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# AN EVALUATION OF TEACHERS' PERCEPTION IN IMPLEMENTING SCHOOL-BASED ASSESSMENT

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**Abstract**

This paper presents a theory-based evaluation of the School-based Assessment (SBA), an assessment system which is conducted by subject teachers in schools to assess students cognitive (intellect), affective (emotional and spiritual) and psychomotor (physical) aspects. The implementation of SBA is in line with the National Philosophy of Education and the Standards-based School Curriculum in Malaysia. A survey was employed within the theoretical framework of the CIPP Evaluation Model. Findings from the survey suggest that all 376 teachers are quite satisfied with the input received from the governments. Regarding process dimension of evaluation, the implementation goes well but could still be strengthened. And looking at the product dimension of evaluation when system is implemented, teachers are satisfied with the students' attitude and knowledge but not really with the motivational level especially the students' reading interest. The study thus provides some support for the effectiveness of the SBA system implementation and for the theoretical model that is proposed.

**Keywords** *school-based assessment, evaluation, the CIPP Evaluation Model.*

**Abstrak**

Kertas kajian ini membentangkan satu penilaian berasaskan teori terhadap pentaksiran berasaskan sekolah (PBS), iaitu satu sistem pentaksiran yang dilaksanakan oleh guru-guru matapelajaran di sekolah untuk menilai aspek kognitif (intelek), afektif (emosi dan spiritual) dan psikomotor (fizikal). Perlaksanaan PBS adalah berlandaskan kepada Falsafah Pendidikan Kebangsaan dan Kurikulum Standard Sekolah yang dilaksanakan di Malaysia. Satu kaji selidik telah dibina berasaskan kepada satu kerangka teoritikal iaitu Model Penilaian CIPP. Dapatan kajian menunjukkan semua 376 guru agak berpuas hati dengan input yang diterima dari pihak kerajaan. Berkait penilaian dimensi proses, perlaksanaan sistem PBS berjalan lancar cuma ianya masih memerlukan beberapa penambahbaikan. Untuk penilaian dimensi produk, guru-guru merasakan yang mereka berpuas hati dengan sikap dan pengetahuan pelajar terhadap PBS tetapi agak kurang berpuas hati dengan tahap motivasi terhadap pembelajaran pelajar terutamanya minat

terhadap membaca. Seterusnya, kajian ini sedikit sebanyak menyokong keberkesanan perlaksanaan sistem PBS dan juga model teoritikal yang telah dicadangkan.

**Kata kunci** *Pentaksiran berasaskan sekolah, penilaian, Model Penilaian CIPP.*

## INTRODUCTION

### *School-based Assessment*

School-based assessment system, a fairly new innovation in assessment is an assessment which is conducted by subject teachers in classrooms following the procedures from the Malaysian Examination Syndicates in terms of planning, administration, scoring and reports (Lembaga Peperiksaan Malaysia, 2011). It is integrated into the teaching and learning process meaning that it is a continuous process throughout the schooling system. It includes both types of assessment, assessment for learning and assessment of learning. It assesses the process and product of teaching and learning. It is considered a holistic assessment because it assesses various aspects of children development such as their cognitive (intellect), affective (emotional and spiritual) and psychomotor (physical). In fact, the main objectives of SBA are to get the overall picture of an individual's potential, to monitor individual's development and help to increase their potential and also to make a meaningful reporting on individual learning (Lembaga Peperiksaan, 2010).

SBA is seen as an alternative assessment in replacing the traditional assessment which tend to focus most on public examination. Looking at SBA in particular, its aim is to enhance the meaningfulness of assessment by focusing more on students' learning development rather than grade (Che Noraini *et al.,* 2013). Furthermore, this new form of assessment is using Standards-referenced Assessment whereby, the assessment of students is not compared to each other in their classroom as is traditionally practiced rather they are assessed on their growth in learning based on the standard statements (Ministry of Education, 2011). SBA is supposed to promote active involvement in learning which includes teacher feedback, self-assessment and peer-assessment skills (Davison, 2007 and Cheng *et al.,* 2011). Feedback, which is the most important components in assessment for learning must be understood clearly by teachers because a carefully-focused feedback can help students to realize the gap that exists between their current learning status and the desired learning goal (Young and Giebenhaus, 2005). Similarly, the two skills also act as a medium to close the gap in student learning as both skills tend to influence students to think and learn more (Black and Wiliam, 1998).

