

Preliminary Study of Teachers Formative Assessment Perceptions in Special Education in Malaysia

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Abstract: *Although formative assessment is widely recognised as an effective tool and approach for increasing student learning in general education, its application in special education, particularly in Malaysia, is less well known. This study investigated teachers' perceptions towards formative assessment in special education. Three primary teachers who work with students with mild intellectual disabilities participated in a case study. Data was gathered through interviews. The finding reveals that formative assessment implementation was far from satisfactory and it is poorly understood by the teachers, particularly special education teachers. This study also contributes to the need for teachers to improve their formative assessment knowledge and skills for formative assessment to help students in special education.*

Keywords: formative assessment, special education, teachers' perceptions

1. Introduction

Assessment is a procedure used in special education to gather data on a student in order to make informed decisions. Generally, assessment is an effective method of evaluating a student's problem-solving skills (Swanson & Watson, 1989). According to Gearheart and Gearheart (1990), assessment is a process that involves structured collection and interpretation of a wide variety of information needed to make instructional/intervention decisions and, when appropriate, classification and placement decisions. Assessment in special educational setting serves a few primary purposes. According to NASET (2018), there are five basic purposes of assessments as follows:

- i. Screening and identification – to identify those who may be experiencing delays or learning problems
- ii. Eligibility and diagnosis – to diagnose the type of problems or disability that a student has in order to determine whether or not they need special education
- iii. IEP (Individualized Education Program) formulation and placement - to provide specific confirmation so that an IEP can be created and decisions about the students' educational settings can be made
- iv. Instructional planning - developing and preparing education that suits the student's unique requirements
- v. Evaluation -to assess the progress of students

Besides assessment, teachers in special education also play an important role in the establishment of policies and practices in special education, and ensuring the success of education for these students (Rouse & Agbenu, 1998). The role as the special education teachers is unique in the sense that she or he serves a variety of roles in the educational setting. This is because, these educators, especially special education teachers encounter a variety of situations that require practical decisions and relevant solutions (NASET, 2018). In fact, it is always important for special education teachers to completely understand the assessment process and be able to convey vital information to students and parents (Pierangelo & Guliani, 2006).

2. Problem Statement

Burns and Ysseldyke (2009) reported that formative assessment (FA) is the fourth most common practise employed by special education teachers. Teachers in special education schools have been observed using a variety of formative assessment methods and activities such as informal discussion, participation observation, and practical problem-solving in which these activities and methods are considered to be an integral part of classroom teaching and assist them to better understand their students' strengths and weaknesses (Martyn and Richard, 1998). Formative assessment is the process in the classroom where evidence of student learning is gathered, analysed, and used by teachers and students to decide on the course of learning and instruction to follow in order to increase student learning (Black & Wiliam, 2009).

Gillies (2014) stated that, FA is an authentic assesment which is designed by the teachers to provide them with information on what their students understand, the difficulties they are experiencing, and how best the teaching process can be adjusted to overcome difficulties and problems that have been identified. FA was the first large-scale study that has been reported and conducted by Black and William (1998). The results demonstrated a very clear finding that FA raised achievement standards of students from kindergarten to college level across a variety of subject areas. Nevertheless, the particularly interesting part was that FA do raise achievement levels overall and it was most beneficial to low achievers and students with learning disabilities. Black and William (1998) believed that it occurs with the frequent use of relevant, immediate and constructive feedback that helped students to understand what they need to do to achieve better.

A few years later, follow-up research conducted by Black and his colleagues has confirmed that learning gains are possible when teachers promote and incorporate FA into their lesson plans (Black, Harrison, Lee, Marshall & Wiliam, 2004). In addition, Black, Harrison, Lee, Marshal dan William (2004) suggested few startegies that are effective in helping students to learn such as; (i) rich questioning, (ii) sharing criteria for success, (iii) comment-only marking, and (v) student-peer assessment and self-assessment. In line with that, Brookhart and Lazarus (2017) stated three common FA practices in special education setting that can contribute to the success of students with special needs, for example; (i) explicit learning, (ii) varied assessments and (iii) immediate feedback.

Apart from that, research has shown a significant relationship between teachers' assessment system and students' achievement (Odde, Borman, & Fermanich, 2004) whereby the assessment can be powerful lever for adressing achievement gaps for students with special needs. However, literature related to the assessment of special education is limited (Holdheide *et al.*, 2010). In addition, studies about the use of formative assessment from a special education perspective also found to be lacking (Anderson, 2020). Furthermore, more knowledge is

needed concerning formative assessment practices in special education (Lin & Lin, 2015) and how FA can be implemented in special education settings (Watkins, 2007).

