

- MUNOZ-CACHON, M.J., SALCES, I., ARROYA, M., ANSOTEGUI, L., ROCANDIO, A.M., REBATO, E., 2007, *Body shape in relation to socio-economic status in young adult from the Basque Country*. Coll Antropol 31:963-968.
- MIRZA, N.M., KADOW, K., PALMER, M., SOLANO, H., ROSCHE, C., YANOVSKI, J.A., 2004, *Prevalence of overweight among inner city Hispanic-American children and adolescents*. Obesity Research; 12(8):1298-1310.
- PHOTIOU, A., ANNING, J.H., MÉSZÁROS, J. et al. 2008, *Lifestyle, body composition, and physical fitness changes in Hungarian school boys*. Res Q Exerc Sport.:(2):166-73.
- SEVİMLİ, D., 2008, *Investigation of the relationship between body mass index and physical activity in adults.*, TAF Preventive Medicine Bulletin; 7(6):523-528.
- SINGH, S.P., 2007, *Somatotype and Disease – A Review.*, Anthropologist Special Volume No. 3: 251-261
- SINIRKAVAK, G., DAL, U., ÇETİNKAYA, Ö., 2004, *The relation between the body composition and maximal oxygen capacity in elite sportsmen* Cumhuriyet Medical Journal., 26 (4):171-176.(in Turkey)
- WHO, (WORLD HEALTH ORGANIZATION), 1987, *Measuring obesity classification and description of anthropometric data. report on WHO consultation on the epidemiology of obesity*, Warsaw, pp: 21-23.

IMPLEMENTATION OF TEACHING OF PHYSICAL EDUCATION (PHYSICAL FITNESS)

Syed Kamaruzaman Syed Ali, Julismah Jani

Faculty of Sport Science, Sultan Idris Educational University, MALAYSIA

Email: s_kamaruzaman@yahoo.com / 29.01.2010 / 25.02.2010

Abstract

Purpose. The subject of physical education (physical fitness) is very important. Due to physical educator have to implement teaching and learning of physical education properly in secondary school. The objective of the study are a) to identify the level of the implementation of teaching and learning strategy, source and teaching material, facilities and equipment, and evaluation, b) to identify the relationship between the teaching and learning strategy, source and teaching material, facilities and equipment, and evaluation, c) to identify the most important aspect in teaching of physical education (physical fitness).

Method. In exposing an existence of connection between variables in research, a descriptive framework in terms of correlation research has existed to study the implementation on teaching of physical education (physical fitness). It is focusing on two or more variables data collected and identify the correlation of it.

Result. The level of implementation of physical education teaching and learning strategy (physical fitness) is moderate. While, the level of implementation of source and teaching material at moderate. And then, the level of implementation of facilities and equipment is moderate as well. However, the level of implementation of evaluation is high. Beside that, there was a relationship between teaching and learning strategy, source and teaching material, facilities and equipment, and evaluation. Among those aspect, the most important aspect is teaching and learning strategy.

Conclusion. Teaching and learning strategy, source and teaching material, facilities and equipment, and evaluation, are important factors in the teaching of physical education (physical fitness). However, the most important aspect is teaching and learning strategy.

Keyword: Physical Education, Teaching, physical fitness.

Introduction

Physical Education subjects were core subjects in Malaysia, but still there is a problem in terms of implementation. Reports from Curriculum Development Centre (2001) on the implementation of Physical Education in schools in Kelantan and Sabah are part of Physical Education teachers are not in daily planning and existing curriculum, teachers do not write daily lesson plans properly, to train football school teams during Physical Education period, monitor student progress during Physical Education classes, and leave time used by Physical Education teachers for teaching other subjects. Division of Planning and

Educational Research Policy (2005) reported that the implementation of Physical Education subjects were given less compare to other subjects. It is because Physical Education is not included the critical subjects. In general, the management of schools considered the subject of Physical Education can be taught by teachers who are not options. Therefore, the Physical Education subject taught without giving serious emphasis on the importance of achieving the goals of Physical Education. Through the reports presented at the Seminar, E.H. Wee (2002) considers the whole teaching of Physical Education in schools is still low. Problems that exist in the implementation of the

Physical Education curriculum indirectly desirable researchers to conduct a study to determine the extent of teaching Physical Education (physical fitness) in secondary schools with more depth. Researcher found that the study has not been carried out in Malaysia. To see the extent of teaching Physical Education (physical fitness), researcher use the evaluation models (D.L. Stufflebeam, 2000a). Through this model, the implementation of the teaching of Physical Education (physical fitness) are reviewed by evaluating the only dimensions of the process. Dimension of process including a few component such as the strategy of teaching and learning, sources and material of teaching, facilities and equipment, evaluation.