### *Theory-driven evaluation*

In order to explain the effectiveness of SBA, this paper reports on a theory-driven evaluation approach of the SBA system in Malaysia. A theory-driven evaluation

is an approach which states that the evaluation goals and mechanisms are related to the theoretical underpinnings and also driven by stakeholders (Creemers *et al.,* 2010). Looking at the few evaluation models, there are many possible theoretical frameworks that could be used in evaluating the system, of which in part depends on the questions and topics of interest. In the case of SBA, we are primarily interested in the effectiveness of the system implementation. This leads us to see look at various dimensions of evaluation. For this reason we have premised this evaluation on the theoretical framework provided by the CIPP Evaluation Model (Stufflebeam, 1971).

***The CIPP Evaluation Model***

The CIPP Evaluation Model was developed by Daniel Stufflebeam and his colleagues to evaluate any projects, personnel, products, institutions or systems from various disciplines such as education field, housing and community development, transportation safety and military personnel review systems (Stufflebeam, 2003a). Various educational programmes have been conducted using this model, such as those related to science and mathematics education, rural education, educational research and development, school improvement, professional development schools and many more (Stufflebeam, 2002). A key characteristic of this model is its four dimensions of evaluation – context, input, process and product (Stufflebeam, 1971). This four dimensions of evaluation also serve planning, structuring, implementing and recycling decisions respectively. As such, context evaluation involves confirming the present objectives, to modify the existing objectives or develop a new ones. It could also involve a number of factors distinguished by school context in Malaysia which involves schools from different type (urban-rural) or different category (primary-secondary). Input assesses the strategies, personnel, resources or procedures in achieving the program's objectives, process evaluation is looking at everything related to the implementation of already selected designs, strategies or action plan and product evaluation determines and examine the specific outcomes of the program. Furthermore, it is based on the management-oriented approach which allows managerial decision-makers to get enough information from the evaluators (Hogan, 2007). The CIPP Evaluation Model is a useful framework for analyzing the interrelationship between the four evaluation dimensions but for this study, it focused only at each component of evaluation dimensions. The model proposed is the following:

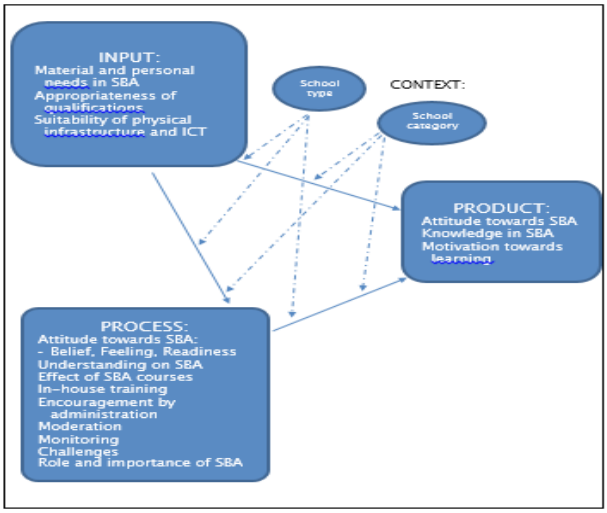


**Figure 1:** The CIPP Evaluation Model applied to this evaluation

In this study, context evaluation involves a number of factors distinguished by school context in Malaysia which involves schools from different type (urban-rural) or different category (primary-secondary). Input evaluation consists of three constructs which are material and personal needs in SBA, appropriateness in personnel's qualifications and suitability of physical infrastructure and ICT. Process evaluation consists of twelve constructs which form the teachers' attitude towards SBA system and includes belief, feeling and readiness, teachers' understanding of SBA system, effect of SBA courses in improving teachers' skill, in-house training, the encouragement by the administration, moderation process, monitoring process, challenges, role of SBA and importance of SBA in the school improvement process. Lastly is the product evaluation which is looking at the aspects of programme impact concerning students' attitudes towards SBA, students' knowledge in SBA and students' motivational source towards learning. All the constructs are developed from past literature reviews especially from several instruments related to SBA implementation. Then, based on the operational development for each construct, items are developed.

