Students' Perception and Readiness on School-Based Assessment

Alias Masek

Nur Ain Ngah Nasaruddin

Faculty of Technical and Vocational Education,
Universiti Tun Hussein Onn Malaysia, Malaysia
Email: aliasmasek@uthm.edu.my

Abstract

School-Based Assessment (SBA) was implemented in Malaysia in stages, starting with form one secondary school students in 2012. After a few years of implementation, the SBA has raised many concerns among educational practitioners nationwide. Previous studies highlighted several implications due to perception and readiness of the stakeholders, leaving much room for improvement of SBA implementation in several countries. Hence, this study was conducted to investigate students' perception and readiness concerning the SBA implementation. The survey study was conducted among 336 lower secondary school students located in different geographical areas. The data were collected using questionnaire and were analysed using descriptive and inferential statistics. The result indicates that the students have moderate perception and readiness for SBA, and there is no difference between urban and suburban school students. It has been found that students were not serious when faced with SBA assessment components and not well prepared for continuous assessment. The implication is that students in form one in secondary school should be well informed of the SBA system implementation, so that they understand the impact of SBA on their final grade. Generally, the implementation of SBA throughout of the schooling system will benefit the students and the country development, but must through a careful planning.

Keywords: perception, readiness, school-based assessment, urban and rural education,

1. Introduction

Education is associated with the development of a national economy, through the production of quality human capital that is resulting from a well-planned education. One of the important aspects in education that needs a careful planning is the process of assessment, since the assessment process will determine the quality of outcome. Generally, assessment plays an important role in any tasks that someone has to complete. It refers to the process of obtaining dimensions in a particular area or things according to predetermined objectives. Assessment is broadly defined in education context, which involves the process of getting to know students' development in a holistic manner. These processes require teachers to collect, translate, record and make use of information about students' response to the task of education (Lambert and Lines, 2011). Specifically, assessment in classroom context refers to activities that involve the processes of designing, building, managing, examining and reporting by teachers in schools, which involve pupils, parents and external organisations.

In Malaysia, our school system has been examination-oriented since its establishment. In fact, assessment that is examination-oriented has become an academic benchmark in determining students' achievement, which in turn affects their ability to secure a place at tertiary education institutions (Malaysian Examinations Syndicate, 2012). This system has been in place since the beginning. Nevertheless, the government of Malaysia has learnt from existing examples such as Hong Kong (Qian, 2014), become aware of the significant roles of assessment in the context of students' learning; hence, a new system has been recently proposed by the ministry. School-Based Assessment (SBA) has been introduced to replace the existing national examination system, especially the assessment system for lower secondary students (Lower Secondary Examination). Amongst the main reasons for this change is the provision of more skills (generic skills i.e. communication skills, critical thinking, team skills, etc.) and to optimise students' holistic development from the beginning (form one), without merely focusing on academic achievement. This is very important for the future of school leavers, in order for them to contribute to the national economy.

In the SBA system, the assessment component consists of two categories, namely academic and non-academic. For academic, SBA assesses theoretical knowledge according to content knowledge in multiple ways such as quizzes,

tests, and assignments; meanwhile, non-academic focuses on using multiple approaches to assess students' generic skills, including communication skills, technical skills, and team skills. Moreover, SBA involves all physical, emotional, spiritual and intellectual aspects, compared with the existing assessment that is more focused on academic achievement. In SBA, teachers are the main personnel to implement the continuous assessment process during teaching and learning in the classroom (Malaysian Examinations Syndicate, 2012). This system had been implemented in all subjects, starting from students in form one in the year 2012.

Existing literature suggests that the biggest challenge of SBA implementation is dealing with teachers' and students' perceptions (Adediwura, 2012). For example, in Bangladesh, students were sceptical about whether assignments given by their teachers contributed to their learning and final grade (Purvin, 2011). In Hong Kong, Qian (2014) studied a new SBA implementation in the English language; findings indicated that SBA was beneficial to students but there was much room for improvement in terms of students' and teachers' perceptions. Similarly, in a study of Yip and Cheung (2010), the results indicated that the implementation lacked materials and training; thus fairness of SBA was the main concern of teachers. Similar findings were supported by Yung (2010), in which fairness of SBA implementation was the main concern discussed in his study. Also, in South Africa, SBA serves as a platform for students preparing for the final external examination. However, the study from Ryeneke, Meyer and Nel (2010) indicated that SBA failed to enhance learning and preparation of students for examination.