Research Objective

The objective of the study are:

- To identify the level of the implementation of teaching and learning strategy, source and teaching material, facilities and equipment, evaluation.
- To identify the relationship between the teaching and learning strategy, source and teaching material, facilities and equipment, evaluation.
- To identify the most influential factors most influential in the teaching of physical education (physical fitness).

Research Method

In exposing an existence of connection between variables in research, a descriptive framework in terms of correlation research has existed to study the implementation on physical education (physical fitness). It is focusing on two or more variables data collected and identify the correlation of it (J.R. Thomas, J.K. Nelson & Silverman, 2005) whereas the Stufflebeam Assessment Model is implied as conceptual framework in this research.

Sample Some 50 physical educators from secondary schools, technical secondary schools, and boarding schools (Division of Planning and Educational Research, 2008) were chosen as a sample for this research though the minimum sample size in this correlation study is engaged to 30 candidates respectively (L.R. Gay, G.E. Mills, & P. Airasian, 2009; 2006).

Instrument This research uses observation method (structured checklist) to collect information related to the dimensions of the process.

Result and Discussion

a. Implementation strategies of teaching dan learning

Table 2 indicates frequency, percentage, mean, standard deviation and level of implementation for teaching and learning strategy.

Table 1 Frequency, percentage, mean, standards deviation and level of implementation for teaching and learning strategy

Item	Mean	SD	L
Induction set	3.64	.96	M
Warm up	3.89	.95	H
Teacher demonstration	3.56	.88	M
Student demonstration	2.96	.79	M
Class task	2.98	1.12	M

Group task	3.41	1.12	M
Minor games	3.51	.75	M
Warm down	3.17	.95	M
Questionnaire/ discussion	2.91	.83	M
Assessment	2.88	.91	M
Assignment	2.60	1.09	M
Overall mean	3.23	.94	M

L-Level; H-High; M-Moderate; L-Low

Based on the Table 1, the overall mean show that the level of implementation of teaching and learning strategy is $M=3.23; SD=.94$. This finding indicates that the level of implementation physical education teaching and learning strategy (physical fitness) is moderate. This finding parallels that of R.Y. Abdul (1997) whereby implementation of teaching and learning of physical education in Tanah Merah, Kelantan is at a moderate level with a mean score 152.02. Indirectly, these findings indicate that teaching is an important aspect of implementation that needs to be implemented in schools.

b. Sources and Material Teaching Used

Table 3 is an identification of frequency, percentage, mean, standard deviation and level of sources and material teaching used.

Table 2

Percentage, Mean, Standard Deviation and Level of Sources and Teaching Material Used

Item	Mean	SD	L
Internet	3.53	.79	M
News paper excerpt	3.10	.92	M
Magazine	2.87	.85	M
Article or journal	2.88	.96	M
PE book reference / Sport Science	2.38	.77	M
Department of PE	2.19	.98	L
Text Book			
Structural heart	4.00	.81	H
Respiratory	3.80	.88	H
Training zone for CV	3.40	.73	M
Practice stamina activity of CV	3.44	.76	M
Muscular activity endurance	3.96	.76	H
Endurance training schedule	3.44	.73	M
Endurance activity	3.43	.76	M
Training – comparison between MS and ME	3.44	.77	M
MS training – Upper Body	3.34	.69	M
MS training- without Weight	3.40	.70	M
MS training – Lower body	3.36	.72	M
Weight training (games)	3.40	.73	M
Training activity for MS	3.42	.81	M
Total of Mean	3.31	.79	M

