

Teachers' Knowledge and Readiness towards Implementation of School Based Assessment in Secondary Schools

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Abstract

School-Based Assessment (SBA) was implemented in Malaysian secondary schools in 2012. Since its implementation, teachers have faced several challenges to meet the aims and objectives of the School-Based Assessment. Based on these challenges this study aims to find the level of teachers' knowledge and readiness towards the implementation of school-based assessment (SBA). The study was conducted in 15 daily secondary schools in the state of Kedah, which is situated in the northern part of Malaysia, bordering Thailand. 155 teachers were randomly selected from a total of 260 teachers. This study used 2 questionnaires to assess teachers' knowledge and readiness to implement SBA. The questionnaire was adapted from Alabah (2012) which was designed to assess the teachers' knowledge (30 items) and readiness (35 items) on Nigerian teachers' perception of SBA. This questionnaire used a 4-point Likert-type scale with strongly disagree to strongly agree. The findings provide evidence that the knowledge of the teachers in terms of 5 dimensions, that is, conducting SBA, bands in SBA, knowledge of evaluating SBA, SBA procedural knowledge and knowledge of implementation of SBA. The overall mean (3.27) for the level of teachers' knowledge towards SBA shows that all the teachers agree that they have the knowledge about SBA. In terms of readiness, the mean (3.09) shows that all the teachers agree that they are ready to implement SBA. The comparison of the two means suggest that teachers have relatively more knowledge but are less ready to implement the SBA. The implication here is that teachers feel that their level of knowledge is not complete and more initiatives need to be taken by the educational authorities so that teachers are more confident of their level of readiness.

Keywords: knowledge, readiness, daily secondary schools, school-based Assessment, teachers

1. Introduction

Malaysia is a fast developing country which is undergoing dynamic changes in its education system. Thus, educational transformation is taking place so that it is able to compete in the global education system. As a result, a comprehensive curriculum and assessment system needs to be put in place so that students are able to make further progress and be competitive in a borderless world. The Chief Director of Malaysian Education indicates that the ministry that a holistic form of assessment is implemented in Malaysia through School-Based Assessment to bring about transformation in the Malaysian Education system. This is to enhance the Malaysia education system so that it is world class. In response to the challenge of bringing changes to the education system, several initiatives were planned and put forward at the ministry level to improve the current assessment system. Consequently, Malaysia's Minister of Education, Yassin (2011) launched and implemented the transformation at the macro level of the Malaysian Education System. This move has posed major challenges to the Ministry of Education as it begins at the school level for students.

According to the Official Circular, Reference Number KP/LP/005/08/06/01/(27), the School-based Assessment will be implemented starting from 2011 at the primary school level in which the new system replaces the previous one. The previous system is examination oriented and students were inclined to take part in co-curricular activities. School-Based Assessment represents a new direction in existing educational policies in which assessment is conducted by the school. Subject teachers conduct continuous assessments in the teaching learning process throughout the year. SBA is designed, administered, scored and reported systematically according to procedures set by the Malaysian Examination Syndicate (2012). A mechanism has been established to coordinate and monitor the implementation of SBA to improve the reliability and validity of the assessments.

The SBA has been introduced to transform the national education system so that the aims of the Primary School Integrated Curriculum (KBSR), Secondary School Integrated Curriculum (KBSM), National Education Philosophy (FPK), Educational Development Master Plan, and Malaysian Development Education Plan, 2013-2015 (PPPM). In addition, SBA was implemented to enhance the development of human capital, monitor the development of human capital among students and create a more conducive environment for the assessment of teaching and learning. This transformation of the current system intends to move the focus away from centralized examinations, and prioritize continuous assessment, improve student learning, conduct more holistic assessments, and improve examinations at the school and central level. SBA also aspires to help in human development by emphasizing all aspects of knowledge acquisition. Additionally, SBA hopes to establish and build human capital, develop a progressive attitude, and appreciate values, ethics and moralistic elements (Malaysian Examination Syndicate, 2011).

According to Khodori (2000), there are several important components in the implementation of the National Education Assessment System (SPPK). Important components of the assessment system include school assessment, centralized examinations, psychometric tests, and assessment of physical and curricular activities. The success of SPPK in 2011 depended on the implementation of SBA. This is because SPPK and the National Curriculum are two strategies that are interdependent to achieve the standards established by the Examination Syndicate. These reforms were carried out to ensure that the students achieve global standards, particularly in the areas of skills, knowledge and competencies. In a recent report in local news, it was stated that SBA focused more on holistic assessment which is designed to collect information effectively on students' overall development, achievement, and skills (Kosmo, 2014, p. 8).

