for Understanding positively as a viable instruction contributing to pupils’ cognitive development and providing fun. They regarded it as pedagogical knowledge and mapped well with the current education reform in Hong Kong. Although they encountered a number of conceptual and instructional difficulties for implementing the model, they were determined to adopt the model in their future teaching. The findings generate insights on how pre-service PE teachers can be helped and facilitated in their occupational socialization processes.

Keywords: Teaching games for understanding, physical education teacher education, occupational socialization
Introduction

This qualitative study is about the socialization of 4 final year pre-service physical education teachers (PSTs) with an innovative curriculum model namely “teaching games for understanding” (TGfU). After introducing the TGfU and its development in Hong Kong, the methodology of using Lawson’s (1983) occupational socialization and the interpretive perspective in the meaning making process is presented. This is followed by a discussion of the results of the study and their possible implications on physical education teacher education (PETE).

Teaching Games for Understanding

The motivation of this study comes from experiences of the writers during teaching supervisions in recent years. Pupils were commonly found making the requests to their PE teachers while attending game lessons like: “are we going to play games today?”; “when can we play games?” and “should we play games straightaway?”. It appears that pupils have their preferred ways of learning in games that the current ways of teaching may not be most suitable for them.

As explained by Rink (2006), traditional game lessons have been commonly conducted in the form of “technical model” within which drills are used for acquainting pupils for the mastery of techniques through informing, extending, refining and application tasks. It is assumed that pupils learn best with the “technique-to-games” progression. Tactical understanding should be waited after the development of sophisticated techniques. Games are only arranged after they have mastered the techniques under the direct instruction of teachers.

Bunker and Thorpe (1982), Light and Fawns (2003), Grehaigne and Godbout (1995) and Werner, Thorpe and Bunker (1996) commented on the technical model for over emphasis of the development of techniques. Very often, pupils were found unable to transfer techniques in games, possessing little motivation in games lessons and leaving school knowing little about games.

In the past 2 decades, TGfU has been suggested as an alternative curriculum model for games teaching. According to Thorpe, Bunker and Almond (1986), the model was pioneered in the late 1960s by staff of Loughborough University for promoting benefits of using small sided (3 vs 3 or 5 vs 5 etc.) and conditioned games, and working on grids (a grid with 10 feet by 10 feet playing area) for pupils in games lessons. Ever since the publication of the article, “A model for the teaching of games in the secondary school” by Bunker and Thorpe (1982), it has developed to be a curriculum model with pedagogical and theoretical foundations attracting worldwide implementation and discussion although with variations of terms. The terms are being TGfU (Thorpe et al, 1986; Werner et al, 1990; Werner and Almond, 1990; Werner et al, 1996) for the cases in the UK and (Liu,1996; Cruz, 2004; Liu et al 2006) Hong Kong; Games Concept Approach (Tang and Wong, 2000 and Tan et al 2002) for the cases in Singapore; Play Practice (Launder, 2001) and Games Sense (Light, 2004 and Den Duyn, 1997) for the cases in Australia; and Tactical Games Approach (Griffin et al, 1997) for the cases in the US.

The essence of TGfU is to move away from the skills-based to a cognitive-based and from a direct to an indirect teaching approach in game teaching. The focus is on involving pupils in games, introducing them tactical concepts and allowing them to make decisions based on tactical awareness (Thorpe et al, 1986). Werner et al (1996) presented the step by step
illustration of the model as highlighted in Figure 1:

![Figure 1: Model of TGfU](image)

Firstly, the teacher introduces pupils with particular game form to recognize tactical problems to be solved. Secondly, through involving in the game, pupils are expected to appreciate the rules that give the game its shape. The rules are modified in terms of the playing regulations, scoring system, offensive and defensive criteria aiming to determine the repertory of skills required and the tactical problems structured. Thirdly, pupils are provided with opportunity to appraise the tactics used or to be used in the game. Fourthly, pupils and teachers make decisions on “what to do?” and “how to do it?” “What to do?” focuses on tactical decision while the “how to do it?” relates to “the decision as to what is best way to do it and the selection of an appropriate response is critical” (Thorpe et al, 1986, p. 9). Fifthly, the skill execution aims to describe the required skill movement as envisaged by the teacher. Finally, the performance is the observed outcome of the previous processes.

