

Re-assess or Risk the Slow Death of School Based Assessment

Parmjit Singh*, Kaarthiyainy Supramaniam and Teoh Sian Hoon

Faculty of Education, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

ABSTRACT

The aim of this study is to analyse the success of School Based Assessment (SBA) implemented in 2010/11 in Malaysia. It examines teachers' readiness, confidence level and enjoyment in teaching mathematics. It also investigates if participation in SBA professional development courses impacted on teachers' readiness for it. A total, of 260 teachers (65 males and 195 females) were selected as respondents while 12 teachers were interviewed for their feedback. The findings show that the teachers involved in the study have a low level of readiness and confidence in implementing SBA. Professional development courses related to SBA did not have any impact on teachers' readiness level. More than two-thirds of them reported that they did not enjoy teaching since the implementation of SBA. This study indicates more effort is needed to enhance teachers' competency in achieving the goals of SBA.

Keywords: Confidence, implementation, professional development courses, readiness, School Based Assessment

INTRODUCTION

School Based Assessment (SBA) assesses the cognitive, affective and psychomotor domains. The objective of SBA is to enhance student learning which cannot be assessed

easily through public examinations (Hong Kong Examinations and Assessment Authority, 2013). Under the new assessment system, good students could progress faster whilst the weaker ones are allowed to take up more time in learning. The SBA approach in evaluating students' academic progress was officially introduced by the Ministry of Education Malaysia and was implemented periodically in line with the Standards-based Primary School Curriculum beginning 2011 as part of Malaysia's educational transformation reform (Malaysian Examination Syndicate,

ARTICLE INFO

Article history:

Received: 15 September 2016

Accepted: 30 January 2017

E-mail addresses:

parmj378@salam.uitm.edu.my (Parmjit Singh),

kaarthyainy@salam.uitm.edu.my (Kaarthiyainy Supramaniam),

teohsian@salam.uitm.edu.my (Teoh Sian Hoon)

* Corresponding author

2012). The transformation of the current system was initiated to move away from centralised examinations and to focus on continuous assessment, improve student learning, conduct more holistic assessments, and improve examinations at the school and central levels. Chappuis and Chappuis (2008) claim that SBA is able to provide relevant information to students during the learning stage, enhance their performance and status of their achievements to meet their learning objectives. In addition, formative assessment techniques provided information on the quality of teaching (Hall & Burke, 2003).

The SBA confers greater responsibility on the teachers to design quality assessments that match students' learning outcomes. However, it was discovered that teachers' workload had increased since the implementation of SBA, resulting in dissatisfaction with the policy (Azrul, 2011; Lee, 2012). Teachers are required to record their assessments online but they experience frequent server malfunctions. Azlin, Ong, Mohamad, Rose, and Nurhayati, (2013) confirmed that "under this system, teachers are given greater responsibility to design quality assessments that align with the learning outcomes" (p.102). Their additional responsibilities include updating the filing systems which contain students' evidence of learning and their examination marks. On the contrary, there have been various measures put in place to enhance mathematics teaching. For example, abacus (also known as Sempoa) was introduced to boost pupils' computation and mental

arithmetic skills in early 2000s, but this practice too ended. In 2004, PPSMI was introduced whereby Mathematics and Science were taught in English to improve their English language skills. Despite an investment of more than RM1 billion on teaching and learning tools and professional development, it was shelved in 2011/12. Subsequently, SBA was introduced in Year 1 in 2011 and Secondary 1 in 2012 mainly due to students' poor performance in TIMSS and PISA studies (2003 to 2011).

In light of the changes over the last two decades, this research attempts to answer the following research questions: a) are teachers affected by the implementation of SBA have understood the philosophy of SBA?; b) are teachers confident and ready to conduct SBA?; c) Do the teachers have the competency in varying their repertoire of teaching strategies to purposes?; and d) are teachers expected to be creative in using various teaching strategies and repertoire of methods in assessing their students? Tong and Adamson (2015) opined that assessments are an important tool in facilitating student progress in learning. Hence, teachers must have high levels of confidence while assessing student performance in SBA. There is also a need to know if attending professional development SBA courses has significant relationship with teachers' readiness in conducting SBA.

