



PLANNING AND PREPARATION OF PHYSICAL EDUCATION TEACHERS TOWARDS TEACHING PERIOD FOR THE IMPLEMENTATION OF FORM 4 PHYSICAL EDUCATION CURRICULUM FOR THE PHYSICAL FITNESS STRAND

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Abstract

Objectives. Teachers' planning and preparation before implementing any teaching and learning is vital. This study surveys the aspects of Physical Education teachers' planning and preparation in relation with teaching periods.

Methods. Survey method was employed in this study, with 50 Physical Education option teachers were involved as respondents. Descriptive statistics was used to analyze the study findings collected through questionnaires.

Results. The findings of this study showed that Physical Education teachers have planned and prepared their lessons at high levels. The planning and preparation made by the Physical Education teachers were to plan 5 periods for cardiovascular endurance topic (M=4.16; SD=.74), 4 periods for muscular endurance topic (M=4.06; SD=.71), 5 periods for muscular strength topic (M=4.12; SD=.72), and periods for teaching activities (M=3.90; SD=.87).

Conclusions. Based on the overall findings, it was found that Physical Education teachers have given more focus towards the planning of cardiovascular endurance topic.

Key Words: Planning and preparation, teaching period, implementation of Physical Education curriculum.

Introduction

Allocation of teaching period is the amount of time used by a teacher towards a certain subject, duty or activities in classroom (Arends, 1994). Teachers must make necessary planning related to the time allocated before starting any teaching. A good planning will maximize the usage of time allocated (Shahabuddin, Rohizani & Mohd Zohir, 2003). Fatimah (2000) has recommended time allocation for teaching into three stages in order to produce effective teaching. Firstly, the initial stage such as the induction, where during this time teachers will introduce the scope of teaching contents to the students to attract their interests and prepare them to accept the teaching and learning to be delivered. Secondly, the developmental stage where during this time teachers employ appropriate teaching method, use related teaching materials and conduct encouraging interactions with students. And thirdly, the closure stage where teachers make summaries related to the teaching contents that have been delivered to further strengthen students' comprehension as well as the achievement of teaching objectives. According to Sumarjo (2005), teachers have somewhat limited time to implement the teaching of Physical Education (PE). Therefore, while implementing the teaching, they must ensure that every second counts and fully utilized (Siti Aishah, 2007). Arends (1994) also stressed that the time allocated must be used effectively while teaching certain topics to maximize students' learning. United States Department of Health and Human Services (USDHHS) (2000) has recommended that

50% of the class time must be used to implement physical activities actively with students to achieve the objective of a healthy society, in 2010 in the United States of America. Beyer (2008) also seconded by stressing that the PE programmes in secondary schools must be allocated with sufficient time and activities to be able to attract students' interests. This showed that in any PE classroom, appropriate usage of time is vital in implementing physical activities to ensure the achievement of PE objectives. In addition, the Curriculum Development Centre (CDC) (1999) has stressed towards the approach of learning through physical activities to be used in the PE subject. While preparing for lessons, teachers must be smart to plan their time management wisely so that the amount of time is appropriate with the sub topics and important contents to be delivered to the students. This is due to the fact that time has significant impact towards the way a teacher teaches (Cuirkshank, 2003). According to a circular No. 25/1998, a total of 80 minutes a week (40 minutes per period) have been allocated to implement PE and Health Education (HE) in secondary schools. The total time allocated, if systematically planned, can of course assist in the process of the implementation of teaching and learning of PE. There are also schools that scheduled flexible timetables for PE, in which 80 minutes were allocated for one time per week to ease the implementation of PE in schools (Malathi, 2007). For the implementation process of teaching and learning of PE, flexible timetabling has always been applied. In a normal flexible timetabling, PE has always been conducted three or four times in a month as compared to Health Education which is only conducted once or twice per month. In relation to this,