Pupils are expected to experience a variety of game forms like field or striking/fielding, target, court or net/wall and territory or invasion games (Werner and Almond, 1990). They test their solutions and reflect what they did to be successful in games. Such cognitive focus in terms of “thinking in action” facilitates pupils’ internalization of concepts and strategies inherent in games (Light & Fawns, 2003; Chow et al, 2007).

Several studies had compared TGfU with the traditional technical model (French et al, 1996; Turner and Martinek, 1999; Griffin and Placek, 2001; Butler and McCahan, 2005), relatively little information had been available on how PSTs’ experienced their professional learning within TGfU. As suggested by Light and Tan (2006), “clearly, the development of graduating teachers is a pivotal consideration in seeing TGfU makes a difference in games teaching across the range of diverse societies and cultural settings within which it is being developed” (p.10). It is necessary before any initiatives for improvement of PETE are initiated.

**Development of TGfU in Hong Kong**

Liu (2005) recalled that TGfU was introduced to Hong Kong in 1994. In 1996, Dr. Thorpe, the pioneer of the model was invited to conduct workshops for local pre- and in-service PE teachers (Liu, 1996). Since then, PETE programmes and respective websites for promoting the model were initiated.

As discussed by Li (2005), TGfU fits well in conceptions of learning with those advocated in local education reform (Education Commission, 1999; 2000). Both stress the importance of constructivist learning in realistic settings (Dyson et al, 2004; and Butler, 1997). Student-centred learning is advocated within which pupils are expected to contribute and construct their learning of tactical concepts through involving in games. They actively make sense of their learning process by synthesizing new experiences.
and context, and applying information to new game situations. Generic skills and higher order thinking are developed. The role of teachers as facilitators is envisaged and more interactive and joyful learning are promoted (Figure 2).

<table>
<thead>
<tr>
<th>Education Reform</th>
<th>TGfU</th>
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<tbody>
<tr>
<td>Constructivism-student-centered</td>
<td>Student-centered</td>
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<tr>
<td>All-round development</td>
<td>Integration of Mind and Body</td>
</tr>
<tr>
<td>Generic Skills</td>
<td>Provide more integrated learning opportunities for enriching generic skills like critical thinking, problem-solving, communication, collaboration and self-management.</td>
</tr>
<tr>
<td>Joyful Learning</td>
<td>Game-based learning</td>
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<tr>
<td>Teachers’ role as facilitators</td>
<td>Facilitation in problem solving and Guided Discovery</td>
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<tr>
<td>Higher Order Thinking Skills</td>
<td>Game concepts/ tactical understanding</td>
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<td>Learners’ role-participatory, interactive</td>
<td>Active learning</td>
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Cruz (2005) explicates that TGfU has been included in the PETE curriculum in the Hong Kong Institute of Education as a measure of change in local curriculum development for the past decade. Apart from its inclusion as a teaching module, PSTs are required to plan lessons and put on trial the model in micro-teaching. The concept is then modelled in professional activity units. Finally, PSTs practise the model in their 2 field experiences (FEs) scheduled at the end of their 3rd and 4th year study respectively.

A number of research projects had been conducted inquiring the implementation of the model. Liu (1995; 1996) conducted two studies on the perceptions of 155 serving secondary school PE teachers and 10 PE lecturers of the teacher training institute on TGfU. He found that all PE lecturers attached closely to the skill-based approach of games teaching. He urged local PE lecturers and teachers to adopt the new approach in order to train PSTs competence in games teaching. He later conducted another study to evaluate the feelings and perceptions of 4 PE teachers on implementing TGfU of the basketball unit (Liu, 2001). He reported that all teachers recognised the value of the approach for the children. The concern of how many techniques was learnt remained and teachers demanded more information and support for promoting TGfU.