In a study conducted by Alaba (2012), it was revealed that more than half of the teachers in Nigeria were not prepared for the implementation of SBA and which led to the scrapping of the policy. Another

pressing issue is whether or not teachers are contented with the teaching process. Various educational reforms have taken place in Malaysia over the last two decades that may have adversely affected teachers. Studies have shown that teachers experience exhaustion and burnout (Azlin, et. al., 2013; Azrul, 2011; Lee, 2012; Friedman, 1996; Merseth, 1992). Maslach, Leiter and Jackson (2012) explain that burnout is a general term to describe different negative consequences of work that include emotional exhaustion, depersonalisation and lack of personal accomplishment. This study was undertaken to examine the challenges faced by teachers due to the implementation of SBA. Hence, the objectives of the study are to:

- i. Investigate teachers' readiness and confidence in assessing student performance via SBA.
- ii. Examine the relationship of attending professional development courses in SBA with teachers' readiness levels.
- iii. Assess teacher's enjoyment in teaching mathematics since the implementation of SBA.

The findings of the study would help in ensuring that SBA is implemented more effectively in the Malaysian education system.

METHODS

Structured interviews were conducted with 260 respondents who are primary school mathematics teachers who taught in Primary 1, 2 and 3 in Selangor. A total of 68% (n=195) of the respondents were females while 32% (n=65) were males. This was followed by structured interviews with eight teachers.

RESULTS

Research Question 1:

What is the level of teachers' readiness in implementing SBA?

In measuring teachers' readiness (Table 1) procedure of SBA, marking criteria, moderation system and assessment philosophy all the mean scores for the items (procedure of SBA, marking criteria, moderation system and assessment philosophy) ranged from 5.89 (SD=1.69) to 6.20 (SD=1.74) with an overall mean score of 6.10 (SD=1.65). Based on the overall mean score of 6.10, primary school teachers are not ready to conduct SBA in their classroom teaching. This low level of readiness is not accepted as a competent level for teachers. They do not understand the fundamentals of implementing SBA. Thus, students are not being assessed as per the SBA.

Table 1
Teacher's readiness in implementing SBA (n=260)

| | Mean | SD |
|--|------|------|
| I have a good understanding of the requirement of SBA | 6.20 | 1.74 |
| I have a good understanding of the procedure of SBA | 6.19 | 1.72 |
| I have a good understanding of the marking criteria of SBA | 6.15 | 1.76 |
| I have a good understanding of the moderation system of SBA | 6.04 | 1.77 |
| I have a good understanding of the underlying assessment philosophy of SBA | 5.89 | 1.69 |
| Overall | 6.10 | 1.65 |

Scale 1= Least, 10 = Most

Research Question 2

What is the level of teachers' confidence in analysing students' performance in SBA?

To analyse teachers' confidence level and ability in assessing the student's performance

using SBA, an instrument consisting of six items was utilised. Each question followed the scale that represented a choice from 1 (least) until 10 (most).

Table 2
Teachers' confidence levels since the implementation of SBA

| Teachers' confidence | Mean | SD |
|--|------|------|
| I am confident in evaluating students' mastery using bands provided (from 1 to 6 - poor to excellent) or other forms of standard benchmarking. | 6.23 | 1.56 |
| I can give clear explanations regarding students' achievements according to their mastery level. | 6.28 | 1.64 |
| I can access each student individually according to his or her needs | 6.14 | 1.74 |
| I can confidently plan the next teaching and learning activity in meeting the students' needs based on their feedback | 6.27 | 1.57 |
| I feel confident in determining students' ability and position in class according to the criteria based on their performance standards. | 6.24 | 1.56 |
| I feel confident judging students based on the clear criteria of evaluation according to the performance standards available. | 6.19 | 1.62 |
| Overall | 6.21 | 1.52 |

Scale 1= Least, 10 = Most

Table 2 shows the highest mean score obtained for the item 'give clear explanations regarding students' achievement according to mastery level' (M=6.28, SD=1.64) followed by "I can confidently plan the next teaching and learning activity in

meeting the students' needs based on their feedback" (M=6.27, SD=1.57). On the other hand, the lowest level of confidence is obtained for the item 'I can access each student individually according to his or her needs' (M=6.14, SD=1.74). The other items

are in the range of 6.19 (SD=1.62) to 6.24 (SD=1.56). Based on the overall mean score of 6.21 (SD=1.52), it can be clearly seen that teachers do not have the confidence nor the ability to assess students' performance using SBA. Additionally, data indicates the teachers are ill prepared in utilising SBA philosophy to improve student learning and achievements.

Research Question 3

Is there any significant relationship between the teachers' level of readiness and attending professional development courses in SBA?

In terms of course attended, Table 3 shows 63.3% (n=157) respondents attended between 1 and 2 courses followed by 27.8% (n=69) respondents who attended between 3 and 4 courses. There were 6.0% (n=15) of respondents who had attended 5 or more courses.