***Research aims***

The traditional concept of assessment which focuses more on public examination and less on formative assessment has a negative rather than positive impact on society. Their practices are not integrated into the teaching and learning process and could not give much help in improving learning (Wiliam, 2001). Stiggins (2005) added that it also affects students' emotion and confidence level negatively. A shift to a new assessment system is needed especially in a developing country like Malaysia. So, it is timely to discuss some of the issues related to SBA as this assessment system is still in a relatively early stage of development.

The key aim of this study is to explain the extent to which science and mathematics teachers implement SBA in classrooms and could have a positive impact on student learning. On a theoretical level, we are interested in whether

this study could provide any additional support to the effectiveness of the system implementation.

Research questions therefore are:
RQ1: What are the teachers' perceptions on the context dimension of the SBA system implementation?
RQ2: What are the teachers' perceptions on the input dimension of the SBA system implementation?
RQ3: What are the teachers' perceptions on the process dimension of the SBA system implementation?
RQ4: What are the teachers' perceptions on the product dimension of the SBA system implementation?

## METHODOLOGY

A survey research method was used in this study using questionnaire as a form of data collection method. A questionnaire with a 5-Likert scale was used to get the perceptions from the respondents. The respondents are the primary and secondary school teachers who were teaching mathematics and science subjects in a government schools all over Kelantan. Teachers are used as respondents because they are the most involved and most concerned with the system compared to administration staff or parents. In addition, science and mathematics teachers are those who are greatly involved with laboratory equipment and ICT hardware in schools. Since SBA has started in 2012 for secondary schools and the data collection was done in early 2014, these teachers have had 2 years of experience in implementing SBA in their science and mathematics classes. The questionnaire was constructed by the researcher based on the theories and past literature. Content validity was checked by a professor who is an expert in measurement and evaluation in education. The pilot study was conducted using a survey to 60 teachers in another country which have a similar characteristics with the real fieldwork respondents. Results from pilot study showed that the instrument is valid, reliable and practical with a few changes have been made. In this study, a stratified random sampling was used to select the schools followed by a random sampling of teachers in the selected schools. Two main elements influenced the sampling framework: school category (secondary-primary) and school type (urban-rural). Two secondary schools and two primary schools were randomly chosen from each district, with one of them was from urban school and another one was from rural school. Since there are 10 districts altogether, it was expected to have 40 sample schools. However, the researcher managed to get 37 schools only. And, for each school, 8 to 15 questionnaire were distributed to the schools. Descriptive statistics was conducted using SPSS version 21 to do the screening and cleaning process and to check for missing data.

## FINDINGS

### *Profile of respondents*

A total of 376 respondents are involved with 169 respondents are from urban schools and 207 are from rural schools. Or, if referring to school type, 201 and 175 are from secondary and primary schools, respectively. From the gender aspect, there are more females (74.7 percent) than males. And, most of them are Malays (93.6 percent).

### *Context evaluation*

Data indicates that 169 respondents are from urban schools and 207 are from rural schools. In addition, out of 376 respondents, 201 are from secondary schools and 175 are from primary schools. The similar number of respondents from each type of school has been planned earlier when stratified sampling method is applied. This is due to the fact that this research further look into the difference between school type and category.

### *Input evaluation*

Overall, data from Table 1 indicates that the resources, procedures and personnel qualifications have met the desired result. Teachers' responses indicate a high level of satisfaction of the respondents towards input dimension of SBA evaluation. Material and personal needs including a complete assessment document, teaching assistant and a properly planned training are seen as greatly needed by teachers. Teachers are perceived as having sufficient qualifications and skills to implement assessment activities in the classrooms. Same goes to the suitability of physical infrastructure and ICT. However, in particular, nearly one-third of respondents perceive that the physical equipment in classroom is not suitable for SBA activities.

