# IRMM

INTERNATIONAL REVIEW OF MANAGEMENT AND MARKETING

EJ EconJournals

# International Review of Management and Marketing

ISSN: 2146-4405

available at http://www.econjournals.com

International Review of Management and Marketing, 2016, 6(S8) 48-53.

Special Issue for "International Conference on Applied Science and Technology (ICAST) 2016, Malaysia"

# **Physical Education Teachers Challenges in Implementing School Based Assessment**

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#### ABSTRACT

School based assessment (SBA) was previously partially implemented in Malaysia. Nevertheless beginning 2011, SBA was made as an educational policy that needs to be implemented in primary as well as lower secondary schools. It presents the understanding, readiness of experienced teachers with regards to the change in the schools assessment approach and how they had implemented SBA in one subject, namely health and physical education (PE) for lower secondary school. This paper discusses the case of SBA in PE because this subject covers the theoretical as well as the physical implementation aspects. In this qualitative study, 15 secondary day schools in one district in Kedah were randomly selected. A total of 20 PE teachers were then purposively selected from these schools for the interviews. The semi-structured interview sessions was designed to collect information on teacher subject knowledge, availability of assessment facilities and equipment, and PE classroom management to implement SBA. The interview questions were adapted and modified from the Examination Board, Ministry of Education Malaysia (2011). The paper highlights the challenges faced by them and how they overcome those challenges. The finding shows that PEs teachers faced three major challenges namely core knowledge of the subject, assessment facilities and equipment, and classroom management. The impact of SBA on the teachers' orchestration and design of classroom instructions is also discussed.

Keywords: Physical Education, School Based Assessment, Subject Knowledge, Assessment Facilities, Classroom Management JEL Classifications: 120, 125

#### **1. INTRODUCTION**

School based assessment (SBA) was implemented in the Malaysian education system in 2011, in both primary and secondary schools. This study only discusses the secondary school level specifically the physical education (PE) and health education (HE) subject. Malaysia Ministry of Education (MOE) takes seriously the issue brought up by teachers regarding the implementation of SBA. SBA is a policy which involves holistic assessment of students' achievement through four components of assessment namely school assessment (PS), physical activities, sports and co-curricular assessment (PAJSK), psychometric assessment (PPsi) and centralized assessment (CA). SBA was implemented as part of the education transformation program and was first introduced in the primary schools in the year 2011 followed by the secondary schools in 2012. Generally, health and physical

education (HPE) teachers know that they need to implement SBA. However, their understanding of SBA is limited and they had differently interpreted the result of SBA.

Students learning can be enhanced when teachers who practice assessment also support students to acquire the skills (Dixon and Haigh, 2009). Professional development program should be appropriately designed to change teachers' conceptualization and assessment practices (Vingsle, 2014). Teachers must create situations where the students can practice and engage effectively and meaningfully in assessment (Cowie, 2005).

The majority of school children in Malaysia no longer walks and cycle to school despite the fact that children who walk or cycle to school have higher levels of physical fitness and physical activity compared to those who do not (Davidson et al., 2008).



On a similar note, the percentage of children in the United States who walk to school has declined sharply over the past decades (Ham et al., 2008; McDonald, 2007). In Malaysia, the overall level of implementation of PE is only moderate, which include the level of implementation of facilities and equipment (Syed and Jani, 2010). To obtain objective and subjective data to assess the effectiveness of PE, different aspects of assessment should be implemented (Roberts et al., 2006). The purposes of carrying out assessment In the PE curriculum are to provide feedback on student learning and to determine the effectiveness of the PE teachers (Wee, 2002).

#### 1.1. HPE

HPE strategies and practices are critical in improving the health and wellbeing of students in schools. Nationally and internationally there is increasing recognition of the many and reciprocal benefits posed by health and education for young people. In sum, healthy young people are better learners, and educated young people live healthier lives. Schools in particular are well placed to deliver the knowledge, skills and attitudes that underpin healthy living as they provide early and sustained access to young people who are establishing their lifelong health pathways that actually begin during their schooling days.