Cruz (2004) studied the perceptions of 5 serving teachers and their secondary 1 to 3 pupils on TGfU. The teachers expressed that they would implement the approach in their future teaching as their pupils experienced were more active and fun as well as understood more about the tactics.

Li and Cruz (2006) conducted a qualitative study of how 4 highly skilled pre-service PE teachers learned how to teach by TGfU. They concluded that all PSTs perceived TGfU positively as a viable curriculum model. However, half of the participants expressed that they would not implement the model in their future teaching career because of the impact of anticipatory socialization as well as confusion on tactics and techniques while teaching.

On the whole, research on the promotion and implementation of TGfU for local PSTs is still limited. This study was launched to supplement the current research data concerning how PSTs with an orientation towards teaching experienced their learning-to-teach TGfU experiences.

**Methodology**

This study aims to understand how 4 final year PSTs taking the four-year full-time Bachelor of Education programme experienced their occupational socialization with TGfU. According to Lawson (1986), occupational socialization involves “all kinds of socialisation 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” (p.107). It is a life-long learning-to-teach process involving three phases namely acculturation, professional and organizational socialization (Lawson, 1983). Acculturation refers to PSTs’ biography especially their PE and sport experiences in school. It results in the development of their pre-conception on PE and PE teaching before joining the PETE. Professional socialization signifies PSTs’ professional learning processes from their pre-service PETE. Organization socialization refers to the influence of the workforce when PSTs enter their teaching career in schools. This study mainly concerned the first two phases. They are regarded as “dynamic and dialectical” within which PSTs actively construct their professional learning through constraints originated from the existing social structure. At the same time, their active agency in constructing professional perspectives and development is recognised.

The interpretive inquiry was adopted to capture PSTs’ occupational socialization experiences with TGfU holistically and naturalistically. It stresses on “hermeneutics” highlighting the importance of understanding and interpretation of how they gave meanings to their socialization processes with the awareness of the context (Bleicher, 1982).

The Participants

4 PSTs (2 males and 2 females with the pseudonyms M1, M2, F1 and F2) with the ages between 22 and 24 were purposefully selected for the study. As the majority of the PSTs, they were fresh graduates joining PETE immediately after their secondary education. They were selected because they were PSTs with an orientation towards teaching (Li, 2006). They possessed positive secondary school PE experiences, taking PE teachers as their role models and longing for contributing something to the profession as well as the pupils as shown in their recruitment interviews. It illustrated distinctive impacts of anticipatory socialization experiences of PE formed during their acculturation phase.

Data were collected through semi-structured interviews and writing of reflective journals immediately after their 2nd FE. The timing was thought to be versatile and practical. Each interview lasted for about 30 minutes. The duration was regarded suitable for collecting necessary information and maintaining PSTs’ concentration. Interviewing questions including their knowledge and professional learning of TGfU, their experiences and difficulties encountered, their perceived values of TGfU and their intention of practicing the model in their future teaching career were inquired.

Reflective journals were employed to identify the “why”, “how”, and “what” of their significant TGfU experiences. Issues like their satisfying and dissatisfying experiences, significant contributions and the difficulties encountered were included. They helped to identify possible socialising events and experiences.

Data Analysis

Through inductive analysis, all data were transcribed, coded and organized. Emerging and recurring themes concerning PSTs’ occupational socialization experiences in TGfU were decontextualized with content analysis and constant comparison as suggested by Strauss and Corbin (1998). During the process, phenomena such as their professional learning, difficulties encountered and perceived values of TGfU were interpreted in a wider context of their socialization. They were then interpolated with the data and cross-case analysis in the process of “saturate”, “abstract”, “conceptualise” and “test” with a spiral and back and forth manner.

