

# Drills or Plays: Some Social Implications in PE Pedagogy

## 操演抑或遊戲：體育教學法的某些社會因素

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### Abstract

Personal observations and evaluation reports on teaching practice suggest that PE teachers attending training at the Hong Kong Institute of Education (HKIEd) tend to “over teach” in the sense that they talk too much and put too much emphasis on scientific details such as the mechanical properties of a movement. As more time was spent on explanation and other phases of teaching, learning through play in the applying phase was reduced. Observations also indicated that PE teachers tended to use drills rather than plays or modified games to allow pupils to acquire the criteria performance. A study of 250 lesson plans written by 24 students of an Advanced Certificate of Teacher Education (ACTE) course and 30 students of a Teacher Certificate (TC) course in the HKIEd has also revealed the same tendency. Evidence indicates that the mean time allocation for the applying phase shown by these students is lower than that suggested by textbooks/documents in pedagogy (approximately 50%). “Over teaching” in the above sense may be a socio-political measure in response to the academic movement of our discipline. Drills, which in general facilitate skill refinement, neglect the interest of different ability groups and the two sexes.

### 摘要

根據個人觀察及學生實習教學評估報告所得，香港教育學院體育系學生在實習教學時，一般傾向於「過度講授」，在學習前期花太多時間於某些運動科學知識上（例如某些技巧的力學原理），由於教學上用於講解及其他環節佔用了大部分時間，「技術應用」的機會相應減少。觀察所得亦同時指出，學生在實習教學時亦較喜歡用「操演」的形式，多於讓學生透過實演或模擬遊戲去鞏固有關技術。作者分析 24 名資深教育證書課程 (ACTE) 及 30 名二年制教師證書課程 (TC) 學生所寫的 250 份教案，發現學生在課堂上編配予「技術應用」這一環節的時間比率，較一般體育教學文獻所建議的為低（約課堂時間的 50%）。「過度講授」可能是體育界對體育學術化的反響。「操演」有利於技巧的提升，但是忽略了不同技術能力組別及男女之間的興趣差異。

### Introduction

For schools, the nature of physical education (PE) teaching is the acquisition of sport/physical skills (Carr, 1979). Contemporary concepts of PE, such as the of-through-about movement model (Arnold, 1988) or the “physically educated man” model (NASPE, 1990) emphasizes a balance among the cognitive, psycho-motor and affective domains. However, sport/physical skills are always at the core of school PE teaching. For without learning the proper skills, talking about enjoyment, health and fitness, sense of well being, moral development, etc. are meaningless. All these desirable goals are possible only after the proper learning of the relevant physical skills.

Physical skills broadly fall into two categories, the functional (purposive) and the expressive (aesthetic). The teaching of physical skills involves a series of planned tasks: (1) informing, (2) refining, (3) extending, (4) applying (Rink 1993; Siedentop, 1983). According to Siedentop's terminology, applying means a phase during which students can move the focus outside and above the skill itself to a broader environment. For functional activities such as most games, the applying phase is when the taught skill is tested and used in context (Siedentop, 1983), whereas for expressive forms of movement such as gymnastics and dance, it is best seen as a time when students are challenged to synthesize the learned skills into their own repertoire which carries personal interpretation. Professionals generally agree that children learn most whilst they are playing. It is usually during

the applying phase that students play. This paper, therefore, argues that an applying phase is necessary for most kinds of PE lessons. However, evidence observed in teaching practice visits over the years 1993-96 seems to indicate that PE teachers teach skills in violation of this basic principle.

During April 1995, a number of ACTE<sup>1</sup> students, together with four final year students of a two-year Teacher Certificate (TC) course, were assigned to the author's supervision. Having observed several lessons early in the supervision cycle, the author's attention was drawn to how lesson time, particularly time for the applying phase, was used. Rough time checks on the spot showed that the percentage of time allocated to the applying phase by ACTE students ranged from 6% to 32% with a mean of about 20%. It was also observed that although TC students often allocated higher percentage of time for application as shown in their lesson plans, they often failed to follow what was planned owing to managerial and transitional matters. The time for all phases of teaching was subsequently compressed. Consequently, the time for the applying phase was also proportionally reduced.