HPE is an important subject in the Malaysian system of education (Safani and Hamdan, 2005). HPE has been made a core subject since 1989 because it is believed to contribute towards the development of the students as a whole through their learning experience in the cognitive, affective and psychomotor domains (Abdullah Sani, 2003; Darst and Pangrazi, 2006). HPE is made a compulsory subject because it aims to produce healthy, active and productive future generations. Knowledge, skills and experience obtained through HPE indirectly enable students to practice a healthy culture and lifestyle. HPE consists of two main components that are PE and HE. The elements of PE are related to athletics, games, movement, artistic and gymrama education whereas for HE, the elements are conservation, control and health development. This paper only focuses on assessment on HE in the lower secondary schools. The aim of HPE is to assist students to become fit through physical activities and practices (MOE, 2016). The national physical fitness standard Test (SEGAK) was introduced to make students to be constantly sensitive, knowledgeable, and practice physical activities to enhance and sustain their level of physical fitness based on optimal health.

# 2. SBA IN PE

There was no systematic evaluation of PE prior to the implementation of SBA. Thus, it is considered a significant loss since PE is a subject with contents that cut across the curriculum. Nevertheless, schools had individually carried out the school-operated evaluation (PKS) on PE, which measured the students' level of practical skills, theoretical knowledge, social and moral values as well as affective competence (MOE, 2001). SBA was introduced in Malaysia as an assessment transformation initiative whereby students' achievements in PE, were not only based on examinations alone. Implementation of PE assessment in schools can be enhanced if the evaluation process is thorough and effective (Payne, 2003). There is a need to carry out a holistic assessment process on PE. However, currently there is no one standard that can be used to continuously assess students' achievements in PE (Noraini, 2005).

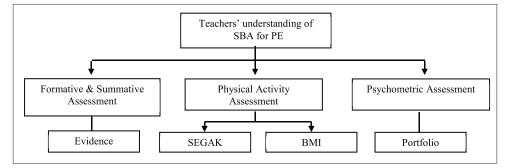
Several assessment designs which can be administered for this subject and among them are observations, games, assignments, essay writings, journal writings, logbook entries and project work (Marzano, 2006). There are three types of assessments for PE namely summative assessment, physical activity assessment and psychometric assessment. Knowledge understanding assessment is based on PE standard teaching document (DSP) supplied by MOE. The activities involved in this aspect are formative and summative evidence, national physical fitness standard (SEGAK) activities, body mass index (BMI) report and portfolio (Figure 1).

#### 2.1. Formative and Summative Assessment

PAJSK, which comprises of psychometric assessment and physical, sports and co-curriculum activities assessment, is administered, executed, recorded and reported through students' participation, involvement and achievements in sports activities, co-curriculum and extra curricula activities. Meanwhile, the SEGAK and BMI are executed to evaluate and report students' physical activities. PE teachers have to record students' SEGAK and BMI because assessment is done during the learning and teaching of PE and HE subject.

Class teachers have to record their students' sports activities, co-curriculum and extra-curricular activities. Psychometric test is also administered to identify the students' natural talents and talents that they have gained, thinking skills, problem solving skills, interest, career, attitude and personality. This type of assessment is not based on the curriculum or the process of teaching and learning.

#### Figure 1: Guidelines by the Malaysian examination council for assessment of physical education through school based assessment



The information received through psychometric is used to identify the interests, strengths and weaknesses, talents and readiness of the students. This information can help teachers to prepare a suitable learning and teaching sessions and create a conducive and effective learning context. Information from Psychometric test also can be used to guide the students in their quests of syphoning themselves into either the arts or the science streams when they are in Form Four so as to help them determine their future career.

For students in secondary schools, personality trait inventory, career and Interest inventory and specific aptitude test are administered by the school counselors. They will prepare a report by interpreting each student's score. The report is kept in the counseling room. Counselors will discuss the result of the personality trait inventory, career and interest inventory and specific aptitude test scores with the class teachers to help students in terms of their career choice that the counselors and teachers feel suitable for the students.

#### 2.2. National Physical Fitness Standard Test

Being fit covers the physiology and psychology aspects believed to protect students from the dangers of hypokinetic illness (lacking in movements) such as heart disease, obesity and other ailments that involve the muscles and bones. Fitness in terms of performance refers to an individual's ability to compete in sports activities having sufficient energy, endurance, skills and function well as a human being. Malaysians are practising healthy life styles daily. An optimum fitness level helps students to do their daily activities efficiently and effectively without feeling tired or exhausted. The country needs people who are healthy and active. Therefore students should give serious thoughts about their level of fitness and agility.