“Trustworthiness” and “authenticity” of the data suggested by Guba (1990) were employed to establish credibility and legitimacy of this research.
During negotiating access, participants’ consent was obtained. They were explained with the details of the study, their rights and obligations. Interview and reflective journals were translated by a PE professional and verified by PSTs. Direct quotations with the PSTs’ own wordings were extracted to ensure the authenticity of the data. Data of the reflective journal were used for triangulating the accounts made during their interviews. It intends to de-contextualize the complexities of their TGfU experiences. However, generalization of the research results should be taken with caution because of the relatively small number of sample.

Discussion of Results

General characteristics of the participants

Although TGfU has been introduced to Hong Kong for over a decade, no participants in this study had such experience in their primary and secondary education. They only learnt about it from their PETE. They had not tried using the model in their 1st FE. It was their first time of teaching Basketball and Handball units by using TGfU in the 2nd FE. The following are their occupational socialization experiences with TGfU:

Theme 1: TGfU as a viable curriculum model

All participants’ experiences with TGfU were positive. They all regarded it as a viable approach of game instruction. In the interview, M1 commented:

TGfU allowed pupils to involve, think and learn in the games all the time. They liked the lessons to be implemented in the form of TGfU. (M1)

Similarly, M2 claimed that TGfU was another possible teaching method. He elaborated:

We have to start the lesson with games and pupils learn and think all the time. They were motivated more as they involve in the games for most of the time. (M2)

F1 also commented on TGfU. In the reflective journal, she wrote, “TGfU is a good teaching method. It involves pupils in games most of the time, within which they can learn how to play smartly as well as acquire fun. The model promotes students’ psychomotor, cognitive and affective development.” For her, TGfU could promote pupils’ learning within which cognitive objectives like thinking and tactical awareness, psychomotor skills like tactical competence and affective objectives such as cooperation and collaboration were enhanced.

F2 seemed understanding the model better. In the interview, she said:

It is fantastic! All pupils involved in the games actively. They enjoyed the game and played whole-heartedly… They were actually aware the tactical concepts through involving in games. … They started to think in the game. Most of them were highly motivated and there was a lot of learning taken place. (F2)

In F2’s mind, TGfU differed from the traditional mode of PE teaching. It focused more on skill training and practices. She found that most her pupils were motivated more in TGfU because of relatively more game involvement.

Influenced by positive anticipatory socialization experiences, all participants joined PETE with an orientation towards teaching. They were high achievers and possessed idealistic conception of
teaching PE. With the aspiration of contributing something to the PE profession and promoting learning for pupils, they regarded the model as a viable method of games teaching. Their pupils were motivated by the game play. The results coincided with that of the previous study conducted by Li and Cruz (2005) on 4 highly skilled PSTs.

Theme 2: Values of TGfU

All participants understood that TGfU was to promote their pupils’ tactical understanding through planned activities. They experienced cognitive enrichment of their pupils. M2 voiced that his pupils had a lot of opportunities to discuss and solve tactical problems. In his reflective journal, M1 recorded that his pupils’ cognitive enrichment was enhanced as he has structured stimulating questions. He praised the active involvement in thinking during the game lessons as valuable learning experience for his pupils. F2 expressed in the interview that she was particularly amazed by her pupils’ active involvement in the group discussion in her lessons. F1 was surprised with the cognitive deliberation demonstrated by her pupils during questions and answers. In the reflective journal, she wrote:

It was my girls’ postulations of defensive concept of covering in volleyball that surprised me most. Most of the pupils vividly recalled and reflected what were going on in their game play. They could pinpoint their right and wrong positions and necessary movements of cover. The model does not like that of the traditional one which concentrates on skills only. It tackles pupils thinking and problem solving. (F1)