Despite these discouraging findings, in a study by Tong (2011), a qualitative study of an English subject revealed an encouraging finding. This study focused more on students' views and experiences in regard to the SBA system implementation. The results indicated that students were happy with a multifaceted approach to the concept of assessment and they perceived that feedback given during the process of assessment was a source of motivation for learning.

It is important to note that there will always be new challenges and resistance when implementing a new system. According to Cheung (2000), a successful new system implementation must be according to a proper process of educational changes and concern for the individuals or organisations involved. In this case, several stages must be considered when adopting SBA into the existing system, for instance, the five modified Stage of Changes model from Cheung and Ng (2000), would be more useful to at least avoiding failure of a new system implementation, and thus save more resources (money, effort, time, etc.).

The SBA system is in contrast to the examination-oriented system, where students were stressed due to negative perception of assessment (Brown and Wang, 2011); the main cause of stress for the students is the requirement to sit for a national examination, which will determine their next education level. Furthermore, a successful SBA implementation and education transformation requires thorough understanding of the students in the schools; there are several reasons for failure of transformation, including failure to understand that each school is unique and different (Fullan, 2002). Based on these premises, it is important to assess students' perception and their readiness on the SBA system implementation.

1.1 The Context

Integrated Living Skills (ILS) is one of the subjects in the Malaysian school system that is taken by the lower secondary level students in form one, two and three. The continuous assessment had already been implemented as early as in 2003, long before the introduction of SBA (Malaysian Examinations Syndicate, 2012). This continuous assessment was used before the introduction of the exam-oriented system that focused on academic achievement as the basis for streaming students when entering the next level of schooling. Prior to the implementation of this system, continuous assessment was used in this particular subject but did not contribute much to students' final grade. Therefore, some students who had better performance in technical skill did not achieve good grades when they failed to perform in the national examination (during form three). This is because our education system is very focused on and concerned with academic achievement, rather than technical and vocational education and training (TVET).

From a lifelong learning perspective, this subject provides an early insight into TVET, which is in high demand in a knowledge-based society; it will entail redefining basic skills, to include for instance the new information and communication technologies. The subject also takes into account the foreseeable labour market trends in the country. The scope of this subject offers an expository core in designing and technical skills with four options for the elective component. The components such as technical skills, home economics, agriculture, and commerce and entrepreneurship, appear to be in line with the subject aims of producing independent, creative, proactive and knowledgeable students who are able to deal with the challenges in their everyday lives (Centre of Curriculum Development, 2002).

Besides that, it is hoped that more moral values, positive attitude and good working culture can be incorporated

into the practical activities. Other specific objectives outlined in ILS are as follows (Centre of Curriculum Development, 2002):

- To encourage self-improvement, being creative and innovative in designing and producing products out of variable sources.
- To be conscious of surrounding matters and getting ideas from multiple sources in designing and producing products.
- To carry out do-it-yourself tasks, simple repairs and maintenance of electrical and pumping work in everyday lives.
- To choose the right equipment, tools and materials and use them with the correct technique.

SBA in ILS subjects has been implemented since 2003. However, education transformation in 2012 has resulted in incorporation of SBA into all subjects at lower secondary school level. In ILS, SBA includes academic and non-academic assessment that nurtures students' creativity and innovation. Students' achievement and performance can range from band 1 to band 6. Students must pass at least band 3 in a particular task to enable them to proceed to the next tasks. Teachers are responsible for monitoring and assessing students' tasks, which must be completed and documented within the year.

2. Methodology

This research used a descriptive survey design. Descriptive research was chosen because it can be used to make descriptive assertions about a large population (Dantzker and Hunter, 2012). Data were collected using questionnaires.

2.1 Sampling and Population

This study involved 336 out of a population of 1926 students as according to Krejcie Morgan (1970) suggestion. The respondents were randomly selected from four clustered-sampled schools at different geographical locations (urban:School A and School B; suburban: School C and School D). Sampling technique was used to reduce cost and time rather than using the whole population (Connaway and Powell, 2010).

2.2 Research Instrument

Data were collected using a questionnaire, which consists of two sub-constructs, namely perception and readiness. The questionnaire comprises three major parts, namely Part A (3 items); Demographic information, Part B (19 items-five points likert scales); Students' perception of SBA, Part C (17 items- five points likert scales); Students readiness for SBA. Perception is operationally defined as students' thought/perception of the SBA system and implementation, while readiness is concerned with the extent to which students are technically ready to start using the SBA system. Items in Part B were adapted from a previous study by Zainal et al. (2013), for example, "SBA improves my academic achievement". Items in Part C were adapted from Zubair (2012), for example, "I am ready for a test at any time point".