Another phenomenon commonly observed by the author and shared by other lecturers in the PE Department of HKIED was that many PE teachers taught physical skills by giving too much verbal explanations. Instead of getting children into action as soon as possible, they spent too much time talking about what to do and how to do it. They also paid too much attention to scientific theories behind certain skills. This is in line with observations reported in literature (Rink, 1993, p 43). Others observed similar problem among beginner teachers (Ratcliffe, 1987) and, sometimes, even the more experienced ones (Smith et al, 1993).

Experimental studies would not throw much light on the problem under study since we are dealing with an in situ phenomenon. On the other hand, a multiple approach including document/text analysis such as the study of lesson plans, first hand information collected in the field such as teaching practice observations, seems to be more helpful in depicting the scenario. Such methodology is widely accepted in the field of sociological studies (Silverman, 1993).

In this paper, time allocated to the applying phase of a PE lesson is examined on the base of studying 250 lesson plans written by ACTE and TC students in the HKIED. The verbal accounts of student teachers' teaching during internship are highly relevant (lecturers, on the average, have more than ten years of teaching experience in the local context and have been conducting over 40 teaching practice supervisions yearly), though subjective, and hence are also used as a base for discussion.

## Mal-practice in Skill Teaching

Verbal reports from lecturers involved in teaching practice were collected during evaluation meetings. Among the many undesirable practice identified, a common one was that teachers favoured verbal explanation in their teaching. Personal observations confirmed that skill teaching that lasted for most of the lesson without a phase for applying (in its literal sense) was not uncommon. It was not unusual in having some teachers using five to eight minutes to explain and demonstrate, for example, a volleyball dig before allowing students to feel the hitting position at the hands. One student teacher observed attempted to provide every detail of a basketball lay-up shot in ten minutes before getting pupils into practice. It was quite common to find teachers, after the skill teaching phase (informing plus a few variation exercises), spending the rest of the lesson time on pattern drills rather than on plays or modified games.

In the current study, 91 lesson plans written by 24 ACTE students (most of them have about 2-4 four years of teaching experience) were examined and 159 lesson plans prepared by 30 second year TC students (of a three year programme representing the inexperienced teachers) were used for comparison. These TC students had one block of six to eight weeks of teaching practice in year one. The number of lesson plans that were examined ranged from 6 to 10 per subject and were mostly on track and field (39), basketball (46), badminton (6), dance (23), football (27), gymnastics (47), handball (16) hockey (2), rugby (4), softball (3) and volleyball (37).

Nearly half (10) of the ACTE students and one third (9) of the TC students did not indicate in their lesson plans the timing for each phase of teaching. The time allocated to the applying phase (or group activity phase as it is usually referred to by students in the HKIED) was calculated as a percentage of the duration of the total lesson. The data was processed by the data analysis tool of Excel 5. The ACTE students has a mean score of 29.52% (S.D.= 6.95%, Max = 46.8, Min = 14.2) of the total lesson time assigned for the applying phase whereas the mean for TC students are 36.3% (S.D.=6.64%, Max = 48.5, Min = 17.6). These figures seem quite centrally distributed and may bear significant difference. Application of an independent t-test indicates that the TC groups spent significantly ( $p < 0.05$ ) more time on applying phase than the ACTE groups.

## Discussions

The time budgets as they appeared in lesson plans represented the thinking of the students. They were the students' perceptions on how a lesson should be conducted. To study the time-budget

instead of the actual time management is considered more appropriate for the purpose of this study. Whilst the small sample size of this survey inherited considerable limitations, the ACTE students were a heterogeneous group coming from different schools all over the territory and were trained in the three former colleges of education. On the other hand, there was a possibility that the TC students were initiated into certain practices because they were taught to do so since they were a homogeneous group coming from the same college and taught by the same lecturers.

Nevertheless, the above findings do suggest some points of concern. Whilst all the subjects planned their lessons according to the four stages: warm-up; skill teaching; group activities (applying); and warm-down or closure, the following points are observed:

(a) that a considerable number of students did not indicate the time budgets of their lessons; (b) that the TC students tended to allocate more lesson time for applying than did the ACTE students; (c) that both ACTE and TC students allocated insufficient time for the applying phase;

The following observations were noted: (a) points to the fact that insufficient attention was given to detailed lesson planning among new PE teachers. There was little awareness of the importance of appropriate timing of a lesson. Although this may have no direct bearing to the actual teaching, particularly for the more experienced ones (Stroot & Morton, 1989), this is reflective of a negative attitude towards planning. (b) this seems to support a finding that the ACTE students exhibited no better tactics in lesson planning than did the TC students under training (Chow, 1994) and that the ACTE students' cognitive complexity was not superior to the TC students (Chow, 1995). There is no clear explanation for this undesirable practice. It might be speculated that their behaviour is reflective of the practice in the field.