**Table 1:** Teachers' responses on input evaluation of SBA (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| a14: It is easy to implement assessment if teachers are supplied with a complete assessment document | 6<br>(0.8) | 23<br>(3.0) | 79<br>(10.2) | 330<br>(42.5) | 336<br>(43.3) | 774<br>(99.7) | 2<br>(0.3) |
| a15: A teaching assistant is needed to help teachers in assessment | 8<br>(1.0) | 30<br>(3.9) | 112<br>(14.4) | 259<br>(33.4) | 366<br>(47.2) | 775<br>(99.9) | 1<br>(0.1) |
| a16: Training of the personnel involved should be properly planned and implemented | 3<br>(0.4) | 20<br>(2.6) | 42<br>(5.4) | 301<br>(38.8) | 410<br>(52.8) | 776<br>(100.0) | 0<br>(0.0) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| a17: Teachers are sufficiently qualified to implement assessment activities | 10 (1.3) | 61 (7.9) | 172 (22.2) | 373 (48.1) | 158 (20.4) | 774 (99.7) | 2 (0.3) |
| a18: Teachers' skills in assessment are adequate for implementing assessment activities | 30 (3.9) | 131 (16.9) | 216 (27.8) | 316 (40.7) | 83 (10.7) | 776 (100.0) | 0 (0.0) |
| a19: The physical equipment in classroom is suitable to conduct SBA activities | 62 (8.0) | 176 (22.7) | 200 (25.8) | 299 (38.5) | 39 (5.0) | 776 (100.0) | 0 (0.0) |
| a20: The space can be adapted to assessment activities | 46 (5.9) | 120 (15.5) | 198 (25.5) | 365 (47.0) | 44 (5.7) | 773 (99.6) | 3 (0.4) |
| a21: The ICT hardware is suitable to conduct SBA activities | 68 (8.8) | 118 (15.2) | 170 (21.9) | 350 (45.1) | 69 (8.9) | 775 (99.9) | 1 (0.1) |

### *Process evaluation*

Overall, data indicates that more than half of the respondents believe that teachers' attitude (belief, feeling and readiness) towards SBA are positive as in Table 2. However, in general, nearly one-fourth of the respondents are not sure about their attitude towards SBA. Next, majority of the respondents feel that they understand SBA and the courses provided by the government have upgraded their skills on SBA as shown in Table 3. But still, one-fourth of them are still not sure about that. In-house training also is perceived as successful by most of the respondents. In terms of administration factor, nearly half of the respondents are satisfied with the role of the administrators but unluckily, more than one-third are not sure about that.

**Table 2:** Teachers' responses on process evaluation of SBA in terms of teachers' attitude towards SBA (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| a1: SBA is efficient in improving students learning | 51 (6.6) | 127 (16.4) | 202 (26.0) | 349 (45.0) | 44 (5.7) | 773 (99.6) | 3 (0.4) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| a2: SBA can help students to become more independent learners | 36 (4.6) | 138 (17.8) | 203 (26.2) | 350 (45.1) | 47 (6.1) | 774 (99.7) | 2 (0.3) |
| a3: It is good that students have more than one opportunity to be assessed | 21 (2.7) | 97 (12.5) | 164 (21.1) | 412 (53.1) | 82 (10.6) | 776 (100.0) | 0 (0.0) |
| a4: SBA can be effectively incorporated into existing lessons | 18 (2.3) | 79 (10.2) | 174 (22.4) | 431 (55.5) | 74 (9.5) | 776 (100.0) | 0 (0.0) |
| a5: SBA is not burdening me | 169 (21.8) | 233 (30.0) | 176 (22.7) | 164 (21.1) | 33 (4.3) | 775 (99.9) | 1 (0.1) |
| a6: SBA is not boring | 49 (6.3) | 120 (15.5) | 234 (30.2) | 329 (42.4) | 41 (5.3) | 773 (99.6) | 3 (0.4) |
| a7: SBA is compulsory | 45 (5.8) | 100 (12.9) | 199 (25.6) | 326 (42.0) | 102 (13.1) | 772 (99.5) | 4 (0.5) |
| a8: I prepare students' individual files for my subject before conducting SBA | 15 (1.9) | 57 (7.3) | 131 (16.9) | 421 (54.3) | 149 (19.2) | 773 (99.6) | 3 (0.4) |
| a9: I have plenty of opportunities to discuss SBA implementation with my colleagues who are teaching the same subject with me | 27 (3.5) | 130 (16.8) | 214 (27.6) | 326 (42.0) | 78 (10.1) | 775 (99.9) | 1 (0.1) |
| a10: I always follow the planning instructed by the MOE in SBA implementation | 8 (1.0) | 54 (7.0) | 192 (24.7) | 397 (51.2) | 125 (16.1) | 776 (100.0) | 0 (0.0) |