In analysing the relationship between

Table 3
Number of related SBA courses attended since the implementation

| Courses attended | Frequency | Percentage |
|------------------|-----------|------------|
| 1-2 | 157 | 63.3 |
| 3-4 | 69 | 27.8 |
| 5-6 | 9 | 3.6 |
| 7-8 | 3 | 1.2 |
| More Than 8 | 3 | 1.2 |
| Total | 241 | 100 |

teachers' readiness and courses attended, we divided the course attended between 1 and 2 courses, and 3 and more courses.

H₀: There is no significant difference between the teacher's readiness in conducting SBA and the numbers of courses attended.

H₁: Teachers attending more courses (3 and above) has a higher level of readiness in conducting SBA.

Table 4 shows that the mean scores for

Table 4
T-test comparing mean score between teachers' readiness and the number of courses attended

| | Courses Attended | N | Mean | SD _t | df | p |
|-----------|------------------|-----|------|-----------------|--------|-----|
| Readiness | 1 - 2 | 157 | 6.04 | 1.64 | -1.622 | 238 |
| | 3 and above | 84 | 6.40 | 1.63 | | |

teachers attending 3 or more courses (mean=6.40, SD=1.63) is higher than those attending 1 to 2 courses (mean=6.04, SD=1.64). However, the t-test analysis indicates no significant difference [t (238) = -1.622, p=.106] between both these scores at the 0.05 level. Thus, we fail to reject the null hypothesis. This clearly indicates that although teachers attending 3 or more

related SBA courses have a higher level of readiness than their counterparts attending 1 to 2 courses, these differences are not significant. In other words, attending more professional development courses did not seem to have any effect in enhancing teachers' level of readiness in implementing SBA.

Research Question 4:

What is the percentage of teachers' enjoyment in teaching mathematics since the implementation of SBA?

Table 5 shows teachers' level of enjoyment teaching mathematics since the implementation of SBA.

Based on Table 5, 52.9% (n= 137) of

Table 5
Do you enjoy teaching since the implementation of SBA?

| Enjoyment | Frequency | Percentage |
|-----------|-----------|------------|
| Yes | 137 | 52.9 |
| No | 122 | 47.1 |
| Total | 259 | 100 |

respondents said that they enjoyed teaching since the implementation of SBA compared with 47.1% (n=122) who said no. This finding indicates nearly half of the teachers were discontented since the implementation of SBA. The following issues and concerns faced by the teachers were extracted during the interviews.

(Teacher No (from 1 to 12), Level (Primary 1, 2 or 3), Gender) (T2, 1, F) indicates Teacher 2, Primary One and Female

- *"I have no time to make my class more attractive"* - (T2, 1, F)
- *"Most of my time is spent on filling up forms and making online submissions"* (T3, 3, F)
- *"My time to teach has deteriorated and the additional topic in syllabus increased the subtopic made me have a*

lot of work to do." - (T4, 3, F)

- *"It has become difficult to see their progress in learning and their interest in specific skills"*- (T6, 3, F)
- *"SBA made teachers' feel burdened and at the same time cheating became easy and biasness was evident when awarding marks."*- (T11, 2, M)
- *"It's difficult to know the level of students' understanding. The SBA requirement can't dictate the students' understanding because teachers will ask the students to complete the task given until a correct answer is attained."*- (T12, 3, F).

Analysis of teachers' feedback about implementation of SBA

Research question: *If given a choice, will you like to continue or discontinue the implementation of SBA in schools?*

Table 6 describes the respondent's view, if given a choice, whether to continue or discontinue with SBA. Data shows 51.9% (n=135) respondents do not want to continue compared with 47.5% (n=122) who said yes.

The following information was extracted

Table 6
Teachers views to continue with the implementation of SBA

| | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 122 | 47.5 |
| No | 135 | 51.9 |
| Total | 257 | 100 |

during the interviews:

- *“Ministry of education must look back at this new implementation. Try to reduce the workload of teachers or increase the staff to help the teachers, and if that cannot be done it is best to abolish it!”- (T5, 2, M)*
- *“Parents could not accept their children ability without doing the exam...we faced lots of difficulty.....so much burden for us... rather berhentikan (stop it) sahaja seperti (like) PPSMI” - (T12, 3, F)*
- *“How to determine the level of students’ comprehension and understanding if they do not take the exam? Exams are still needed” - (T6, 3, F)*
- *“It puts both students and teachers under stress, to achieve the highest band and to carry out the assessment respectively...If given a choice, I’d decline.”*

DISCUSSION AND CONCLUSION

The introduction of SBA system in stages by the Ministry of Education Malaysia in 2011 to evaluate students’ academic progress was in line with the implementation Standards-based Primary School Curriculum. This was part of Malaysia’s educational reform. This study was aimed at examining teachers’ views on the effectiveness of the policy since its inception.