On the other hand, although the TC students appeared to allocate more time for the applying phase than did the ACTE students, feedback from supervising lecturers together with the author's own experiences reflected that the TC students were generally unable to follow the lesson plans closely and that time for applying was usually shorter than that has been planned. This seems to suggest that PE teachers were aware of (or had been taught rather) that appropriate time should be allocated for applying although they were not usually capable of following a schedule at the beginning. As they become more experienced they tend to teach more and allow less time for student practice. Questions arise out of these observations. Do the ACTE and TC students realize that substantive amount of the PE lesson

time should be assigned to the applying phase? If they do, why do they not put theory into practice?

This contrasts with the percentage of lesson time for the applying phase recommended in the literature. PE pedagogy writers seem to agree that approximately half of a lesson should be allocated to skill application in a PE lesson (see Table 1).

Table 1. Time for the applying phase suggested by PE pedagogy writers.

Authority	% lesson time for Applying
Harrison J & Blakemore C (1989)	40
Kirchner G (1992)	60
Hellison D & Templin T (1991)	40
DES, National Curriculum (1992)	50

Fenstermacher (1979) once indicated that teachers appear to know what is effectiveness in teaching but they just tend not to practice it. Placek (1983) postulates that teachers may view successful teaching differently from researchers' findings and that teachers are most concerned about students' enjoyment of physical education. A similar finding was reported in a pilot study conducted at the Hong Kong Institute of Education, Black Campus (HKIED, 1996). If these findings reflect some truth, teachers should have assigned more time for the applying phase where the skills taught could be developed in a play context. Why is there such a gap?

### Playfulness is Important

The activities of physical education are intrinsically valuable because they represent institutionalized forms of play, therefore, fundamentally important sources of meaning. This, it seems to me, is the uniquely educational value inherent in our subject matter. (Siedentop, 1972, pp.190-191)

In saying this, Siedentop was advancing a play approach in PE. He further stated that "The meaning obtainable from play experiences is directly proportional to the degree that the player is at play and in the play environment." (p. 193) The element of play is essential to all PE programme. "The goal of play education was to help students acquire skills and develop an affection for the activities themselves" (Siedentop, 1994, p. 81). Thus, a time assigned for students to participate in play(s) of its formal or modified form is an essential part of a PE lesson, particularly in functional games.

It is commonly acknowledged that students learn by doing. They learn best by doing things through fun and enjoyment. This is particularly true in physical skill learning. We do not

tell our babies how to move their legs one by one when teaching them to go through walking to running. Nor do we teach our kids to ride a bicycle by telling them the mechanics and watching a lot of pictures and video. We design little movement tricks (learning experiences) to initiate them into the criteria performance step by step and then provide lots of opportunities in different settings to allow the learned skills to mature in their respective milieus. Many of our new PE teachers seem to fail in this aspect of teaching. When one fails to behave in a certain way, he/she either does not know that certain behaviour is desirable, or is not able to do it for some other reasons. The present problem may be accounted for by one or both of these axioms.

It is, of course, obvious that there is no guarantee that students learn when simply allowed ample time to play freely. The point lies with the word "freely" which should not be interpreted as unattended play with no organization at all. Designing appropriate learning experiences is a very demanding on the teacher's creativity. As Rink (1993) has indicated:

Unfortunately, it is the applying task that is most often inappropriate for individuals and groups within a class. This is also a task that teachers are reluctant to modify for students. (p. 158)

A brief discussion in this aspect is given by Hellison and Templin (1991, pp. 67-74). Nevertheless, it is maintained that properly designed activities in the applying phase will, on the one hand, allow students to refine the learned skills in a more genuine context and, on the other hand, allow students some time for intensive exercises. One of the reasons for teachers to ignore this may be that they do not understand the nature and meaning of a well designed applying phase in each lesson.