**Table 3**: Teachers' responses on process evaluation of SBA (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| a11: Educational assessment transformation through SBA leads to changes from examination-oriented assessment to an assessment which is more integrated | 28 (3.6) | 95 (12.2) | 181 (23.3) | 369 (47.6) | 102 (13.1) | 775 (99.9) | 1 (0.1) |
| a12: SBA is conducted during the teaching and learning process | 10 (1.3) | 54 (7.0) | 122 (15.7) | 466 (60.1) | 120 (15.5) | 772 (99.5) | 4 (0.5) |
| a13: For centre assessment in SBA, assignments are prepared by the Examination Board | 8 (1.0) | 36 (4.6) | 190 (24.5) | 351 (45.2) | 181 (23.3) | 766 (98.7) | 10 (1.3) |
| b24i: to assess students using the assessment instrument | 12 (1.8) | 39 (6.0) | 132 (20.3) | 412 (63.4) | 55 (8.5) | 650 (100.0) | 0 (0.0) |
| b24ii: to assess students documentation following stated criteria in the assessment document | 2 (0.2) | 59 (9.1) | 122 (18.8) | 437 (67.2) | 30 (4.6) | 650 (100.0) | 0 (0.0) |
| b24iii: to explain assessment criteria in details to students | 4 (0.6) | 70 (10.8) | 148 (22.8) | 386 (59.4) | 42 (6.5) | 650 (100.0) | 0 (0.0) |
| b24iv: to conduct assessment activities effectively | 2 (0.3) | 51 (7.8) | 125 (19.2) | 427 (65.7) | 45 (6.9) | 650 (100.0) | 0 (0.0) |
| b25i: IHT is conducted by the experts from the ministry or the panels of teachers | 26 (4.0) | 66 (10.2) | 142 (21.8) | 372 (57.2) | 44 (6.8) | 650 (100.0) | 0 (0.0) |
| b25ii: IHT has been conducted more than once to increase teachers' understanding | 45 (6.9) | 109 (16.8) | 156 (24.0) | 297 (45.7) | 43 (6.6) | 650 (100.0) | 0 (0.0) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| b25iii: Training includes practical forms not only theoretical | 32 (4.9) | 139 (21.4) | 170 (26.2) | 265 (40.8) | 41 (6.3) | 647 (99.5) | 3 (0.5) |
| b26i: Administrators provide reinforcement such as giving gifts or praise to those teachers that practice SBA in their classrooms | 97 (12.5) | 143 (18.4) | 207 (26.7) | 250 (32.2) | 70 (9.0) | 767 (98.8) | 9 (1.2) |
| b26ii: Administrators give special recognition to teachers performance for conducting SBA | 89 (11.5) | 144 (18.6) | 213 (27.4) | 243 (31.3) | 77 (9.9) | 766 (98.7) | 10 (1.3) |
| b27i: Each teacher prepares students' scores for his/her subjects | 23 (3.0) | 50 (6.4) | 115 (14.8) | 487 (62.8) | 96 (12.4) | 771 (99.4) | 5 (0.6) |
| b27ii: Each teacher prepares evidence according to students' achievement | 16 (2.1) | 35 (4.5) | 110 (14.2) | 494 (63.7) | 116 (14.9) | 771 (99.4) | 5 (0.6) |
| b27iii: Each teacher records the marks of evidence in SPPBS application | 20 (2.6) | 29 (3.7) | 115 (14.8) | 474 (61.1) | 134 (17.3) | 772 (99.5) | 4 (0.5) |
| b28i: The school SBA committee appoints certain teachers as internal monitors | 17 (2.2) | 70 (9.0) | 161 (20.7) | 432 (55.7) | 86 (11.1) | 766 (98.7) | 10 (1.3) |
| b28ii: Heads of panel of each subject monitor SBA activity implementation | 22 (2.8) | 100 (12.9) | 180 (23.2) | 402 (51.8) | 64 (8.2) | 768 (98.9) | 8 (1.0) |
| b28iii: Evidence of centre assessment is kept in a systematic way in a safe place before it is returned to the students | 18 (2.3) | 22 (2.8) | 105 (13.5) | 476 (61.3) | 147 (18.9) | 768 (98.9) | 8 (1.0) |

Next is on moderation and monitoring process which are the two main components contributed to the quality assurance process in SBA in Malaysia. Most respondents feel that they have implemented both processes (as shown by item b27 and b28) in Table 3.