A pilot test was conducted before the actual study. A total of 35 sets of questionnaires were distributed to a different group of students in order to identify the clarity of wordings and item structure. As a result, three items were restructured due to unclear statement. Data were then tested for reliability using Cronbach's alpha, and any value above 0.6 is considered acceptable for research purpose (Perera et al., 2008). The coefficient values according to the sub-constructs are indicated in Table 1.

Table 1: Cronbach's alpha for Part A and Part B

Part	Construct	Cronbach's alpha
B	Perception	0.765
C	Readiness	0.691
All		0.753

2.3 Data Analysis

Quantitative data from the questionnaires were first analysed using descriptive statistics. Then the data were analysed using frequencies, percentage, mean scores and standard deviation in order to interpret the results and give them a

meaningful form. The inferential statistics used independent t-test to compare the mean scores between urban and suburban school students.

3. Results

A total of 327 complete questionnaires were analysed, indicating a very high response rate at 97.3%. Gender was equally balance with 164 male and 163 female respondents. Also, an equal split of respondent were from urban and suburban area.

Students' perception of SBA was analysed using mean score and standard deviation (SD). The overall mean score of students' perception of SBA is at a moderate level (mean score = 3.33; SD = 0.79), indicating that students have a moderate perception of SBA implementation. Data indicated the highest mean score is 3.74 (SD = 1.18), where students agreed that SBA encourages communication between teachers and students. Specifically, 115 respondents, which is equivalent to 34.2% of the total number of respondents, gave a rating of strongly agree for this particular item. However, when the previous national standardised assessment system is compared with the SBA system in terms of ease of use, respondents gave lower ratings to this item, which resulted in the lowest mean score of 2.87 (SD = 1.45). A total of 44.3% of the respondents disagreed with this particular item. The other items are indicated in Table 2.

Table 2: The mean scores and standard deviation of students' perception of SBA

Students' perception of SBA	Mean score	SD
SBA influenced my interest to ILS subjects.	2.96	1.23
SBA is meeting the syllabus of the subjects involved.	3.22	1.18
SBA system is easier than Lower Secondary Assessment.	2.87	1.45
SBA encourages collaboration between students.	3.55	1.18
SBA encourages communication between teachers and students.	3.74	1.18
SBA can promote mutual assistance among students.	3.59	1.18
SBA encourages creative thinking of students.	3.63	1.97
SBA activities take a long time to implement.	3.38	1.29

The mean score for this construct was deemed to be at a moderate level (mean score = 3.21; SD = 0.74), indicating that students' readiness is at a moderate level. The data indicated that the highest mean score is 3.70 (SD = 1.12), which is achieved by the ninth item. A total of 101 respondents or equivalent to 30.1% of all the respondents strongly agreed with this statement, "I immediately ask the teacher if sceptical of the SBA assignment". Meanwhile, the lowest mean score was 2.23 (SD = 1.26), when respondents were asked to rate the item, "I do not need the guidance of teachers in the implementation of SBA activities". The other items are indicated in Table 3.

Table 3: The mean scores and standard deviation of level of students' readiness for SBA

Level of students' readiness for SBA	Mean score	SD
I need the help of teachers for the implementation of assignment.	3.50	1.27
I give up if I am not able to do an assignment.	2.66	1.29
I constantly give the best effort for each assignment.	3.51	1.12
I immediately ask the teacher if I do not understand anything related to teaching and learning.	3.62	1.15
I immediately ask the teacher if I do not understand the assignment.	3.70	1.12
I do not need the guidance of teachers in the implementation of SBA activities.	2.33	1.26

A comparative analysis was performed to determine if there is any significant difference between urban (n=164) and suburban (n=163) school respondents. Mean score, standard deviation and independent t-test were used to perform the analysis. Based on the hypotheses to be tested, there was no significant difference in students' readiness between urban and suburban areas on the SBA implementation. The results are indicated in Tables 4.

Considering the gaps between urban and suburban in terms of academic gaps and information dissemination (Amiruddin and Masek, 2014), students' readiness on SBA in both groups were compared. The mean score indicated that students' readiness for SBA in suburban area (mean score = 3:24, SD = 0.75) is slightly higher than that in urban area (mean score = 3.18, SD = 0.73). However, further analysis using independent t-test indicated that the null hypothesis failed to be rejected at 95% confidence interval [t (325) = -0.80, p > 0.05]. Effect size using Cohen's d 0.08; very small.