To obtain a complete information about the development and potential increase of one's fitness, one needs to be assessed (Jamil, 2008). Therefore, PE teachers' role is to develop and increase the level of their students' performance and fitmess in order to achieve the objective of HE. The SEGAK assessment program for students in Malaysian schools was planned in tandem with the basic fitness found in the PE and HE syllabus for secondary schools. SEGAK was introduced by the Malaysian Ministry of Education in 2005. This type of assessment was planned to be implemented fully on Form Five students starting 2008. All SEGAK reports will become the fitness component for SBA. In the Malaysian context, the SEGAK program is planned to assess physical fitness through four activities that are (i) up and down the bench, (ii) pumping, (iii) star jump and (iv) sit ups.

#### 2.3. BMI Assessment

BMI indirectly measure body composition by considering one's body mass against one's height and it is closely related to the amount of fat in the body (Reilly, 2006). To determine BMI, the body weight (in kilogram) is divided by the height (in meters) that is squared. BMI can be used to measure obesity (Ikeda et al., 2006). BMI can also be used to assess students' physical activities (Harris et al., 2009). Physical activities help an individual to maintain healthy body weight (Hill and Wyatt, 2005) and should be systematically practiced during the childhood stage (Birch, 2008).

#### 2.4. Portfolio

Portfolio is an assessment instrument that can portray a more systematic learning development compared to other instruments (Grace, 1992). However, portfolio can be made into a learning file that is used to assess students' learning process. This means that portfolio presents more benefits in administering SBA including the PE subject (Jones, 2008).

Portfolio assessment involves a systematic record management which can be used to monitor students' development (Stiggin et al., 2004). Students' achievement is recorded in terms of exam marks, journals, mind maps and products of project work so that they can be easily accessed and evaluated periodically (Stefanakis and Meier, 2011). In the Malaysian context, portfolio is used by students to keep their notes and additional information that represent as evidences for references so as to determine the highest band that is achieved by the students.

The focus of next section is the PE teachers' understanding, perceptions of SBE in the context of PE subject and the challenges they faced during the process of implementing SBA of PE at their schools. Within the presentation and discussion, the teachers, who participated in a study that looked into implementation of SBA in schools, are identified as PET1 (Physical Education Teacher 1) till PET20 (Physical Education Teacher 20).

## **3. METHODOLOGY**

Prior to doing this qualitative study, permission from the State Education Department was obtained. 15 secondary day schools from a total of 22 schools in one district in Kedah were randomly selected. A total of 20 PETs from a total of 62 teachers were then purposively selected from these schools for the interviews. The PE teachers were purposively selected based on a minimum of five years PE teaching experience, teaching Grade 8 or Grade 10. The semi-structured face-to-face interview sessions was designed to collect information on teacher subject knowledge, availability of assessment facilities and equipment, and PE classroom management to implement SBA. The interview questions were adapted and modified from the Examination Board, Ministry of Education Malaysia (2011). The interviews with the research participants had lasted for duration of 45 minutes to 1 hour. The interview sessions were designed to collect information on the three broad themes, namely teacher core knowledge of the subject, assessment facilities and equipments, and PE classroom management to implement SBA. The adaptation and modification of the interview questions were based on the frequently asked questions from the Examination Board, Ministry of Education Malaysia (2011). The qualitative data collected were fully transcribed and thematically analysed.

#### 4. FINDING

#### 4.1. Knowledge of the Subject

Seemingly the cascading approach exercised by the authorities to disseminate knowledge about PE assessment to PE teachers had not been successful due to the liquidity of knowledge. This issue

had resulted in less effective implementation of PE assessment among the teachers. Teachers had also raised their dissatisfaction with courses organized by the authorities to assist them in doing continuous PE assessment because the duration of these courses were generally "short and not continuously provided" according to Physical Education Teacher 3 (PET3, 2015). PET9 and PET5 said:

"I did attend a course at the end of 2011, but the course for a day was not adequate" (PET9, 2015).

"Even though I attended the course, it's still all kind of blurry. courses like this should be continued. What's going on here is of course only being given at the outset." (PET5, 2015).

The above comments by the teachers denote that SBA training courses, in particular PE assessment courses, need to be continuously conducted if the authorities is serious in ensuring teachers understand SBA and to effectively perform PE assessment. It was only when the teachers were in the process of doing the PE assessment that they became aware of the possible problems in PE assessment. With the little knowledge that they had, solving the problems was very challenging to them. The issue regarding liquidity of PE assessment knowledge happened among the head of departments who attended the courses, as mentioned by PET4:

"Teachers who are often called to attend the courses are the heads of the departments. After attending the courses, they failed to convey clear information to the other teachers. A similar situation will occur when the heads of the departments attend meetings of internal courses. This situation resulted in a less knowledgeable teachers who will not be using the portfolio according to their understanding... Actually I'm just an assistant teacher... so if there are courses and briefings the person who is often present would be committee head, but sometimes the head committee did not even pass the information to me...if there are printed notes, he would just tell me without any explanation... therefore, I really would not know how to use them accordingly" (PET4, 2015).