There are twelve main challenges involved as in Table 4. Most respondents believe that all factors are interfering the effectiveness of the implementation of SBA in schools except for the two factors which they believe less challenging – support from head teachers and getting cooperation from teachers. And, the most challenging factor is extra work load followed by 'no special recognition for teachers' performance' and then followed by 'problem to get related resources' and 'insufficient knowledge'. It is worth pointing out that the number of respondents who agreed, disagreed and unsure are similar in terms of 'lack of confidence amongst teachers' and 'school climate'.

**Table 4:** Teachers' responses on process evaluation of SBA in terms of challenges faced (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| c1: Difficult to gain support from the head teacher | 125 (16.1) | 287 (37.0) | 215 (27.7) | 114 (14.7) | 31 (4.0) | 772 (99.5) | 4 (0.5) |
| c2: Difficult to gain cooperation from teachers | 100 (12.9) | 339 (43.7) | 176 (22.7) | 122 (15.7) | 36 (4.6) | 773 (99.6) | 3 (0.4) |
| c3: Insufficient knowledge to implement SBA process | 53 (6.8) | 106 (13.7) | 183 (23.6) | 323 (41.6) | 110 (14.2) | 775 (99.9) | 1 (0.1) |
| c4: Lack of confidence to conduct SBA | 48 (6.2) | 169 (21.8) | 241 (31.1) | 250 (32.2) | 65 (8.4) | 773 (99.6) | 3 (0.4) |
| c5: Problem to get related resources on SBA | 45 (5.8) | 129 (16.6) | 159 (20.5) | 302 (38.9) | 135 (17.4) | 770 (99.2) | 6 (0.8) |
| c6: School climate seems to hinder SBA implementation | 72 (9.3) | 219 (28.2) | 229 (29.5) | 178 (22.9) | 76 (9.8) | 774 (99.7) | 2 (0.3) |
| c7: Insufficient financial resources | 51 (6.6) | 143 (18.4) | 177 (22.8) | 254 (32.7) | 147 (18.9) | 772 (99.5) | 4 (0.5) |
| c8: Extra workload | 33 (4.3) | 64 (8.2) | 134 (17.3) | 267 (34.4) | 276 (35.6) | 774 (99.7) | 2 (0.3) |
| c9: No special recognition for teachers performance for conducting SBA | 27 (3.5) | 83 (10.7) | 184 (23.7) | 317 (40.9) | 162 (20.9) | 773 (99.6) | 3 (0.4) |
| c10: Students and parents may not trust teachers' assessment in SBA | 38 (4.9) | 113 (14.6) | 218 (28.1) | 272 (35.1) | 133 (17.1) | 774 (99.7) | 2 (0.3) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| c11: Students may memorize responses and reproduce them during SBA sessions | 32 (4.1) | 124 (16.0) | 188 (24.2) | 297 (38.3) | 132 (17.0) | 773 (99.6) | 3 (0.4) |
| c12: The existing number of teachers is not sufficient to implement SBA activities | 33 (4.3) | 133 (17.1) | 187 (24.1) | 260 (33.5) | 161 (20.7) | 774 (99.7) | 2 (0.3) |

There are two main factors related to school improvement – role of SBA (item d30) and importance of SBA (item d31) as shown in Table 5. Generally, the most significant one is that most respondents feel believe that SBA provides new learning opportunities for building on students' strengths and interests. Another interesting point to make is that nearly half of the respondents feel that absentee rate reduction and public satisfaction increment are not affected by SBA implementation and nearly one-third of them are not sure about that. Similar percentage of respondents are also not sure whether SBA could influence teachers on their willingness to take decisions related to assessment reform or reduce pressure in public examination.