PE teachers nowadays have a strong desire to "etch" into the students the skills instead of providing practices through which they will learn the skills. The lessons become teacher centered and skill presentation overtakes skill learning as the aim. This is supported by the general feedback from the lecturers involved in teaching practice supervision in the PE Department of the HKIEd since 1993. It is also the common observations as reported by the inspectors of the Advisory Inspectorate (PE) in the Hong Kong Education Department (Lam, 1997). Some teachers do not seem to realize that there could be no learning at all even when a teacher is teaching very hard if the students are not learning. On the contrary, students may learn a lot whilst left alone practicing and playing. The role of a teacher is to initiate students into a positive environment where they are guided through carefully designed learning experiences (exercises or progressions) with positive feedback. Siedentop (1983) has rightly pointed out that:

The only way to improve your tennis skill is to play tennis. Not only do you have to play, but you will also probably have to play against someone who is better than you or receive instruction from someone who can help you improve your skill as you play. Books, films, and all the rest are important, but they should be seen in proper perspectives—as support sources for skill development, not as substitutes for direct experience in the skill itself. (p. 6)

There may be lots of other reasons for teachers to focus on teaching rather learning. Perhaps more teaching impresses others that they are hard working, knowledgeable teachers, and thus respectable. Keeping the students busy with organized drillings also appeals to teachers as being efficient in handling large class size and entails less disciplinary irregularities (Morris, 1995). This seems no less true in PE than any other subjects. One of the ACTE students that I talked to recently told me that students were under better control in drills. Discipline is of course important but should not be achieved at the expenses of learning.

### Struggle for Professional Status

Apart from the above, professional paranoia, an identity crisis for PE teachers, may have also played a part as regard to the finding that PE teachers are tempted to talk on a lot of scientific details of movements when teaching skills. From a symbolic interactionist perspective this could be viewed as a collective struggle for professional status. PE has gone through many stages of development: gymnastic oriented, games oriented, physical fitness oriented, and ultimately sets its root on the so called "scientific functionalism" (Kirk, 1992; Siedentop, 1994, pp.62-64). This has been a strategy for gaining acceptance at university level and thus getting resources for PE's development. PE teachers have been traditionally labeled as "brainless" physical labors and the subject regarded as a frill subject in the curriculum. In order to combat this negative image, PE teachers may subconsciously try to impress their counterparts that they are academics by injecting into the subject a lot of "knowledge" borrowed from other disciplines. Knowledge becomes the key to the academic family. It has been shown that a lot of subjects such as biology, general science and even psychiatry have gone through similar struggle before they acquire the present professional status (Goodson & Dowbiggin, 1994). It is an irony that whilst PE professionals argue that knowing-how is as valuable as knowing-that that they at the same time resort to resort to the know-that scenario to elevate their professional status.

PE teachers fail to see the point that studying human movement or sports from an academic perspective is one thing whilst teaching PE at school level is another. A distorted conception

on teaching for understanding, a movement in the teaching of PE launched by Thorpe et. al. (1986), has developed over time. Some PE teachers wrongly believe that students would learn and perform sport skills better by knowing more about movements in terms of biomechanics, physiology, psychology, sociology, etc. This violates motor learning principles (Schmidt, 1991, pp.176-177). The myth can be easily seen when one refers to the amazing skills demonstrated by acrobats. They do not acquire those skills by studying but rather through a large amount of quality practice. By studying the subjects' learning processes on a ski simulator, Wulf and Weigelt (1998) suggest that

When one learns a complex motor task that requires whole-body movements or the coordination of many degrees of freedom, learning might be more effective if the learner has a chance to "discover" the correct movement along. By discovery- or by 'doing rather than thinking about'. (p. 366)

They go on to conclude that "too much information (the mechanics of) can—under certain conditions— be harmful to learning". However, it must be remarked that there seems less doubt that the cognitive aspects of sports is contributed to the development of a physically educated person.