L-Level; H-High; M-Moderate; L-Low

Finding through observation (checklist structured) Table 2 show that the level of utilization of resources and teaching materials are at moderate levels. Findings of this study support research by F.T. Hoe (1999) who found that levels of resources use among teachers to help teach physical education were low. Research conducted by the Planning and Policy Research, Ministry of Education Malaysia (2005) also found that relief materials such as reference materials for teaching subjects physical education and health education are limited. Circumstances such as this can also cause problems in the use of resources and teaching materials among teachers in physical education in schools. Resources and teaching materials are necessary to improve student understanding of content teaching. Therefore, teachers must ensure that adequate resources and teaching materials are available. With sufficient resources and materials it is easy for teachers to plan teaching of physical education, thus implementing effective teaching and learning.

c. Facilities and Equipment Item Used

Table 3 is a clarification of frequency, percentage, mean, standard deviation and level of facilities and equipment used.

Table 3

Frequency, percentage, mean, standard deviation and level of facilities and equipment used

Item	Mean	SD	L
Field	4.02	.76	H
Aerobic VCD	3.61	.80	M
High-Fi	3.62	.60	M
Rope	3.43	.96	M
Game Court	4.15	.89	H
Chining	3.10	.97	M
Chair	3.30	.98	M
Dumbell	3.75	.89	H
Barbell	3.35	.88	M
Mattress	4.08	.75	H
Total of Mean	3.64	.84	M

L-Level; H-High; M-Moderate; L-Low

Based on the findings observations (checklist structured), Table 3 show that the use of facilities and equipment are at moderate levels. Findings of this study conflict with research findings by F.T. Hoe (1999) who found that the use of facilities and equipment have been implemented effectively with mean values between 3.65 to 4.85. While research conducted by the Planning and Policy Research, Ministry of Education Malaysia (2005) also found that facilities for implementing of teaching and learning of physical education have been reduced. Fields schools have been lost to computer labs. In the implementation process of physical education, especially for the title physical fitness, facilities have to be provided with adequate equipment. This is because the activities in physical fitness involve more use of facilities and equipment.

d. Physical Education Assessment

Table 5 shows the distribution of frequency, percentage, mean, standard deviation and level of implementation of aspects of evaluation.

Table 4

Frequency, Percentage Min, Standard Deviation, and Level Implementation of Evaluation

Item	Mean	SD	L
First monthly test	3.05	.88	M
Second monthly test	2.96	.78	M
First Fitness test	3.54	.89	M
Mid-Year Exam	4.83	.38	H
Second Fitness test	3.42	.79	M
End of Year Exam	4.85	.36	H
Coursework	3.71	.93	H
Overall Mean	3.76	.72	H

L-Level; H-High; M-Moderate; L-Low

Refer to Table 4, findings through observation (structured checklist) show that the level of implementation of physical education evaluation (physical fitness) is high (M=3.76;SD=.72). However, research findings of I. Abang, P. Noraini, (2008) in a secondary school in Kuching City, found that 6.7% of teachers still do not implement the physical fitness test every semester, and 20% of teachers state that they are not satisfied with the implementation of the physical fitness test in their school. According to Roberts, Evans, and Ormond (2006) aspects of assessment should be conducted to obtain objective and subjective data to assess the effectiveness of physical education. E.H. Wee (2002) also pointed out that in the physical education curriculum, assessment is carried out not only to provide feedback on student learning, but also determine the effectiveness of the physical education teachers at the school.

2. Relationship Between teaching and learning strategy, source and teaching material, facility and equipment, evaluation.

In this section the researcher used Canonical correlation analysis to see the relationship between variables (teaching and learning strategy, source and teaching material, facility and equipment, evaluation) and identify the most influential variable.

Table 5

Multivariate Tests of Significance

Test Name	VA	F	Hypoth. DF	Error DF	Sig. of F
L.Wilks	.80	3.75	3.00	46.00	.02*

* P < .05; VA – Value Approx

Based on Table 5, exist relationship between variables between teaching and learning strategies, sources and teaching materials, facilities and equipment, assessment [Wilk's lamda = .80, F (35, 46.00) = 3.75, p < .05]. Those aspects an important in the implementation of teaching physical education (physical fitness) in schools. To ensure that the four aspects can be implemented with good progress during the process of teaching, physical education teachers need to do effective of planning. Effective planning is one of the most significant factor for the effective performance of teachers (R. Bailey, 2003). H.