1.1 Problem Statement

Based on a statement by the Examination Board (Utusan Malaysia, 2012), it can be stated that teachers do not have a complete understanding of the implementation of SBA nor the processes of teaching and learning. This problem could arise as teachers find it difficult to construct instruments related to assessment in its various forms because they are more familiar with examinations that test student achievement. As an example, Tan's (2010) study showed that there were many issues related to the implementation of SBA in Malaysia, especially teacher-related issues. One major challenge was the increase in workload for the teachers. This resulted in teachers not being able to conduct continuous assessment. Furthermore, teachers were not able to conduct SBA more creatively as they were facing time constraints and inadequate resources. The large number of modules partly contributed to this situation. In addition, the teaching periods had been reduced by one class, that is from four to three. Teachers also faced a disadvantage because they lacked knowledge and an understanding about the concept of this assessment. Other related issues were raised such as teachers' competency to provide guidance and teachers' ability to conduct assessments in the classroom in a creative and professional manner.

The Curriculum Development Section (2011) states that teachers need to enhance their knowledge regarding the changes in the system to conduct SBA. Lack of knowledge and understanding limit the opportunities for students to acquire skills and affects their ability to apply these skills continuously. Teachers must increase their knowledge in all aspects through the new assessment system to develop students holistically so that they become useful global citizens. Stiggins (2005) had noted that teachers lacked preparation in conducting the new form of assessment for learning because they lacked opportunities to learn the appropriate techniques and proper assessment practices. There were also huge gaps between teachers on their readiness to implement assessment for learning such as determining clear standards of achievement and deciding on standards that adhere to the curriculum for the students. Moreover, teachers had to provide evidence of learning, assess students' involvement and keep systematic records throughout the schooling year. The objective of this study was to identify the level of teachers' knowledge and readiness of national secondary school teachers to conduct SBA.

2. Literature Review

2.1 Teachers' Knowledge of SBA

Teachers' knowledge in the implementation of SBA has a direct impact on students' learning situations and outcomes in schools. McMillan's (2000) study emphasized that teachers need to have the knowledge and understanding to conduct assessments on student learning. He found that teachers who had sufficient knowledge on assessments were able to integrate it well into their teaching. They were also able to use effective approaches, techniques, and strategies to improve their students' competencies. Cheah (2010) found that the biggest challenge to conduct the SBA was knowledge, skills and teacher attitudes. He added that formal training in the form of workshops or seminars enables teachers to acquire new knowledge to fulfil the objectives of the new Malaysian curriculum assessment system. Formal training would also help to reduce the gap between theory and

practice. He added that the SBA teachers require support to enhance their knowledge, skills and confidence to implement the curriculum on the long run to develop this school based curriculum. Brophy's (1991) study showed that teachers' knowledge on the teaching and learning process is as follows:

Where (teacher) knowledge is more explicit, better connected, and more integrated, they will tend to teach the subject more dynamically, represent it in more varied ways, and encourage and respond fully to student comments and questions. Where their knowledge is limited, they will tend to depend on the text for content, de-emphasize interactive discourse in favor of seatwork assignments, and in general, portray the subject as a collection of static, factual knowledge (p. 352).

Bobis and Gould (2000) found that teachers' pedagogical knowledge influences children's cognitive development. The biggest influence on child development and learning came from teachers' knowledge on child learning. Similarly, John (2002) found that teachers needed to be knowledgeable and have a clear understanding about the components of the SBA to improve student understanding. On a similar note, Antonio (2008) found that under SBA, teachers need to have the knowledge to assess students because teachers played a pivotal role in students' assessment. Naimah (2011) found that teachers need to be knowledgeable in the administration and implementation at school level so that they could use the instruments, rubrics, guides, schedules and procedures which are provided by the Examination Board.

Norazman, Nor'ain, and Nur-Fazliana's (2012) study showed that teachers must be smart in delivering their lessons, have content knowledge of their subject matter and be highly creative so that the learning environment is conducive. Teachers have to put in effort so that students do not continuously perform unsatisfactorily. The study recommends that teachers should take steps to overcome their weaknesses in different aspects such as teaching, assessment, subject matter or guidance given to students.

Other studies have also emphasized on teacher knowledge and ways of enhancing their knowledge to successfully implement SBA. Ismadiah (2012) in her study found that teachers' knowledge and understanding of SBA implementation procedures is highly dependent on teacher attendance in seminars, courses and briefings. He also found that knowledge and understanding have a close relationship with SBA. Similarly, teachers who followed training sessions had better knowledge on assessment and administration of SBA. These teachers were ready to implement the SBA to fulfil its higher objectives.