PET5 had also talked about issue pertaining to liquidity of SBA information during the interview:

"I rarely attend the course or meetings...but if anyone went there...it does not fully convey information appropriately...so I do the assessment according to what I understand... if there's anything I would do so later on" (PET5, 2015).

Seemingly another constraint faced by teachers was parents' knowledge about SBA. Generally parents were uncertain about the "bands" as they were still more interested to relate their children achievements to the number of "A" obtained by them. PET14 highlighted this issue during the interview:

"Before, it was easy... just give report cards to parents... but now with this new system, it is hard to explain to the parents... they are still questioning a number of 'As' earned by their children. plus parents would have to come to school almost once ... every month. Some parents never even showed up at school" (PET14, 2015).

Parents tend to ignore their role in SBA due to failure in understanding current changes in learning and assessment

approaches. Despite explanations had been given to parents by teachers that students can execute the assigned tasks at home, parents were unable to provide appropriate and sufficient infrastructure and resources, or gave proper guidance, to support the completion of these tasks because parents were poorly informed about SBA. Parents "who have little knowledge about the importance of these resources will have trouble in guiding their children to complete their assignments given by the teachers" (PET14, 2015). Consequently, teachers faced difficulties to do follow-up activities with the students since they were unable to complete the assigned tasks at home.

#### 4.2. Facilities for PE Assessment

Problems faced by PE teachers when doing activities for PE assessment include those that relate to availability of physical facilities and tools and as a consequent, some assessment activities were conducted within poor conditions. To overcome these constraints, PE teachers used alternative equipment. Although, they knew that the results obtained would be less accurate. Another constraint these teachers faced was availability of space or area to implement the PE assessment activities.

The availability of large and sufficient area, such as game courts and football fields, to implement PE assessment would contribute to the effectiveness of the assessment. Urban schools faced problem in securing a sufficiently large area for sport activities because of the high estate value. The structure of the schools or its built up area could be other hindrance. Hence, these schools provided relatively small or narrow spaces for PE activities.

#### 4.3. Classroom Management

Another constraint that PE teachers faced in the implementation of assessment activities PE for SBA includes class size. In carrying out the assessment, PE teachers have to deal with the problem to complete the syllabus. This is because they have to allocate more time on subjects that have made the assessment. With a relatively large class size, plus the need to ensure that all students can be properly assessed, the PE teachers need to ascertain that appropriate adjustments to the number of students within a class, as well as the level of their achievements, to ensure that "no students are left behind and can master the skills according to their abilities" (PET12, 2015). When carrying out the assessment, PE teachers need to be focused throughout the process of assessment to avoid the dropout or omissions of students' scores based on evidence in the students' portfolios.

The impact of these constraints had caused PE teachers to feel that SBA assessment "bothers them and take up too much of their time" (PET9, 2015). Moreover, PE teachers need to also complete other tasks in schools "such as stock management, landscaping, administration, etc." (PET3, 2015). The PE teachers also view that "every student should be given the opportunity to do these PE assessment activities" (PET9, 2015).

#### 4.4. Psychometric Assessments in PE

Psychometric assessment is an important third component in PE in SBA, as measured by portfolio assignments. Portfolios are the evidence files, comprising of notes and assessments related to the

cognitive and affective aspects of students. According to PET1: "Sometimes the students are trained to learn on their own. I will instruct the students to gather notes and exercises are made to be kept in the portfolio." (PET1, 2015).

The portfolio also serves as a record which can be referred to when monitoring the cognitive and affective development of students. This is illustrated in the following interview excerpt with PET2:

"If all the duties are collected in the portfolio, it allows continuous monitoring. The material will also remain. It is an ongoing work and achievements can be seen by the students." (PET2, 2015).

However, PE teachers face difficulties in assessing the portfolio, particularly in determining the attitude of the students meeting the criteria for Band 6 (describing the attitude of students who knows, understands and can show a civilized exemplary). However, before the implementation of SBA, 20% marks is allocated to the portfolio. This suggests that teachers' thoughts are still tied to the practice of awarding marks in the assessment system that is compared with the SBA assessment. PET2 and PET3's perspectives are as follows:

"I always have problems to assess students' attitudes for the qualifications of bands 6. With this folio work, it reflects the attitude of the students who knows, understands and can do with civilized exemplary." (PET2, 2015).