Shahabuddin, Y. Rohizani and Z.A. Mohd (2003) have also urged teachers to make plans for teaching. Planning before teaching refers to decisions made about managing, implementing and evaluating teaching.

Table 6
Standardized Canonical Coefficients

<i>Dimension of Process</i>	D
a.Implementaion strategy teaching and learning	1.29
b.Use of resources and teaching materials	.49
c.Use of facilities and equipment	-.63
d.Implementation of physical education assessment	.47
Canonical Correlation	.44

D- Dimension

While, from the Table 6, it was found that the aspect most strongly influential in the process of teaching is teaching and learning strategies (1.29). This indicates that the variable of teaching and learning strategies is the most important variable in implementing the teaching of physical education (physical fitness) in secondary schools. This finding is in line with the opinion of O. Juliana (2007) which states that for implementation of effective teaching and learning, teachers need to learn various teaching strategies and try to apply different strategies for different circumstances.

Conclusion

The study was conducted to identify the implementation of teaching physical education (physical fitness) in secondary schools in Gombak District, Selangor. As a result of the discussion results show aspects of physical education assessment have been implemented at a high level. The implementation strategies of teaching and learning, use of teaching materials and resources and use of facilities and equipment, however are only at the moderate level. Based on the analysis of Canonical correlation, four aspects actually relate to each other in the process of teaching physical education (physical fitness). This shows that the implementation aspects of teaching and learning strategies, utilization of resources and teaching materials, use of facilities and equipment and implementation of physical education assessment are important factors in the process of teaching physical education (physical fitness). From four aspects, the available aspects of the implementation strategies of teaching and learning are key aspects that need to be emphasized by the physical education teachers in the process of implementating the physical education (physical fitness).

References

ABANG, I., ABANG, J., NORAINI, P., HABIBIE, N., 2008, *Physical Fitness Test: To what extent the implementation of secondary school*. Research Journal, Teacher Training Institute Batu Lintang, Kuching Sarawak, Jilid 8, ISSN 1675-6374, 1-13.

- ABDUL, R.Y., 1997**, *Implementation of physical education in secondary schools in Kelantan*. Master Thesis. University of Malaysia, Sarawak.
- BAILEY, R., 2003**, *Teaching physical education. A handbook for primary & secondary school teachers*, London: Kogan Page.
- CURRICULUM DEVELOPMENT CENTRE, 2001**, *Secondary schools syllabus*, Physical Education. Cheras: Gempita Maju.
- GAY, L.R., MILLS, G.E., & AIRASIAN,P., 2009**, *Educational research competencies for analysis and applications*. New Jersey: Pearson.
- GAY, L.R., MILLS, G.E., & AIRASIAN,P., 2006**, *Educational research competencies for analysis and applications*. New Jersey: Pearson.
- HOE, F.T., 1999**, *Comparison of the effectiveness of the program in two secondary school physical fitness*. Master Thesis, Universiti of Putra, Malaysia.
- JULIANA, O., 2007**, *Practice english language strategies in primary schools*. Research Journal, Jilid 27(1), Faculty of Education, Universiti of Malaya. 41-54.
- EDUCATIONAL PLANNING AND POLICY RESEARCH, 2008**, *The numbers of physical education teachers in Selangor*. Ministry of education, Malaysia.
- EDUCATIONAL PLANNING AND POLICY RESEARCH, 2005**, *Report evaluating the implementation of the study subjects physical education and health education in primary schools*. Kuala Lumpur, Ministry of education, Malaysia.
- SHAHABUDDIN, H., ROHIZANI, Y., & MOHD, Z.A., 2003**, *Pedagogy, strategic and Effective teaching techniques*. Shah Alam: PTS.
- STUFFLEBEAM, D.L., 2000a**, *The CIPP model for evaluation*. In *Stufflebeam, D.L., Madaus, G.F. Kellaghan, T. (Eds). Evaluation models. Viewpoint on educational and human service evaluation*, pp. 279-317. 2nd ed. Boston: Kluwer Academic.
- THOMAS, J.R., NELSON, J.K., & SILVERMAN, 2005**, *Research methods in physical activity*. Fifth edition, USA: Human Kinetics.
- WEE, E.H., 2002**, *Physical education and Health Education*. Teaching Education Series. Shah Alam: Karisma Publication.