PE teachers were required to properly plan whether to implement PE subject twice or thrice in a month. If the flexible timetabling can be implemented properly, it will definitely be helpful in achieving the determined lesson objectives. In the teaching and learning process of PE, sometimes the periods used were for other activities. For example, in a study conducted by Hynes-Hunter & Avery (2007) in relation with the timetabling block in PE programmes, it was found that most students wasted a lot of time to wait and managing thus having lesser time to complete activities. This circumstance can cause students to not have enough time to learn certain skills effectively. In a study done by Shabeshan (1998), it was found that students took quite a long time to change their clothes and manage equipments during the teaching and learning process of PE in schools. Thus PE teachers must be smart in making planning and preparation towards the teaching period for the teaching and learning of PE in schools. Thus, a PE teacher should plan the teaching period properly before implementing PE teachings. In planning the teaching period, PE teachers must at least able to identify the details to be done in teaching process. According to Kamaruddin&SitiHajar(2004), the time allocation for a certain time period can be utilized for the following: (a) Introduction of set induction, (b) teacher's explanation, (c) teacher and class, (d) class tasks, and (e) conclusion and summary of teaching and learning. Meanwhile, Mohnsen (2003) explained that PE teachers have the tendency to divide their class time into three categories. First is the students' matters time, where students actively involve in the teaching of PE. Second is the lecture time, where a chunk of time is allocated for students to sit and listen while teachers provide them with information. And third is the management time, where a certain portion of time is allocated for non-teaching activities such as queuing up, discipline and equipment management. All in all, whatever that will be conducted during the teaching and learning process, teachers must properly plan and make preparation with regard to the teaching period. This is to ensure that every planned items can be systematically implemented based on the planned time. Stillwell &Willgoose (1997) stated that the time allocated for all

activities when planning for the PE curriculum contents must be maintained within the teachers' teaching framework. This is because the total time allocated will directly influence what needs to be achieved in PE programmes (Pangrazi, 1997). Apart from that, a lot of time is being used for theory and practice in PE (Hynes-Hunter & Avery, 2007). Hence sufficient time is vital so that all students are able to complete the exercises during the teaching and learning of PE (Rink, 2002). This includes physical fitness exercises that require sufficient time for students to complete. PE teachers must ensure that the time for physical fitness exercises were planned properly before they are being implemented in the teaching and learning process of PE in schools. Based on the above arguments and explanations, PE teachers must plan the PE teaching period systematically before implementing teaching and learning process. Thus, the researcher will survey the extent to which PE teachers has made necessary planning and preparation towards the teaching period in the implementation of Form 4 PE curriculum for the physical fitness strand in secondary schools in Gombak district. At present, there is no research that studies about the planning of teaching period for PE in this country.

Research Framework

This study employed a descriptive framework to research about the planning and preparation of PE teachers towards teaching period aspect in the implementation of Form 4 PE curriculum for the physical fitness strand. Research Location and Sample. The study was conducted in secondary schools in the Gombak district, in the state of Selangor. Based on a source obtained from the Policy Planning and Research Division, Malaysian Ministry of Education, the total number of PE option teachers in Selangor in June 2008 was totalled at 371. Gombak is one of the districts that have a lot of PE option teachers, totalled at 50. This district is also active in sports programmes as compared to other districts. Therefore the researcher has decided to select Gombak as the research location.

Table 1 List of Secondary Schools in Gombak District and the Number of Physical Education Option Teachers

No	Schools	Number of Teachers
1.	SMT SgBuloh	2
2.	SMK Hillcrest	1
3.	SMK Kepong	2
4.	SMK Taman Selayang	2
5.	SMK Taman Malawati	1
6.	SMK Ideal Heights	1
7.	SMK Bukit Rahman Putra	2
8.	SMK Taman Desa	1
9.	SMK SgPusu	2
10.	SMK Gombak Setia	2



11.	SMK Taman Ehsan	3
12.	SMK Rawang	4
13.	SMK Hulu Kelang	1
14.	SM Teknik Gombak	2
15.	SMK SgKertas	3
16.	SMK Seri Selayang	2
17.	SMK SelayangBharu	1
18.	SBPI Gombak	2
19.	SMK Tuanku Abdul Rahman	3
20.	SBPI Rawang	1
21.	SMK DarulEhsan	2
22.	SMK Taman Keramat	1
23.	SMK Sri Keramat	1
24.	SMK Bukit Gading	1
25.	SMK Sri Kundang	2
26.	SMK Bukit Indah	2
27.	SMK Bandar TasikPutri	2
28.	SMK Sri Gombak	1

TOTAL	50
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Source: Gombak District Education Office (2008)

Based on Table 1 above, the researcher has involved all PE option teachers who were teaching PE for Form 4 students in secondary school in all of Gombak district. This is because the study conducted was related to the implementation of Form 4 curriculum for the physical fitness strand in secondary school, in which not all of the teachers in the studied schools have in-depth knowledge about the curriculum. To add, according to Julismah (2007), teachers who have qualifications in Physical and Health Education has already been exposed with a lot of knowledge related to contents and pedagogy during their training. Apart from acquiring pedagogical principles, trained PE teachers have also acquired professional teaching training experiences where they can apply the anatomy, physiology, biomechanic, psychology and human movement concepts in PE (Connor, 2009).