Therefore, urban and suburban school students did not significantly differ in terms of readiness for SBA implementation.

Table 4: Independent t-test between urban and suburban schools

| | Readiness on SBA | | | | | | 95% CI for Mean Difference | | |
| | Urban | | | Suburban | | | | | |
	M	SD	n	M	SD	n		t	df
Readiness	3.18	0.73	164	3.24	0.75	163	0.42, 0.44	-0.804*	325

* p < .05.

4. Findings and Discussions

With reference to the previous examination-oriented system, it focuses more on academic or cognitive ability, which is stressful for students. Doubt exists that future human capital with merely 'cognitive ability' may be incapable of solving tasks and applying their knowledge in an actual workplace environment. Particularly, in this new technology era, the workplace contains more complicated and sophisticated high-tech machinery and computerized systems, which create more complex problems. In this capacity and challenges, students' holistic development is important, which can be nurtured from SBA system implementation.

SBA allows students to undergo individual and on-going assessments, in which students are evaluated holistically based on their actual performance. In that way, students perceive assessment as a process of learning and gaining experience; thus, students can make decisions based on intellectual judgment and have a stress-free environment during assessment. This statement is supported by Ginnis (2012); perception is a subjective process where individuals have different perspectives of an environment depending on what they choose to evaluate. Perception depends on their assumption, value, knowledge, experiences, and personal thought. Literature suggests that students were stressed due to negative perception of assessment (Brown and Wang, 2011). Therefore, it is vital for students to be more aware of the multifaceted assessment in the SBA system, which aims to provide a holistic individual development. In fact, a study by Tong (2011) suggests that a multifaceted approach to the concept of assessment can lead to stronger learning motivation. For that reason, students' current perception must be carefully considered for effective and successful implementation of SBA.

In terms of students' readiness, findings indicated that students' readiness level was at a moderate level; hence, they might not be ready for multifaceted and ongoing assessment in the SBA system. According to Hashim et al. (2010), students were not prepared physically, mentally, and emotionally (spiritually) to adopt the SBA system. Physical preparedness include behaviour or action; mental preparedness refer to focuses, aims and willingness that will affect emotion. Students who are not ready for assessment might face difficulty in the learning process and assessment (Ryeneke, Meyer and Nel, 2010). For effective SBA implementation, teachers should create a friendly learning environment for introducing the SBA system to students.

In addition, several problems were also identified based on students' perception questionnaire. Students were not serious in facing SBA assessment components and not well prepared for continuous evaluation (assessment). This findings can be justified based on Yip and Cheung (2010) findings; students might not enough training and materials on SBA, and thus they do not aware of SBA functions on their final grade (Purvin, 2011). In this case, teachers play a significant role in guiding students to help them understand and get used to the SBA system from the day they enter form one. Teachers should remind students of each task before an ongoing assessment is being implemented.

In this study, findings indicate that no significant difference exists at the level of readiness for school students in urban and suburban areas. However, both groups of students need more information and exposure in regard to the assessments used in SBA, including test, quizzes, assignment, group work and task presentation. This is important, especially for suburban students to maintain their academic achievements compared with their counterparts. Also, the urban and suburban areas typically have different opportunities and access to information, especially for preparing students in terms of training and materials (Mogashoa, 2013). According to Fullan (2002), failure of education transformation is due to several reasons, including failure to understand that each school is unique and different. For that reason, it is important to assess the urban and suburban school students' perception and readiness to accept the SBA system implementation. This premises is strongly supported by Cheung and Ng (2000), whereby a new system adoption (in this case is SBA) must undergo a proper educational changes from stage to stages.

5. Conclusion

Several approaches and strategies must be embedded into the existing education system to improve the effectiveness of SBA implementation. Amongst the main issues to be highlighted are students' perception and readiness for SBA implementation. The findings of this study suggest that students' perception and readiness for SBA were at moderate levels, indicating much room for improvements are needed. Students are unlikely to be fully ready for immediate assessment during the teaching and learning process. Therefore, the implication is that students in form one in secondary school should be well trained of the SBA system implementation, so that they understand the impact of SBA on their final grade. Furthermore, a comparative analysis between urban and suburban school students indicated no difference between geographical areas in terms of readiness. With SBA, the academic or performance gap between urban and suburban can be mitigated, which enables urban and suburban students to be on par with each other in a healthy competition of raising our country's education quality. The implementation of SBA throughout of the schooling system will benefit the students and the country development, but must through a careful planning.

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