All participants perceived positively the value of pupils’ thinking in TGfU. Similar to Howarth’s (2005) description of using “game as problem” approach, they involved pupils in the game as a “laboratory” for addressing the emerging tactical concept. For them, cognitive development, opportunities for thinking and problem solving were important for pupils’ learning in PE. TGfU was capable of achieving these cognitive objectives. The following table highlighting the values identified by individual participants was summarized for reference:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Values identified</th>
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<tbody>
<tr>
<td>M2, F2</td>
<td>Opportunity for discussion, Active involvement in group discussion</td>
</tr>
<tr>
<td>M2</td>
<td>Solving tactical problems</td>
</tr>
<tr>
<td>M1</td>
<td>Active involvement in thinking</td>
</tr>
<tr>
<td>F1</td>
<td>Cognitive deliberation, Reflection and judgement</td>
</tr>
<tr>
<td>F1</td>
<td>Defensive concept in Volleyball</td>
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<tr>
<td>F2</td>
<td>Thinking actively</td>
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</table>

Theme 3: Mapping with current education reform

M1 and F2 described in details that TGfU mapped well with objective of “life long learning” and “student centered” focus advocated in the current education reform in Hong Kong. F2 traced how her pupils’ generic skills were promoted through TGfU in the reflective journal:

A lot of opportunities were provided for group discussion, practical appreciation of game situations and problem solving. Pupils’ were allowed to identify tactical answers and tried out again in the games by their own. Such experiences effectively promote pupils life-long learning skills of communication, problem solving, critical thinking and creativity capabilities which were advocated in the current education reform. (F2)
For her, activities in the form of group discussion effectively motivated pupils to solve their tactical problems encountered in games. Through the process, they were exposed to situations of practical reflections, decision making and testing in games. The process facilitated pupils’ critical thinking and creativity.

On the other hand, M2 commented in the interview that he was aware of current education reform. F1 also echoed that TGfU was basically an indirect teaching approach and was more capable of cultivating pupils’ learning-to-learn capability. In the interview, she recalled that her “pupils critically appraise their tactical problems and suggested necessary movement responses concerning concepts of ball possession, fast break, give and go and positioning. They were found more capable of putting on trail the solutions that they had suggested in the discussion”.

All participants were aware the aims of the current education reform being life-long learning and student-centred focus. With limited practical teaching experience and influenced by the PETE, all PSTs tended to believe concepts advocated in the current education reform un-problematically. They tried their best to incorporate them in their basketball and handball units through group discussion. For them, group discussion could promote their pupils’ active learning, collaboration and communication which were the learning-to-learn skills for life long learning. TGfU were perceived as capable of mapping the conceptions education reform and they had put efforts for promoting pupils’ learning through TGfU.

Theme 4: Type of professional learning

All PSTs in this study viewed TGfU from pedagogical perspective in terms of teaching procedures and indirect teaching approach. M1 and F2 documented in their reflective journals that TGfU included modified game, questions and answers on tactical problem and game again. In his reflective journal, M2 related his satisfactory activities with the games, discussion and “Q and A” for helping pupils to grasp the tactical concept of “give and go” in basketball.

It seems that professional socialization impacts of the PETE were effective in familiarizing PSTs with the teaching sequence, the use of games, major teaching focus on tactical concept, indirect teaching approach, using Q & A and group discussion for promoting pupils’ cognitive development. Similar to the findings of the previous study on highly skilled PSTs (Li and Cruz, 2005), their professional learning related most on technical teaching. Probably, they were novice teachers and completing those planned teaching activities is their main focus during their FE.