A study by Salmiah et al. (2011) found that quality teachers must have the knowledge to guide students and their peers so that they can accept the transformation in the education system positively. These researchers also found that there were changes that affected certain groups while other changes affected the whole educational organization. A study by Faridah and Mohini (2012) showed that teachers must be knowledgeable in the field of pedagogy, the subject matter and the learning needs of the students. They also found that teachers must not only be knowledgeable about the content of the lesson to be taught but also the content of previous lessons taught. This knowledge is very important to detect the level of skills and abilities that need to be mastered by the student before a new lesson is taught. Additionally, teachers will monitor and evaluate from time to time the extent to which their students have mastered the knowledge and skills in a particular subject. Accordingly, the assessment is important because it gives a positive impact on the effective generation of new ideas, which in turn helps to enhance students' mastery continually.

The official Circular [No. 2, Year 2011, Examination Syndicate, Reference No. KP. LP. 003.07. 14 (2)] informs about the improvements made to the national assessment system in all government and government-aided schools. This means that by 2014, students be evaluated based on the National Assessment which includes School Assessment, Centralized Assessment, Physical Activity Assessment, Sports and Co-curriculum Assessment and Psychometrics Assessment. Based on a newspaper report, (Utusan Malaysia, 2012, p. 22) the Examination Board states that teachers do not understand the relevant implementation process of this new assessment system in line with the teaching and learning process in schools. This is because the teachers find it challenging to construct instruments related to various forms of assessment. Teachers are more accustomed to evaluating student achievement based on examinations.

2.2 Teachers' Readiness for SBA

Some studies have shown that there are teachers who are not ready to implement the SBA. Norani and Saifulazri (2010) found that there were teachers who are not willing to conduct SBA. They also found that some teachers were not willing to conduct SBA due to lack of training, which inadvertently affected their confidence to conduct SBA. In his study, Stiggins (2005) found that teachers lack willingness to undertake new assessment system for learning in the classroom because they do not have opportunities to learn the techniques of good assessments. He also found that the willingness of teachers in implementing assessment for learning covers a

wide area, for example, to set specific performance targets and determine standards of achievement for students according to the curriculum. In addition, teachers have to continuously be prepared with documentary evidence on learning that has taken place, assess the level of students' involvement and keep records systematically.

A study by Alaba (2012) found that teachers in Nigeria are not willing to conduct the SBA in teaching and learning situations. He also found that more than 50% of the teachers in Nigeria have negative perception on the impact of SBA in the practice of teaching and learning for students. He suggested that effective monitoring should be carried out in the implementation and in-service training must be provided for all teachers. He found that less than half of the teachers in Nigeria (40.7% of the sample) were really ready to conduct the SBA at the school level. Issues that concerned the teachers included understanding of SBA requirements, procedures, criteria involved in assessment, the system itself and the opportunity to develop professionalism in the implementation of SBA. However, according to him, the attitude of teachers towards SBA ranged from positive to negative. Most teachers acknowledged that SBA had good motivations and would bring many benefits to the students. Nevertheless, they had their reservations about its practicality and converting the ideas into reality in classroom pedagogical practices.

In their study conducted in Brunei, Kamaruddin and Leong (2011) found that teachers require more time and preparation to implement SBA because it is more challenging. Through the interviews conducted, the teachers involved stated that relevant courses should be conducted for teachers which are commensurate with their needs under SBA. Among the needs include teaching and learning of mathematics, computer use, internet access and teaching aids in schools. Tan (2010) in his study found that teachers are less willing to implement SBA. The implications of teachers not being ready to implement the new system are that marks awarded by teachers are neither fair nor valid. This situation affects the validity and reliability of the assessments.

3. Methodology

The total population was 280 teachers who were teaching in 18 national secondary schools in one of the district in the state of Kedah, Malaysia. The sample size was 210 teachers, who responded to the questionnaire. Questionnaires were distributed in the 15 schools through the headmasters. All the participants responded to this quantitative study. The researcher studied about knowledge issues and secondary school teachers' readiness to implement the SBA. The questionnaire was constructed with a 4-point scale agreement, that is, 1 (strongly disagree), 2 (disagree), 3 (agree) and 4 (strongly agree). Participants were required to read and mark their responses in the questionnaire that was given by researchers.

4. Findings

4.1 Level of Teachers' Knowledge in School-Based Assessment

Table 1 shows the findings for SBA teachers' level of knowledge ($M = 3.27$, $SD = 0.37$). The highest score ($M = 3.27$, $SD = 0.37$) was recorded for knowledge to conduct SBA and the lowest score ($M = 3.12$, $SD = 0.35$) recorded was for the implementation of SBA. Knowledge on the band system in SBA recorded the second highest score ($M = 3.20$, $SD = 0.38$) when compared to knowledge of assessment in SBA ($M = 3.18$, $SD = 0.32$) and procedural knowledge in SBA ($M = 3.14$, $SD = 0.40$).