Research Instrument

Instrument is any tool used to obtain information, evaluate or study certain matter (Bhashah, 2007). This study employed questionnaires as instrument to obtain the research data. The instrument was constructed based on related theories, related researches, PE lesson syllabus, PE syllabus specifications, PE textbook, information from PE panel files and interviews as well as document analysis conducted by the researcher in several secondary schools in the state of Selangor.

Questionnaire

Questionnaire is a popular data collection technique and was frequently used in a survey study (Cohen & Manion, 1995). Questionnaire is useful to obtain facts about backgrounds, interests, viewpoints, and certain characteristics of research subjects (Alis, 2008). The information acquired from questionnaire is a primary data and can assist in fulfilling the needs of a study (Cheng, 2005). Therefore, questionnaire instrument has been used in this study. The questionnaire used the 'true' and 'false' items (Bhasah, 2007). The questionnaire was build based on the

interviews and document analysis done by the researcher in several national secondary schools in the state of Selangor. Through interviews with PE teachers and school administrators, the researcher was able to identify plenty of information related with the respondents. Meanwhile the findings from the analysis of a few documents such as the PE lesson syllabus PE syllabus specifications and the distribution of PE teaching periods were used as the sources to build the instrument. The questionnaire was build based on the steps proposed by Wan Chik (2007) as the following: (a) prepare questions, (b) distribute questions to a few samples, (c) collect and analyze the information, (d) prepare questionnaire based on the information analysis, (e) distribute questionnaire to a few samples, (f) collect and analyze again, (g) make correction if any weakness was detected to the questionnaire, (h) prepare questionnaire for the final distribution to samples, (i) distribute the questionnaire, (j) collect information from the samples and analyze the results and (k) write a report.

Instrument Validity and Reliability

Validity and reliability of an instrument is a very important procedure in the formation of any research instrument. Therefore, before the instrument is used for any actual study, the researcher must first confirm the validity and reliability.

Instrument Validity. Validity is a basic matter in quantitative study (Armstrong, Gosling, Weinman, Marteau, 1997). It is an important concept in the context of construct evaluations or concepts such as attitude, motivation, perception, fitness and achievement (Azizi, Shahrin, Jamaludin, Yusof & Abdul Rahim, 2007). Validity can be divided into two, which are external validity and internal validity. According to Balachandher (2005), internal validity includes content validity, criterion-related validity and construct validity. To obtain the validity of questionnaire instrument for this study, the researcher



has conducted the content validity. In conducting the content validity, the researcher has relooked and critically reread the sentences, words or appropriate sentence structures to see whether they were appropriate with the components in evaluation. This validity is vital to ensure that the instrument actually measure the concepts that needs to be measured (Azizi, Shahrin, Jamaludin, Yusof, & Abdul Rahim, 2007). For example, when the study was conducted to see the implementation of Form 4 PE curriculum for the physical fitness strand, the researcher included all the topics that were normally covered in the curriculum. This was done to ensure that the instrument really measure what needs to be measured. In evaluating the construct or implementation of Form 4 PE curriculum for the physical fitness strand, the dimension of contexts, resources, processes and products were given emphasis in selecting the items. Thus, the content validity was done to check the suitability of question items. The items were checked in terms of their sentences, focus and terminologies used. The more items that represent the dimensions for the constructs or concepts, the better its content validity will be (Azizi, Shahrin, Jamaludin, Yusof & Abdul Rahim, 2007). After detailed reviews was made towards the questions or statements in the instrument, the researcher implemented a two-phase process to acquire content validity as in a study conducted by Gurvitch, Blankenship, Metzler, & Lund (2008). In the first phase, the researcher sent the instrument to a six-panel member that has the expertise in PE field and programme evaluation and assessment so that they can provide reviews about the statements that were contained in the instrument as well as provide feedback related with the words and instrument contents. This is

because instrument formation is a very complex task which is related with technicalities hence expert assistance is very much required in related fields (Stufflebeam, 1985; Aiken, 1997). Azizi, Shahrin, Jamaludin, Yusof & Abdul Rahim, (2007) has also explained that the discovery of content validity is a consideration that can be done by using panel members to consider the extent to which the instrument fulfilled the standards. After receiving the checked instrument back from the panel members, the researcher reviewed it back and makes necessary corrections based on the critiques and recommendations. For the second phase of the content validity process, the researcher distributed the corrected instrument to two PE teachers to be completed. While providing responses, the PE teachers were also encouraged to make notes about any error and ambiguous statements regarding the contents of the instrument. The second phase was the final checking in validity process (Gurvitch, Blankenship Metzler & Lund (2008). The respondents involved in the second phase of validity process will not be involved in the actual study.