What is the level of teachers’ readiness

in conducting SBA in their school since the implementation of SBA?

The findings indicate that the teachers are not ready (Mean=6.10, SD = 1.65) to conduct SBA in their schools although it was implemented since 2011. Similarly, they do not have the confidence (Mean= 6.21 SD=1.52) and ability to assess student’s performance using SBA. This suggests that the policy could fail if no measures are taken to address the issues raised by the teachers. In the Malaysian context, educational policies are often regulated at the national level by the ministry. This top down approach has often proven to be ineffective in synchronising practices and aspirations of the proposed policy, as confirmed by studies (LeCzel & Gillies, 2006). Reflecting on the past failures of using *sempua* for teaching of math and science in English (PPSMI) indicate that more needs to be done in order to ensure that policies like SBA is successful as the latter is demanding, and labour intensive. It demands greater levels of commitment as well as cooperation from the already overstretched teachers. Teachers are already overburdened with administrative duties such as record keeping and participating in extracurricular activities. The underlying fear is that teachers may experience burnout, a phenomenon that has not been thoroughly addressed.

Findings suggest that professional development courses attended by teachers involved in this study have little impact on

their readiness to implement SBA. Some of the challenges are described as follows:

- *The courses I attended were a waste of time. We were forced to attend a half day workshop where we merely sat down and listened to a boring lecture from the instructor.* - (T4, 3, F)
- *I attended two courses in my district. We were asked to accept the policy I don't believe in the SBA and there is no way we can assess students without exams.* - (T12, 3, F)
- *The courses were alright, such that in the first workshop, the instructor was good and got us involved in hands on activities to enhance our understanding.... there were lots of Q and as during the one day workshop..... However more on-going workshops are in need to grasp better knowledge of the School based Assessment.* - (T5, 2, M)
- *I understand SBA as explained by the speaker but implementing it was a different story altogether. Self-practice and discovery is crucial and works better as opposed to mere adherence to a set of fixed rules.”* - (T7, 3, M)
- *We definitely need more hands-on workshops specifically in the field of mathematics teaching. The instructor we had ventured more into the English language aspect giving more examples on it than actually focusing on mathematics teaching per se. Most of my colleagues faced the same problem in assessing students' learning in*

mathematics...- (T6, 3, F).

Findings also suggest a need for efficiency in conducting professional development courses. First, having a one-off or one-day work shop is ineffective especially if the policy to be implemented requires a shift from current practices; rather, it should be an on-going one over a prolonged period of time. This fundamental principal has been supported by researchers (Yoon et al, 2007; Bush, 1984) decades ago. Second, though these teachers understand the principles of SBA, they faced problems with its implementation, namely in translating theory into practice.

The reason traditional professional development is ineffective is that it does not support teachers during the implementation phase. In implementing any new policy, it is common for even experienced teachers to struggle initially (Ermeling, 2009; Joyce & Showers, 1982). If this is so, what more could be expected of new teachers? Studies reveal that it takes an average of 20 separate practices for a teacher to master a new skill, which also increases with the complexity of the skill (Joyce & Showers, 2002). Bush (1984) and Truesdale (2003) (as cited in McCrary, 2011) confirmed that when a skill is merely described, only 10 percent of participants can translate the new knowledge to practice; however, when teachers are coached through the phase of implementation, 95 percent could transfer the target skills. Thus, support and encouragement could be extended to an optimum level of 50 to 80 hours

of instruction, practice, and coaching (Banilower, 2002; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Hence, teachers could be provided the opportunity to master the necessary skills at the initial stages. Clearly, this could also boost their confidence and readiness in class which this research showed they lacked. In short, the current implementation of professional development courses in enhancing teachers practices definitely need to be reassessed.

Another issue that must be addressed is teacher burnout. Nearly half (47.1%) of the respondents have shown signs of discontent in teaching since the implementation of the SBA and more than half (51.9%) indicated that they disapproved SBA. These are signs of gradual burnout (Shaheen, & Mahmood, 2015; Skaalvik, & Skaalvik, 2011; Gavish & Friedman, 2010). Hence, guidance for teachers is mandatory to begin with. Creating awareness of its importance is vital as well as to allow them to coordinate their existing and target practices. Not doing so would result in teachers using random techniques that may not be effective. Hence, policy makers are urged to assess teachers' current competency in SBA, ensure meaningful and relevant professional development courses for them to enhance their competency and create a platform for discussing changes related to SBA for knowledge management. This study strongly recommends that policy makers re-examine and address the issues of SBA or face the risk of its slow demise.