Table 1. Level of teachers' knowledge in SBA

| Dimension | N | Mean | SD |
|-------------------------------------|-----|------|------|
| Knowledge of conducting SBA | 210 | 3.27 | 0.37 |
| Knowledge of Bands in SBA | 210 | 3.20 | 0.38 |
| Knowledge of assessment in SBA | 210 | 3.18 | 0.32 |
| Knowledge of procedures in SBA | 210 | 3.14 | 0.40 |
| Knowledge of implementation of SBA | 210 | 3.12 | 0.35 |
| Level of teachers' knowledge in SBA | 210 | 3.27 | 0.37 |

4.1.1 Level of Teachers' Knowledge in Conducting SBA

The level of teachers' knowledge about conducting SBA recorded ($M = 3.27$, $SD = 0.37$). Table 2 shows that the more knowledgeable teachers use a variety of teaching methods to attract students ($M = 3.30$, $SD = 0.46$) and use the SBA Document Standard of Curriculum and Assessment ($M = 3.30$, $SD = 0.47$) compared with teachers who

are knowledgeable in conducting the teaching and learning process according to SBA ($M = 3.26$, $SD = 0.45$) as well as knowledgeable to share information with colleagues ($M = 3.23$, $SD = 0.46$). Knowledgeable teachers use a variety of strategies in the SBA ($M = 3.28$, $SD = 0.49$) and knowledgeable teachers who improve student achievement results in line with SBA ($M = 3.28$, $SD = 0.46$) recorded the same mean score.

Table 2. Item mean for SBA teachers' knowledge in conducting it

| Items on SBA teachers' knowledge in conducting it | Mean | SD |
|--|------|------|
| I have the knowledge to use various strategies in SBA (P1) | 3.28 | 0.49 |
| I have the knowledge to improve students' mastery based on SBA achievement. (P2) | 3.28 | 0.46 |
| I have the knowledge to use various approaches to draw the students' attention.(P3) | 3.30 | 0.46 |
| I have the knowledge to use SBA Document Standard of Curriculum and Assessment. (P4) | 3.30 | 0.47 |
| I have the knowledge to conduct the teaching and learning process through SBA. (P5) | 3.26 | 0.45 |
| I have the knowledge about SBA to share information with my colleagues. (P6) | 3.23 | 0.46 |

4.1.2 Level of Teachers' Knowledge about the Band System in SBA

The teachers knowledge about the Band system in the SBA recorded ($M = 3.20$, $SD = 0.38$). Table 3 shows that the highest score ($M = 3.25$, $SD = 0.46$) was recorded for the knowledge to conduct tests according to the Band system in SBA compared with knowledge to determine the Band on students ($M = 3.23$, $SD = 0.45$). Teachers' knowledge to analyze student achievement according to the Band system in the SBA ($M = 3.17$, $SD = 0.42$) and the knowledge to analyze student achievement in the Band system to plan lessons recorded the lowest ($M = 3.17$, $SD = 0.39$) mean scores.

Table 3. Item mean for SBA teachers' knowledge on the band system in SBA

| Items on teachers' knowledge on the band system in SBA | Mean | SD |
|---|------|------|
| I have the knowledge to decide on the standard of achievement (Band) among my students using SBA. (P7) | 3.23 | 0.45 |
| I have the knowledge to conduct tests following the standard of achievement (band) which has been determined in the SBA. (P8) | 3.25 | 0.46 |
| I have the knowledge to analyze students' achievement which has been determined in the SBA (P9) | 3.17 | 0.42 |
| I have the knowledge to analyze the students' achievement band to plan the subsequent teaching and learning process. (P10) | 3.17 | 0.39 |

4.1.3 Level of SBA Teachers' Knowledge to Make Assessments

The level of teachers' knowledge to make assessments according to SBA recorded ($M = 3.18$, $SD = 0.32$). Table 4 shows that the highest score ($M = 3.25$, $SD = 0.46$) was recorded for knowledge about assignments that can improve the standard of students' achievements (Band) from time to time about tasks that can improve students' Band and the lowest score ($M = 3.14$, $SD = 0.38$) for evidence which serves as the proof to assess students' assignments. Knowledge to assess the standard of achievement (Band) in various forms of achievement among students recorded the second highest ($M = 3.19$, $SD = 0.41$).