**Table 5:** Teachers' responses on process evaluation of SBA in terms of school improvement process (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| d30i: SBA reduces absentee rate | 77 (9.9) | 241 (31.1) | 240 (30.9) | 184 (23.7) | 34 (4.4) | 776 (100.0) | 0 (0.0) |
| d30ii: SBA contributes strongly to the quality assurance process | 60 (7.7) | 166 (21.4) | 261 (33.6) | 256 (33.0) | 33 (4.3) | 776 (100.0) | 0 (0.0) |
| d30iii: SBA increases public satisfaction and confidence towards school | 65 (8.4) | 217 (28.0) | 280 (36.1) | 189 (24.4) | 25 (3.2) | 776 (100.0) | 0 (0.0) |
| d30iv: SBA provides new learning opportunities for building on students' strengths and interests | 42 (5.4) | 130 (16.8) | 245 (31.6) | 323 (41.6) | 34 (4.4) | 774 (99.7) | 2 (0.3) |
| d31i: SBA helps students improve generic skills to build on their strengths and interests | 27 (3.5) | 132 (17) | 201 (25.9) | 365 (47.0) | 45 (5.8) | 770 (99.2) | 6 (0.8) |
| d31ii: SBA helps teachers to improve students assessment practices | 23 (3.0) | 117 (15.1) | 168 (21.6) | 424 (54.6) | 41 (5.3) | 773 (99.6) | 3 (0.4) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| d31iii: SBA helps teachers to actively develop their professionalism | 25 (3.2) | 101 (13.0) | 174 (22.4) | 424 (54.6) | 51 (6.6) | 775 (99.9) | 1 (0.1) |
| d31iv: SBA helps teachers to develop students various learning opportunities | 22 (2.8) | 95 (12.2) | 165 (21.3) | 431 (55.5) | 62 (8.0) | 775 (99.9) | 1 (0.1) |
| d31v: SBA makes teachers and students willing to discuss learning problems in non-threatening manners | 38 (4.9) | 129 (16.6) | 175 (22.6) | 381 (49.1) | 53 (6.8) | 776 (100.0) | 0 (0.0) |
| d31vi: SBA makes teachers willing to take decisions on assessment reform | 28 (3.6) | 114 (14.7) | 226 (29.1) | 372 (47.9) | 36 (4.6) | 776 (100.0) | 0 (0.0) |
| d31vii: SBA reduces pressure in public examinations | 36 (4.6) | 115 (14.8) | 213 (27.4) | 341 (43.9) | 71 (9.1) | 772 (99.5) | 4 (0.5) |
| d31viii: SBA improves literacy and numeracy learning | 36 (4.6) | 99 (12.8) | 194 (25.0) | 398 (51.3) | 48 (6.2) | 775 (99.9) | 1 (0.1) |

***Product evaluation***

For product dimension, in general, this survey results suggest that SBA has, to some extent, reached the target audience. It shows a positive results in improving students' attitude, knowledge on SBA and motivation towards learning. However, SBA does not really improve the reading interest of students.

**Table 6:** Teachers' responses on product evaluation of SBA (frequency and percentage)

| Item | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Missing |
|---|---|---|---|---|---|---|---|
| e32i: Students practice SBA in their study | 39 (5.0) | 183 (23.6) | 207 (26.7) | 321 (41.4) | 25 (3.2) | 775 (99.9) | 1 (0.1) |
| e32ii: The students are motivated to prepare for SBA. | 47 (6.1) | 217 (28.0) | 209 (26.9) | 268 (34.5) | 34 (4.4) | 775 (99.9) | 1 (0.1) |
| e32iii: Practising SBA in their study is NOT burdening them at all | 46 (5.9) | 159 (20.5) | 224 (28.9) | 298 (38.4) | 48 (6.2) | 775 (99.9) | 1 (0.1) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| e33i: SBA tasks are part of teaching and learning of their respective subjects | 48 (6.2) | 107 (13.8) | 170 (21.9) | 390 (50.3) | 58 (7.5) | 773 (99.6) | 3 (0.4) |
| e33ii: Feedback from teachers helps them develop skills that may not be reflected in public examinations | 47 (6.1) | 131 (16.9) | 168 (21.6) | 372 (47.9) | 54 (7.0) | 772 (99.5) | 4 (0.5) |
| e34i: SBA encourages students to read more books than before | 76 (9.8) | 211 (27.2) | 238 (30.7) | 231 (29.8) | 20 (2.6) | 776 (100.0) | 0 (0.0) |
| e34ii: The students are becoming more interested in my subject than before | 53 (6.8) | 148 (19.1) | 279 (36.0) | 257 (33.1) | 39 (5.0) | 776 (100.0) | 0 (0.0) |
| e34iii: SBA helps students to understand more on their strengths and weakness in each subject | 62 (8.0) | 172 (22.2) | 205 (26.4) | 299 (38.5) | 38 (4.9) | 776 (100.0) | 0 (0.0) |