Instrument Reliability

The data compiled through all four methods (questionnaire, observation in the form of a structured checklist, interview in the form of a structured checklist and document analysis in the form of checklist) in this study is based on the research objectives set earlier. A pilot study has been conducted to obtain the instrument reliability as portrayed in Table 3. The pilot study for the questionnaire has been conducted in secondary schools in Hulu Selangor district, between February and April 2008 which involved 30 PE teachers.

Table 3 Questionnaire Coefficient and Reliability Value

Instrument	Variables / Technique	Analysis Technique	Cronbach's Alpha
Questionnaire	Teaching period	α	0.872



During the pilot study, a few feedbacks from PE teachers were recorded. From the feedbacks, the researcher has improved a few words and sentences in the questionnaire so that it can be easily understood by respondents. After improvements have been made, a second pilot study was conducted. The findings obtained from the second pilot study showed a higher reliability value for the questionnaire.

Data Analysis

Quantitative data obtained from the questionnaires were descriptively analyzed. Descriptive statistics were analyzed in the forms of frequencies, percentages, means and standard deviations to show the level of planning and preparation of PE teachers towards the teaching period in the implementation of Form 4 PE curriculum for the physical fitness strand. To analyze the interpretations of mean values for the rating scale of 5-‘Very Satisfied’, 4-‘Satisfied’, 5-‘Somewhat Satisfied’, 5-‘Not Satisfied’, 5-‘Very Not Satisfied’, the researcher has divided them into three levels of High, Medium and Low (refer to Table 4). This method has been used by Rudzi (2003), NikMohdRahimi (2004), and Mohamad Aderi&Rohani (2009) in their respective researches.

Example of Calculation:

Maximum Score = 5

Minimum Score = 1

Score Difference = 5 - 1 = 4

Score difference divided with 3 levels, where $4 \div 3 = 1.33$

Table 4 Categories of Implementation Levels

Implementation Level	Total Score
Low	1.00 – 2.33
Medium	2.34 – 3.66
High	3.67 – 5.00

Research Findings

Background of Respondents

Table 5 showed the frequencies and percentages of respondents' backgrounds from the aspects of gender, race, age, teaching experience, highest academic

qualification, teaching qualification and teaching option.

Table 5 Descriptive Statistics for Background of Respondents [Form 4 Physical Education Option Teachers in Secondary Schools in Gombak District] (N = 50)

Respondents' Information	Background	Frequency	Percentage
Gender	Male	31	62.0
	Female	19	38.0
Race	Malay	42	84.0
	Chinese	2	4.00
	Indian	6	12.0
Age	21 – 25 years old	1	2.00
		16	32.0
	26 – 30 years old	11	22.0
		9	18.0
	31 – 35 years old	13	26.0
	36 – 40 years old		
	Above 41 years old		
Teaching Experience	<1 – 2 years	16	32.0
	3 – 4 years	13	26.0
	5 – 6 years	9	18.0
	7 – 8 years	2	4.00
	Above 9 years	10	20.0
Highest Academic Qualification	Malaysian Certificate of Education (SPM / MCE)	1	2.00
		1	2.00
	Malaysian High School Certificate (HSC)	43	86.0
		4	8.00
	Diploma		
	Bachelor Degree / Master Degree		
Teaching Qualification	Teaching Certificate	3	6.00
		13	26.0
	Diploma in Education	29	58.0
		5	10.0
	Bachelor in Education Degree / PGTTTC / PGDE		
Teaching Option	Physical and Health Education	37	74.0
		13	26.0



Sports Science
 Education

Note: HSC:High School Certificate; PGTTC-Post Graduate Teachers Training Course; PGDE-Post Graduate Diploma of Education