Table 4. Item mean for SBA teachers' knowledge to assess using SBA

| Items on teachers' knowledge to assess using SBA | Mean | SD |
|--|------|------|
| I have the knowledge to assess the standard of achievement (band) in various forms of achievement among students. (P11) | 3.19 | 0.41 |
| I have knowledge about the evidence which serves as the proof to assess students' assignments (P12) | 3.14 | 0.38 |
| I have sufficient knowledge about assignments that can improve the standard of students' achievements (band) from time to time (P13) | 3.25 | 0.46 |
| I have the knowledge to assess higher order thinking skills to evaluate my students' abilities through SBA. (P14) | 3.17 | 0.53 |

4.1.4 SBA Teachers' Knowledge on Marking

The SBA teachers' knowledge about marking recorded ($M = 3.14$, $SD = 0.40$). Table 5 shows the highest score recorded ($M = 3.19$, $SD = 0.41$) for knowledge about marking criteria in SBA and the lowest score ($M = 3.09$, $SD = 0.57$) for clear understanding about the band descriptors from Band 1 to band 6 in SBA.

Table 5. Item mean for SBA teachers' knowledge on marking

| Items on SBA teachers' knowledge about SBA marking | Mean | SD |
|--|------|------|
| I have extensive knowledge on the ways to assess in SBA (P15) | 3.14 | 0.49 |
| I have sufficient knowledge about the marking criteria for SBA (P16) | 3.19 | 0.41 |
| I have a clear understanding about the band descriptors from Band 1 to band 6 in SBA (P17) | 3.09 | 0.57 |
| I have knowledge about the descriptors that are found in the SBA Document Standard of Curriculum and Assessment. (P18) | 3.15 | 0.49 |

4.1.5 The Level of Teachers' Knowledge on the Implementation of SBA

The level of teachers' knowledge on the implementation of SBA recorded ($M=3.12$, $SD=0.35$). Table 6 shows the highest score ($M=3.17$, $SD=0.46$) for knowledge to conduct teaching and learning activities which will help to improve students' achievements continuously. The lowest scores were recorded for two items. These were teachers' knowledge about the use of teaching aids to facilitate student understanding about the lesson content through SBA ($M=3.08$, $SD=0.52$) and teachers' knowledge to choose items that can improve students' achievements in assessing through SBA ($M=3.08$, $SD=0.43$).

Table 6. Item mean for teachers' knowledge on the implementation of SBA

| Teachers' knowledge on the implementation of SBA items | Mean | SD |
|--|------|------|
| I have deep knowledge on the contents of SBA Document Standard of Curriculum and Assessment which can be delivered effectively to students (P19) | 3.15 | 0.46 |
| I have the knowledge to conduct teaching and learning activities which will help to improve students' achievements continuously (P20) | 3.17 | 0.46 |
| I have deep knowledge about recording students' achievements through SBA (P21) | 3.15 | 0.45 |
| I have sufficient knowledge about the use of teaching aids to facilitate student understanding about the lesson content through SBA (22) | 3.08 | 0.52 |
| I have the knowledge to choose items that can improve students' achievements in assessing through SBA (P23) | 3.08 | 0.43 |

4.2 The Level of Teacher Readiness to Implement SBA

Table 7 shows the level of overall teacher readiness for SBA (M=3.09, SD=0.26). The highest score (M=3.25, SD=0.40) was recorded for implementation readiness for SBA. The lowest score (M=2.72, SD=0.40) was recorded for teaching and learning readiness for SBA.

Table 7. Item mean for SBA teacher readiness

| Dimension | N | Mean | SD |
|---|-----|------|------|
| Implementation readiness for SBA | 210 | 3.25 | 0.40 |
| Information readiness for SBA | 210 | 3.18 | 0.37 |
| Response readiness for SBA | 210 | 3.13 | 0.30 |
| Assessment readiness for SBA | 210 | 3.11 | 0.27 |
| Teaching and learning readiness for SBA | 210 | 2.72 | 0.40 |
| Teacher readiness | 210 | 3.09 | 0.26 |

4.2.1 The Level of SBA Teachers' Readiness to Implement SBA

Table 8 shows that the level of teacher readiness to implement SBA recorded (M=3.25, SD=0.40). The highest scores were recorded for two items. These were readiness to implement assessment using the SBA (M=3.30, SD=0.50) and readiness to make detailed preparations before teaching so that teaching takes place smoothly (M=3.30, SD=0.49). The lowest score was for readiness to analyze student achievement to take follow-up action (M=3.15, SD=0.41).