Theme 5: Willingness to adopt TGfU in their future teaching

Although PSTs did not have TGfU experience in their anticipatory socialization phase, all of them showed determination of adopting TGfU in their future teaching. They pinpointed a number of conceptual and instructional difficulties for the implementation of TGfU which were similar to those identified by Liu (2001). Instructional difficulties included encountering with the large class size, managing the class in games situation, having inadequate space for games playing, lacking of knowledge in particular games, structuring relevant questions and gaining no support from their PE colleagues. Those conceptual difficulties included confusing whether to use drills, and the dilemma between tactics and techniques. F2 commented in the interview:

I shall try this approach in my future teaching
as it can promote pupils’ learning. However, it should be noted that there were difficulties for the successful implementation of TGfU. The availability of space for game play for all would be decisive. Moreover, I have to learn more as I was not familiar with all offensive and defensive concepts of all games and I still confused with of why we cannot include drills in the lesson … All in all, asking right questions are also not easy tasks. (F2)

Moreover, all PSTs recognized the importance of content knowledge. They experienced difficulties in synthesizing tactical knowledge of different team games. In the interviews, they highlighted the importance of tactics, strategies and tactical awareness of basketball, football, volleyball and handball which were specific on their own.

M1 and M2 acknowledged in the interview and the reflective journals that they encountered difficulties in teaching pupils game concepts. Their problem aggregated as they had to teach a variety of game forms for their pupils. However, they said that they would solve these problems in accordance with the enrichment of their teaching experience in the future.

Conclusion and Recommendations

It should be noted that PSTs in this study possessed an orientation towards teaching with active and positive professional learning attitude. Through practising their teaching of handball and basketball in the FE, they socialized with a new curriculum model namely TGfU. They perceived positively their professional learning experiences and regarded TGfU as a viable curriculum model for promoting pupils’ learning in local schools. The model was accepted by all of them as an alternative way of games teaching in schools in Hong Kong. In this case, PETE appears to be an effective socializing agent for educating PSTs to adopt and implement TGfU in their FE. On the contrary, the impacts of their anticipatory and organizational socialization are relatively little for this group of PSTs.

All of them acknowledged the effectiveness of their professional learning of TGfU as it could provide pupils with fun. It promoted cognitive learning in terms of thinking and problem solving. The educational values of TGfU perceived by PSTs in this study coincide with a number of studies conducted locally and abroad (Liu, 2001; Li and Cruz, 2006; Howarth, 2005). For the PSTs in this study, such positive experiences reinforce their willingness to continue putting on trial this model in their future teaching.

The model mapped well with conceptions advocated in the current education reform in Hong Kong. It was “student-centred” and capable of cultivating pupils’ generic skills for learning how to learn. The findings illustrated the effectiveness of the PETE in inculcating PSTs’ awareness of current educational reform with reference to TGfU on pupils’ learning. For them, TGfU is a practical PE curriculum model which can promote pupils’ learning and thus is worth to be promoted for games teaching in Hong Kong.

All PSTs experienced conceptual and instructional difficulties for implementing TGfU during their professional learning experience. They included limited space for the games, large class to be managed, unable to design and explain the games to pupils, grouping teams for games, large class size and limited sports facilities which are largely technical teaching problems. Enhancement of the teaching and managerial skills of PSTs through PETE should be strengthened.

Concerning the problems of content knowledge, designing relevant games and probing questions, PSTs need to improve their tactical knowledge of
various games and transform it into pedagogical content knowledge. The findings illustrated the relatively ineffectiveness of PETE to instill PSTs with an in-depth understanding of TGfU. A review of the current curriculum design and delivery of PETE for acquainting PSTs with knowledge and skills for adopting TGfU in teaching games appeared to be necessary. Besides, the vision and mission of teaching games through TGfU should be explained, conveyed and debated in order to facilitate and enhance their professional learning and teaching.

As teacher educators, we have to be aware of how PSTs construct their knowledge of learning-to-teach TGfU. We have to find ways to influence them with a conceptual shift in how they can effectively make use for TGfU of promoting pupils’ learning through games. After all, there will not be incentive for PSTs to change unless there is a paradigm shift in PSTs’ educational values and beliefs about teaching games.

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