From the gender aspect, male PE teachers (62%) were more than female PE teachers (38.0%). From the race aspect, Malay PE teachers (84.0%) were the majority respondents, followed by Indian (12.0%), and Chinese (4.0%). Most of the PE teachers aged between 26 to 30 years old (32.0%). The rest of the respondents aged above 41 years old (26.0%), between 31 to 35 years old (22.0%), 36 to 40 years old (18.0%) and 21 to 25 years old (2.0%). If viewed in terms of the experience of teaching Form 4 PE subject, 20.0% of the PE teachers have taught more than 9 years, 4.0% between 7 to 8 years, 18.0% between 5 to 6 years, 26.0% between 3 to 4 years, and 32.0% less than 2 years. In terms of the academic qualification, most of the PE teachers have obtained Bachelor Degree (86.0%), while the rest of

them at Master Degree (8.0%), Diploma (2.0%), Malaysian High School Certificate (HSC) (2.0%), and Malaysian Certificate of Education (SPM / MCE) (2.0%). While in terms of teaching qualification, 58.0% of them have acquired Bachelor in Education Degree, 26.0% with Diploma, 10.0% with PGTTC / PGDE, and 6.0% with Teaching Certificate. Lastly, in terms of teaching option, a majority of 74% teachers who are teaching PE for Form 4 students in secondary schools in Gombak district were those with Physical and Health Education option and the remaining 26% with Sports Science Education option. Whether they are with Physical and Health Education or Sports Science Education option, both are trained teachers and have the expertise in teaching PE in secondary schools.

Teaching Period

Table 6 showed the mean, standard deviation and level of planning and preparation of PE teachers towards the elements contained within the teaching period components.

Table 6 Mean, Standard Deviation and Level of Planning and Preparation of Physical Education Teachers for Teaching Period Element (N=50)

<i>Teaching Period Element</i>	<i>M</i>	<i>SD</i>	<i>Level</i>
Planned 5 Periods for Cardiovascular Endurance topic	4.16	.74	High
Planned 4 Periods for Muscular Endurance topic	4.06	.71	High
Planned 5 Periods for Muscular Strength topic	4.12	.72	High
Planned Times for Teaching Activities [set induction, teacher's demonstration, students' demonstration, classroom teaks, groupworks, small games, questioning and answering session or discussions, assessments and assignments]	3.90	.87	High

M- Mean; SD- Standard Deviation

Based on Table 6, it was found that all the elements of teaching period acquired mean score values at high levels. The elements were: planned 5 periods for cardiovascular endurance topic (M=4.16; SD=.74), planned 4 periods for muscular endurance topic (M=4.06; SD=.71), planned 5 periods for muscular strength topic (M=4.12; SD=.72), and planned times for teaching activities (M=3.90; SD=.87). The teaching activities consisted of set induction, teacher's demonstration, students' demonstration, classroom teaks, groupworks, small games, questioning and answering session or discussions, assessments and assignments. Based on the findings, it was found that PE teachers also planned and prepared more time allocation towards the element of cardiovascular endurance topic.

Discussion. It was also evident that the level of planning and preparation of PE teachers towards the teaching periods that has been divided into a few different parts were high (M=3.95; SD=.82). Also,

based on the findings, it was found that the elements of planned teaching periods were recorded at high levels: planned 5 periods for cardiovascular endurance topic, planned 4 periods for muscular endurance topic, planned 5 periods for muscular strength topic, and planned times for teaching activities consisted of set induction, teacher's demonstration, students' demonstration, classroom teaks, groupworks, small games, questioning and answering session or discussions, assessments and assignments. The findings of this study is consistent with the stress made by Fatimah (2000). Fatimah (2000) in her statement has stated that the division of teaching periods into 3 parts was to produce an effective teaching. Based on Fatimah (2000) also, the parts were the initial part, developmental part and closure part. Firstly, the initial stage such as the induction, where during this time teachers will introduce the scope of teaching contents to the students to attract their interests and prepare them to accept the teaching and learning to be delivered. Secondly, the developmental stage where



during this time teachers employ appropriate teaching method, use related teaching materials and conduct encouraging interactions with students. And thirdly, the closure stage where teachers make summaries related to the teaching contents that have been delivered to further strengthen students' comprehension as well as the achievement of teaching objectives. A good planning will maximize the use of allocated time (Shahabuddin, Rohizani, & Mohd Zohir, 2003). Planning that involves the division of teaching periods that were arranged according to certain parts is very appropriate to be implemented so that the subject can be delivered at times which are appropriate to students.

Conclusions. Based on the overall findings, it was found that Physical Education teachers have given more focus towards the planning of cardiovascular endurance topic.

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