Table 8. Mean scores for teachers in implementing SBA

| Teachers in implementing SBA items | Mean | SD |
|---|------|------|
| I am ready to implement assessment using the SBA (K1) | 3.30 | 0.50 |
| I am ready to make detailed preparations before teaching so that teaching takes place smoothly (K2) | 3.30 | 0.49 |
| I am ready to conduct the teaching and leaning process through SBA. (K3) | 3.29 | 0.50 |
| I am ready to introduce innovations in teaching and learning in line with the assessment in SBA (K4) | 3.21 | 0.46 |
| I am ready to evaluate the students according to the standard of achievement (band) which has been determined in SBA (K5) | 3.22 | 0.47 |
| I am ready to analyze student achievement to take follow-up action (K6) | 3.15 | 0.41 |

4.2.2 The Level of Teacher Readiness Regarding SBA Information

Table 9 shows that the level of teachers' readiness for SBA regarding information recorded (M=3.18, SD=0.37). The highest score (M=3.21, SD=0.44) was recorded for teachers' readiness to share information about the implementation of SBA with their colleagues. The lowest score (M=3.16, SD=0.42) was for teacher readiness to master the contents of teaching and learning found in the SBA Document Standard of Curriculum and Assessment.

Table 9. Mean scores for teacher readiness regarding SBA information

| Teacher readiness regarding SBA information items | Mean | SD |
|---|------|------|
| I am ready to share information about the implementation of SBA with my colleagues (K7) | 3.21 | 0.44 |
| I am ready to master the contents of teaching and learning found in SBA Document Standard of Curriculum and Assessment (K8) | 3.16 | 0.42 |
| I am ready to monitor the progress in the standard of achievement(band) which my students attain (K9) | 3.17 | 0.39 |
| I am ready to share my knowledge with colleagues regarding the implementation of SBA (K10) | 3.19 | 0.46 |

4.2.3 The Level of Readiness for Feedback on SBA

Table 10 shows that the level of teachers' readiness for feedback recorded ($M=3.13$, $SD=0.30$). The highest score ($M=3.15$, $SD=0.37$) was recorded for teachers' readiness to receive feedback from parents regarding the implementation of SBA in their class. The lowest scores were recorded for two items. These were teachers' readiness to receive feedback from colleagues regarding the implementation of SBA in their class ($M=3.12$, $SD=0.37$) and teachers' readiness to use feedback from their students' achievement in SBA to improve their quality of teaching and learning ($M=3.12$, $SD=0.38$).

Table 10. Mean scores on teacher readiness about feedback in SBA

| Teacher readiness about feedback in SBA items | Mean | SD |
|--|------|------|
| I am ready to receive feedback from parents regarding the implementation of SBA in my class (K11) | 3.15 | 0.37 |
| I am ready to receive feedback from colleagues regarding the implementation of SBA in my class (K12) | 3.12 | 0.37 |
| I am ready to receive feedback from the administrators regarding the implementation of SBA in my class (K13) | 3.14 | 0.34 |
| I am ready to use feedback from my students' achievement in SBA to improve my quality of teaching and learning (K14) | 3.12 | 0.38 |

4.2.4 Level of Teacher Readiness to Assess Using SBA

Table 11 shows that the level of teachers' readiness to assess using SBA recorded ($M=3.11$, $SD=0.27$). The highest score ($M=3.15$, $SD=0.37$) was for teachers' readiness to conduct assessment for their students' progress. The lowest score ($M=3.06$, $SD=0.29$) was recorded for teachers' readiness to emphasize the mastery of holistic skills among students.

Table 11. Mean scores for teacher readiness to assess using SBA

| Teacher readiness to assess using SBA items | Mean | SD |
|---|------|------|
| I am ready to assess students based on the requirements of the SBA Document Standard of Curriculum and Assessment. (K15) | 3.13 | 0.36 |
| I am ready to monitor students' progress in learning through the SBA system. (K16) | 3.10 | 0.32 |
| I am ready to conduct assessment for my students' progress (K17) | 3.15 | 0.37 |
| I am ready to emphasize the mastery of holistic skills among students (K18) | 3.06 | 0.29 |
| I am ready to emphasize the integration of the values (in the realm of the spiritual, emotional, spiritual, intellect) through assessment (K19) | 3.13 | 0.34 |

4.2.5 Teachers' Readiness to Conduct the SBA Teaching and Learning Process

Teachers' readiness to conduct SBA teaching and learning process recorded ($M=2.72$, $SD=0.40$). Table 12

shows that the highest score ($M=3.12$, $SD=0.32$) was recorded for teachers' readiness to monitor students' progress from time to time. The lowest score ($M=2.77$, $SD=0.48$) was for teachers' readiness to provide opportunities for their students to interact in class in relation to the lesson content in line with SBA.