Evidence of the current study reveals that the professional aspects of teaching may have been ignored for the sake of academic prestige. Such a negative attitude towards the professional aspect of PE teaching is not unique to Hong Kong. In a review of the PE teacher education, Bain (1990) concludes that PE is generally regarded as marginal in schools as well as in universities. Pedagogy departments in many universities in North America are often associated with feminism and non-academic. PE teachers are affected by this view and, therefore, try to maintain a professional identity by focusing on other career options such as exercise specialists or by emphasizing their coaching roles rather than teaching. This leads us to consider the argument that our value system, which is socially shaped, determines what is to be taught in PE and how it is to be taught (Kirk & Tinning, 1990).

### **Pedagogy Elitism**

Over teaching, in the sense of attempting too many tasks in a lesson; too much talk during the informing stage; and too many drills, will kill interest in learning physical skills; sports skills in particular. One may argue that well-organized drills are sometimes more conducive to learning. This is, however, a value judgment and is analogous to grammar drilling in language learning. In Hong Kong, some thirty years back, pupils at primary

school learned English by going through huge amount of grammar and sentence pattern drillings. The outcome was that they were unable to use what they learned in daily communication although they might be able to identify grammatical correctness<sup>2</sup>. Given the usefulness of certain types of sport drilling, we must also ask ourselves the question that who benefit most from such an approach? What is the size of such group of students? As Dodds (1986) has pointed out, drillings may be regarded as the embodiment of "motor elitism". Looking for skill perfection would benefit the high ability group only. Assuming interests are random among students, there is always a certain percentage of a class who are highly motivated and thus are receptive to intensive training in e.g. volleyball, whilst the rest are interested in doing the basics only in volleyball but capable of high level skills in others e.g. badminton. Difference in ability and interest is also common between boys and girls. Bias towards drills may be more problematic in co-ed classes. Moreover, such an approach makes PE lessons mostly adult controlled and rule-governed, short of player autonomy and action-centered qualities that characterized informal play (Coakley, 1980). There is a value judgment for PE teachers to make. It is perhaps high time for professionals to rethink the ideology of PE teaching.

To sum up, one would not be able to master a skill by being told how to do it or by reading about it. Repeated practice in an organized manner and playing it in its particular context is the way to success. Clearly, applying is a necessary phase of any skill instruction sessions. Proper timing for this phase is important to happy learning.

### **Conclusion**

Evidence shows that both ACTE and TC students assigned insufficient time for the applying phase though the latter do better in this regard. This may be suggestive that students fail to see the importance of the play element in PE and sports and they overlook the fact that students learn most in playing. The wish to raise the status of the subject may have quietly triggered such an attitude in PE teaching. The misconception that skill learning and performance will be enhanced by informing the learners the cognitive aspects of physical skills might have further reinforced such a wrong teaching approach. Hence, teachers tend to talk and explain too much instead of keeping students on task. It is argued in this paper that the ability to learn or perform a skill at least in its early stage is not enhanced through cognitive information.

PE teachers have to realize that an applying phase/group activity in each PE lesson will allow students of all levels to practice the skill taught in a play situation. If the learning experiences are properly designed, students will deepen their

understanding of, and further polish, the skills taught. During play, creativity and imagination are generated. It is also an opportunity for students to be able to help each other through interaction. The way we teach some thing is a social decision. It solicits different outcomes from different pupils. Although the time allocated to various phases of skill teaching may vary according to the nature of the subject and the teaching styles adopted, writers in pedagogy suggest that approximately 50% of the time for a lesson should be allocated for this purpose, particularly for functional activities. Of course, the learning experience for the applying phase has to be carefully planned and organized so that students' interest is sustained. In order to allow sufficient time for the applying phase, all parts of the PE lesson have to be executed with competence.

This paper has identified more problems than answers, if any at all, in the teaching of PE. To understand how teachers teach and why they teach that way, more studies are needed. Class observations and interviews seem to be more suitable to reveal the inner aspects of these complicated issues. Only when we understand in more depth how PE teachers teach and why they do it that way can appropriate measures be developed to improve the teaching of PE in schools.

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<sup>1</sup> The Hong Kong Institute of Education, formed in 1994 by merging the former colleges of education, currently provides only sub-degree level certificate courses which are one-, two- and three years in duration. The Advanced Certificate of Teacher Education is a one year full-time course designed for serving teacher certificate holders to up-grade their knowledge in certain subjects so that they can teach up to secondary five level in schools.

<sup>2</sup> However, a recent 60 minutes plus documentary illustrated that other "extreme" measures, such as the whole language approach is not doing any better.