ACKNOWLEDGEMENT

The authors gratefully acknowledge Ministry of Education, Malaysia for providing the Fundamental Research Grant Scheme (Project Number: FRGS/1/2014/SS109/UITM/01/1).

REFERENCES

- Alaba, A. A. (2012). Teacher's Perception of School-Based Assessment in Nigerian Secondary School, *Mediterranean Journal of Social Sciences*, 3, 99-109.
- Azlin N. M., Ong, H. L., Mohamad S. R., Rose A. R., & Nurhayati Y. (2013). The Benefits of School-Based Assessment, *Asian Social Science*, 8, 101-106.
- Azrul A. S. (2011, September 21). Guru merungut program SAPS lebih sukar dari manual. *Berita Harian Online*. Retrieved from <http://perkhidmatanpelajaran.blogspot.my/2011/09/guru-merungut-program-saps-lebih-sukar.html>
- Banilower, E. (2002). *Results of the 2001-2002 study of the impact of the local systemic change initiative on student achievement in science*. Arlington, VA: National Science Foundation
- Borg, M. G. (1990). Occupational stress in British educational settings: A review. *Educational Psychology*, 10, 103-126.
- Bush, R. N. (1984). Effective staff development in making schools more effective: *Proceedings of three state conferences*. San Francisco, CA: Far West Laboratory.
- Chappuis, S., & Chappuis J. (2008). The best value in formative assessment. *Educational Leadership*, 65(4), 14-19
- Ermeling, B. (2009). Tracing the effects of teacher inquiry on classroom practice. *Teaching and Teacher Education*, 26(3), 377-388.

- Friedman, I. A. (1996). Multiple pathways to burnout: Cognitive and emotional scenarios in teacher burnout. *Anxiety, Stress and Coping: An International Journal*, 9(3), 245-259.
- Gavish, B., & Friedman, I. A. (2010). Novice teachers' experience of teaching: a dynamic aspect of burnout. *Social Psychology of Education*, 13(2), 141-167.
- Hall, K., & Burke, W. M. (2003). *Making Formative Assessment Work: Effective Practice in the Primary Classroom*. England, Maidenhead: Open University Press.
- Hong Kong Examinations and Assessment Authority. (2013). *Hong Kong diploma of secondary education examination: Information on school-based assessment*. Retrieved 25 August, 2016 from http://www.hkeaa.edu.hk/DocLibrary/Media/Leaflets/SBA_pamphlet_E_web.pdf.
- Joyce, B., & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Joyce, B., & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1), 4- 10.
- Lee, E. (2012, August 8). Why the rush to change. *The Star Online*. Retrieved August 15, 2012 from <http://thestar.com.my/news/story.asp?file=/2012/8/8/focus/11817252&sec=focus>
- LeCzel, K. D., & Gillies, J. (2006). *From policy to practice: The teachers' role in policy Implementation in Namibia*. Washington DC: USAID.
- Maslach C., Leiter M., & Jackson S. (2012). Making a significant difference with burnout interventions: Researcher and practitioner collaboration. *Journal of Organizational Behavior*, 33, 296-300.
- McCrary, M. (2011). *Mapping the Road to Instructional Coach Effectiveness: Exploring the Relationship between Instructional Coaching Efficacy, Practices, and Outcomes* (Doctoral Dissertation, Georgia State University, US). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.425.8041&rep=rep1&type=pdf>
- Merseeth, K. K. (1992). First aid for first-year teachers. *Phi Delta Kappan*, 75(9), 678-683.
- Malaysian Examination Syndicate (2012). *Panduan Pengurusan SBA. Kementerian Pelajaran Malaysia. Lembaga Peperiksaan, 2011. Pengurusan dan Pengendalian: Pentaksiran Berasaskan Sekolah (SBA)*. Kuala Lumpur: Kementerian Pelajaran Malaysia.
- Shaheen, F., & Mahmood, N. (2015). Exploring the Level of Emotional Burnout among Public School Teachers. *The Sindh University Journal of Education*, 44(1), 116 – 135
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029-1038.
- Tong, S. A., & Adamson, B. (2015). Student Voices in School-based Assessment. *Australian Journal of Teacher Education*, 40(2).
- Truesdale, W. T. (2003). The implementation of peer coaching on the transferability of staff development to classroom practice in two selected Chicago public elementary schools. *Dissertation Abstracts International*, 64(11), 3923.
- Yoon, K. S., T. Duncan, S. W. Lee, B. Scarloss, & K. L. Shapley. 2007. *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement* (Issues and Answers Report, REL 2007 No. 033). Washington, DC: U.S. Department of Education, Regional Educational Laboratory Southwest.