Table 12. Mean scores for teacher readiness to conduct the SBA teaching and learning process

| Teacher readiness to conduct the SBA teaching and learning process items | Mean | SD |
|---|------|------|
| I am ready to provide opportunities for my students to interact in class in relation to the lesson content in line with SBA (K20) | 2.77 | 0.48 |
| I am ready to help students who have a low level of achievement (band) to achieve a higher level of achievement (K21) | 2.49 | 0.57 |
| I am ready to diversify my teaching techniques to ensure that the students continually master skills. (K22) | 2.48 | 0.57 |
| I am always ready to monitor my students' progress from time to time (K23) | 3.12 | 0.32 |

5. Discussion

5.1 Level of Teachers' Knowledge in School-Based Assessment

The findings in this study show majority of teachers are knowledgeable about the SBA in terms of level of knowledge, conducting SBA, the implementation of SBA, the Band system, assessment and procedures in SBA. This study found that quality teachers must have knowledge to guide students so that they can positively accept the transformation of assessment in Malaysia's education system (Salmiah et al., 2011). This is because SBA is still a novelty in Malaysia and the success of SBA would depend on the teachers' knowledge and readiness.

This study is also supported by Cheah (2010) whereby the major challenge to implementation of SBA was teachers' knowledge to fulfill the objectives of the new Malaysian curriculum assessment system. Formal training would also help to reduce the gap between theory and practice. He added that the SBA teachers require support to enhance their knowledge to implement the curriculum in the long run so that SBA is able to develop. On a similar note, Antonio (2008) and Naimah (2011) found that teachers needed to have the knowledge to assess students under the SBA because teachers played a pivotal role in student assessment. Teachers' knowledge in conducting evaluation tests according to the band is very important in the process of teaching and learning as the stated SBA objectives. Besides this, teachers also need to be knowledgeable in the administration and implementation of instruments, rubrics, guides, schedules and procedures which are provided by the Examination Syndicate.

5.2 The Level of Teacher Readiness for SBA

The findings suggest that teachers' readiness to be a part of SBA is satisfactory in some aspects. This can be seen by teachers' readiness for SBA, teachers' readiness for information on SBA, teachers' readiness for feedback in SBA and teachers' readiness to make assessments according to the SBA. However, there are other aspects in which teachers are not ready for the SBA. This include a lack of readiness to provide opportunities for students to interact in class in relation to the lesson content in line with SBA, help students who have a low level of achievement (band) to achieve a higher level of achievement, and diversify teaching techniques to ensure that the students continually master skills.

The results of teachers not being ready to implement the new system are that marks awarded by teachers are neither fair nor valid. This finding is similar to the findings by Tan (2010), Stiggins (2005) and Norani and Saifulazri (2010) in which there are teachers who are not ready to implement the SBA and teachers who are not willing to conduct SBA. They also found that some teachers were not willing to conduct SBA because of a lack of training which inadvertently affected their confidence to conduct SBA. Teachers lack a willingness to undertake this new assessment system for learning in the classroom because they do not have opportunities to learn the techniques of good assessments.

5.3 Implication

Teachers must take a smart approach in delivering their lessons, have content knowledge of their subject matter and be highly creative so that the learning environment is conducive. Teachers have to put in extra effort so that students do not continuously perform unsatisfactorily. The study recommends that teachers should take steps to

overcome their weaknesses in different aspects such as teaching pedagogies, assessment strategies, knowledge of subject matter, and guidance given to students to realize assessment for learning in their classrooms. Teachers require more time and preparation to implement SBA effectively.

Teachers' knowledge and readiness need to enhance to ensure successful implementation of SBA. Teachers' knowledge and readiness of SBA implementation procedures are highly dependent on teachers' attendance in seminars, courses and briefings. Documents and guidelines are important, but not sufficient. He also found that knowledge and understanding have a close relationship with SBA. Teachers who followed training sessions had better ways of conducting SBA.

The success of SBA depends on teachers' knowledge and readiness to implement the new assessment for learning. This covers a wide area, for example, a specific set of performance targets to determine standards of achievement for students according to the curriculum. In addition, teachers have to be continuously prepared with documentary evidence on students' learning that has taken place, assess the level of students' involvement and keep the achievement records systematically

5.4 Conclusion

In sum, the findings in this study indicate that teachers must be knowledgeable about the field of pedagogy, the subject matter and the learning needs of the students. Furthermore, teachers must not only be knowledgeable about the content of the lesson to be taught but also the content of previous lessons that was taught. This knowledge is very important to detect the level of skills and abilities that need to be mastered by the students before a new lesson is taught. Additionally, teachers need to monitor and evaluate students' progress from time to time and the extent in which their students have mastered the knowledge and skills in a particular subject according to the Bands. Accordingly, SBA is important because it gives positive impact on students' effective learning, whereby they are no longer expected to memorize facts but instead understand what have learned meaningfully.