"Prior to the PBS, the committee has allocated 20% of the portfolio assignment marks at the end of the examination. Now not anymore... only up to the discretion of the teacher alone to assess the psychometric attitude scores for achievement band six " (PET3, 2015),

PET3 further stated that the psychometric assessment based on Band 6 would be an advantage to students because the assessment is based on "the discretion of the teacher" (PET3, 2015). As a conclusion, psychometric assessment is not an academic assessment but instead an assessment type that emphasizes attitude and the personality of students. The attitude and personality of students are measured by the notes, evidence of training activities and ongoing tasks included in the portfolio of each student.

# **5. DISCUSSION**

The findings in the study show that there are issues in implementing PE assessment. These issues include teacher knowledge, facilities and equipment available for PE assessment as well as teacher knowledge in classroom management within SBA context. Knowledge about assessment is important to ensure teachers assessment practices are in line with the Ministry of Education intentions as stipulated in the PE assessment. PE teachers had taken alternative measures to provide activities for their students to acquire the necessary skill to archive their best in PE assessment. In this sense, the teachers initiatives is in line with what had highlighted (Dixon and Haigh, 2009), whereby these teachers had enhanced their students' PE learning by providing appropriate support for them to ensure they acquire the PE skills and to support their fair PE assessment. These teachers' actions indicate that they had made attempt to create situations whereby their students had

opportunities to practice their PE skills and also to be engaged in PE assessment effectively and meaningfully (Cowie, 2005). The teachers had also voiced their concern regarding the way PE assessment courses were conducted by the relevant authorities. This issue should be noted by the authorities would need to design appropriate model for professional development in PE assessment to make the teachers effectively understand and conceptualize PE assessment practices (Vingsle, 2014).

The school administrators should rethink of the consequences of replacing PE lessons with academic subjects' lessons for Grade 9 and Grade 11 classes in some schools. School administrators may mistakenly believe that PE curricular time should be sacrificed and reallocated to other academic subjects. However, there is currently no evidence indicating that this strategy is, in fact, effective in increasing test scores (Pate et al., 2006; Pate and O'Neill, 2008).

## 6. THE IMPLICATION OF THE STUDY

The intentions of MOE for introducing and directing the implementation of SBA within Malaysia education system need support from all teachers including the PE teachers. This study highlights the constraints and challenges faced by PE teachers in implanting PE assessment in accordance with the newly introduced SBA policy in Malaysia's Education system. Core knowledge of PE as highlighted within the curriculum, the facilities for PE activities available in schools, and management of PE classroom are among the main issues being raised by PE teachers in Malaysia. As evidence from the interviews, PE teachers supported the implementation of PE assessment. However, much more need to be considered by the relevance authorities to ensure a smooth and effective implementation of PE assessment in schools. The benefits of SBA and its importance has also been argued to draw the readers' attention to the need for support of SBA in Malaysia currently and as a way forward to benchmark Malaysia students' non-academic competence with the criteria in the Ministry of Education PE assessment guidelines.

# 7. CONCLUSION

In general, PE teachers have an understanding of appropriate PE assessment in accordance with SBA. However, there are still differences in their knowledge, understandings, and methods in implementing this assessment. Nevertheless, PE teachers in the study had indicated their willingness to enhance their knowledge about PE assessment within SBA, and were receptive and positive about the implementation of PE assessment. The findings within this study indicate the kind of support that the relevance authorities, including the curriculum developers, could learn from the PE curriculum implementers. The findings also potentially contribute towards the change in the methods of assessing students' PE competence. Subsequently, it is worthy to note the fact that for SBA to succeed, all involved need to realize that change is an ongoing process. As for the way forward, students in secondary schools should be made aware of the importance to regularly participate in physical activities, be it in school or outside of school. They should also be made to achieve and maintain a health-enhancing level of physical fitness.

The students' seriousness in PE, especially when it is now being formally assessed, could result in changes in their attitude towards PE. They could potentially exhibit respects to themselves, as well as others, in physically activity settings. In a sense, ultimately, it is hope that the secondary schools students in Malaysia will value physical activity for health, enjoyment, self-expression, challenge and interaction with their peers and other people.

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