## DISCUSSION

The results from this study show there are similar number of respondents in terms of where they come from, be it location factor or school type. Next, regarding our second research question, the results show a high level of input received from the government, with positive ratings from the teachers as respondents. Findings therefore are positive in this regard. This findings are in line with Zhang *et al*., (2011) who believed that the use of a complete assessment document, a teaching assistant and suitable training for all the personnel should be highly recommended in order to meet the needs of the given objectives of SBA. However, quite a high number of teachers believe that the physical equipment and ICT hardware are not suitable. If that is the case, teachers might be having problem to run laboratory sessions with students and SBA activities are also limited. The keying-in of data might also be affected. Our third research question related to processes implemented in achieving program's objectives. Findings indicate that teachers' belief about and attitude towards SBA are positive except their feeling towards SBA. SBA is seen as burdening them. These findings are consistent with those of Othman *et al.,* (2013) and Hamzah and Paramasivan (2009). Similarly, the main challenge for them is that the work is burdensome. Salmiah (2013), Chan and Gurnam (2012) and Faizah (2011) supported this findings. In addition, teachers state that there is no special recognition for their performance and there is a difficulty in getting resources on SBA. Nearly one fourth of them are not sure about the skills gained from the courses provided to them. This might be due to the fact

that they do not practice what is provided to them during training in their teachings. Similarly, quite a high percentage of teachers feel that SBA is not really improving the attendance rate of the students. This might be because teachers could not see the relationship between SBA and the attendance rate. Or, in other words teachers might not understand how SBA could play its role in reducing absentee rate. Finally, in terms of the outcome of the system, teachers believe that the students have made a difference in terms of their attitude and knowledge on SBA and also their motivational towards learning. However, changes are quite limited in the sense that SBA is seen as not really improving the students' reading interest. A study by Feng (2007) on 100 senior ESOL (English for Speakers of Other Languages) students found that students' attitudes towards formative assessments varied depending on the assessment activities conducted by teachers in their classroom. Feedback and self-assessment were favored but not questioning and peer-assessment.

So, this descriptive findings suggest that teacher training should be improved or in particular, should be looked into with more consideration. More quality and frequent trainings are needed greatly. In addition, teacher assistant is also needed as to reduce the workload of an individual teacher in the classroom. The physical infrastructure and ICT should be upgraded. Furthermore, resources and documents on SBA supplied to schools should be improved and special recognition for teachers would be much appreciated.

## CONCLUSION

Overall then, this study provides evidence that the implementation of SBA in Malaysia may contribute to improving students learning. In the Malaysian context at least, SBA is difficult to implement effectively but not impossible. Furthermore, in order to win the 'hearts and minds' of the community as has happened towards public examinations in the previous years, schools need to be geared up to have a clear understanding on what SBA really is. This study also provides support to the use of the CIPP Evaluation Model as a framework for evaluating educational system and shows that theory-driven evaluation can enrich our understanding of the phenomenon studied.

In terms of the implications for the study, the findings here point to the importance of school management to focus on school climate issues by creating a positive school climate. All the factors related to school climate such as physical, social and academic dimensions have to be upgraded if we were to improve students learning. It also points to an additional element of national policies to be included in the evaluation, alongside current strands such as concerning context evaluation in determining the objectives of SBA as has been detailed by the government. Of course, further research in this area would be beneficial especially given that SBA is a newly-implemented assessment system in Malaysia. In particular, collection of classroom data and views from parents, administration staff or other policy makers could be a fruitful attempt to confirm a robust conclusion of the findings.

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