References

- Alaba, A. A. (2012). Teachers' Perception of School-Based Assessment in Nigerian Secondary Schools. *Mediterranean Journal of Social Sciences*, 3(1), 99-109.
- Antonio Mercurio. (2008). *Re-Imagining School-Based Assessment at the Upper Secondary Education Level*. Adelaide, South Australia, Australia: Wadsworth Thompson Learning.
- Bobis, J., & Gould, P. (2000). Changing the professional knowledge of teachers. In J. Bana, & A. Chapman (Eds), *Mathematics education beyond 2000 (Proceeding of the 23rd annual Conference of the Mathematics Education Research Group of Australasia, Fremantle: 47-54)*. Sydney: MERGA.
- Brophy, J. E. (1991). Conclusion to advances in research on teaching, Vol. II: Teachers' knowledge of Subject matter as it relates to teaching practice. In J. Brophy (Ed.), *Advances in research on teaching: Vol. 2 Teachers' subject matter knowledge and classroom instruction* (pp.347-362). Greenwich, CT: JAI Press.
- Cheah, U. H. (2010). *Assessment in Primary Mathematics Classrooms in Malaysia*. Tsukuba International Conference: Innovation of Mathematics Teaching and Learning through Lesson Study—Connection between Assessment and Subject Matter. 17-21 February, RESCAM, Penang (pp. 1-7).
- Faridah, S., & Mohini, M. (2012). Kerangka pengetahuan guru cemerlang matematik dan bagaimana digunakan bagi memilih contoh bahan pengajaran matematik. *Asia Pacific Journal of Educators and Education*, 27(6), 69-86.
- Ismadiah, O. (2012). *Pelaksanaan SBA di Sekolah-sekolah Kebangsaan Sekitar Gelang Patah, Johor*. Projek Sarjana Pendidikan (Pengukuran dan Penilaian), Universiti Teknologi Malaysia. Retrieved from http://www.fp.utm.my/epusatsumber/pdf/fail/ptkghdfwp/projek_3_kandungan.pdf
- John, I. (2002). *Using assessment strategies to inform student learning, Faculty of Education, Language and Community Studies*. University Melbourne, Australia: RMIT.
- Kamarudin, A., & Leong, Y. P. (2011). Implementation of year 4 mathematics curriculum in Brunei Darussalam. *Proceedings 16th International Conference on Education*. Universiti Brunei Darussalam.
- Khodori, A. (2000). *Peranan pentaksiran dalam pembentukan masyarakat yang berfikir dan belajar. Strategizing Teaching and Learning in the 21st Century*. Faculty of Education, Universiti Kebangsaan Malaysia (2:168-175) Utusan Malaysia, 20 Mac 2006.
- Malaysian Examination Syndicate. (2012). *Panduan Pengurusan SBA*. Kementerian Pelajaran Malaysia.

- Lembaga Peperiksaan, 2011. Pengurusan dan Pengendalian: Pentaksiran Berasaskan Sekolah (SBA). Kementerian Pelajaran Malaysia.
- McMillan, J. H. (2000). Fundamental assessment principles for teachers and school administrators. *Practical Assessment, Research & Evaluation*, 7(11), 78-93.
- Norani, M. N., & Saifulazri, S. (2010). Pelaksanaan pentaksiran kerja kursus berasaskan sekolah bagi mata pelajaran Kemahiran hidup di sekolah menengah kebangsaan daerah Johor Baharu. *Jurnal Pendidikan*, 24(3), 102-110.
- Norazman, A., Nor'ain, M. T., & Nur-Fazliana, R. (2012). Kualiti Pengajaran dan Pembelajaran Guru Matematik. *Discovering Mathematics*, 34(1), 105-112.
- Salmiah, S., Ramlah, H., Abd-Rahim, B., & Abdullah, M. R. (2011). Keprihatinan Guru Dalam Pelaksanaan SBA: Perubahan Dalam Penilaian Pendidikan. *Prosiding Seminar Majlis Dekan-Dekan Pendidikan* (pp. 877-888).
- Stiggins, R. J. (2005). From Formative Assessment to Assessment for Learning: A Path to Success in Standard-Based Schools. *Phi Delta Kapan*, 87(4), 324-328. <http://dx.doi.org/10.1177/003172170508700414>
- Tan, A. M. (2010). *SBA di Malaysia: Kesediaan guru, isu dan panduan perlaksanaan*. Kuala Lumpur: Gerak Budaya Enterprise.

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