In Malaysia, FA has just began to be implemented recently in special education schools. Currently, in the context of special education, FA or also known as classroom ongoing assessment is used as the main assessment tool to evaluate students. However, according to the Guideline Book for Classroom-based Assessment for Special Education, the FA practises they suggest have no differences from those used in regular mainstream schools. In fact, Hanafin *et al.* (2007) stated that there is little evidence to demonstrate that the use of FA in special schools differs from that in regular schools. Furthermore, the studies of FA in special schools are still insufficient as compared to studies on FA in mainstream schools (Hanafin *et al.*, 2007). The search engine such as Google Scholar and research websites also failed to show any relevant studies of FA in special education. There is a call for reviewing teacher’s basic knowledge and practices of FA in special education settings. Therefore, a preliminary study is conducted to explore perceptions of special education teachers regarding their basic knowledge and practices of FA.

3. Objective of The Study

This study uses a qualitative approach to first examine how a group of teachers understand formative assessment and then to identify the formative assessment strategies that teachers incorporated into their instruction.

4. Methodology

Participants

Three secondary special school teachers teaching the core subjects (Malay Language, English Language and Mathematics) were selected to participate in this study. For confidentiality reasons, the nick names of each participants are created and were used. They will be identified as Shindy, Meriam and Jibriel throughout this study.

Table 1: Participants’ background

<i>Name</i>	<i>Teaching experiences (years)</i>	<i>Subjects</i>
<i>Shindy</i>	5	<i>English Language</i>
<i>Meriam</i>	22	<i>Bahasa Melayu</i>
<i>Jibriel</i>	23	<i>Mathematics</i>

Based on Table 1, participants for this study have have teaching experience ranging from 5 to 23 years. They are mainly teaching core subjects from Standard 1 (7 years old) to Standard 6 (12 years old).

Data collection and analysis procedure

One interview was conducted in this small scale study through Google Meet platform involving three teachers from a special primary school located in Johor. The interview questions were reviewed to ensure that the participants understood it well and were able to respond accordingly. All interview responses were analyzed using thematic analysis. Thematic analysis was chosen due to its simplicity, less time-consuming and flexibility (Braun & Clarke, 2006). Apart from that, thematic analysis is a method that can be used to identify,

analyze, and report themes within the data (Braun & Clarke, 2006). Braun and Clarke (2006) suggested that thematic analysis composes of a few steps as follows:

- (i) Data familiarization
- (ii) Data transcription
- (iii) Organizing themes
- (iv) Reviewing themes
- (v) Reporting analysis

The themes are extracted from the thematic study of the review of past studies. Then, all the audio recorded interviews were transcribed. Both of these ways help the researcher to extract themes and code the data accordingly to fit the themes. In the final stage, all the data are re-read again to ensure that no data were neglected.

5. Results and Discussion

Data analysis of the teachers' understanding of formative assessment revealed the following theme: Formative assessment as a mean to evaluate students.

Formative testing, testing and evaluation

Shindy and Meriam responses were categorized under this theme. They claimed that formative assessment is a kind of testing to measure students' progress.

*Okay, satu pentaksiran formatif ini adalah secara berterusan di mana guru boleh menggunakan **ujian formatif** ini untuk mengenal pasti dan mengembangkan perkembangan murid (Shindy).*

*Okay, first, formative assessment is an ongoing process where teachers can use these **formative tests** to identify and expand on students' development (Shindy).*

*Pentaksiran formatif ni yang dijalankan setelah kita mengajar murid mengikut kemahiran kita ajarlah.. maknanya bila di akhir atau kemahiran itu kita akan **uji pada budaklah** (Meriam).*

*Formative assessment is carried out after we have done teaching according to the skills we have taught.. this means at the end of our teaching, we will **test it on students** (Meriam).*

Based on the transcripts, Shindy and Meriam stated that formative assessment is more on testing students' progress which will be done after a period of teaching. However, they did not mention clearly the type of testing or instrument used to test students. The difference among these two teachers are (i) Shindy understood that formative assessment is on-going process, and (ii) Meriam understood that formative assessment is a test that can be used or done after teaching or at the end of a topic being taught.

*Pentaksiran formatif sebaik sahaja **kita habis mengajar ataupun semasa sesi PdP** (pengajaran dan pembelajaran) itu dijalankan maknanya tak perlu tunggu habis masa dalam kita mengajar kita pun boleh nilai budak masa itu juga (Jibriel).*

Formative assessment is carried out **right after we finish the teaching or during (teaching and learning) session**, which means there is no need to wait for the end of our teaching session to evaluate the student (Jibriel).

Meanwhile, Jibriel understood formative assessment as an on going process to evaluate students during and after the teaching process. However, Jibriel did not clearly mention the evaluation process conducted in the classroom.

The second theme that was extracted from this study was hands-on activity as formative assessment method. Shindy's and Jibriel's responses were categorized under this theme.

Hands-on activity as formative assessment method

Okay, saya akan gunakan kaedah **latih tubi** saja (Shindy).

Okay, i will only use hands-on activity (Shindy).

*Saya tak ada kaedah tertentu sebenarnya. Kalau bertulis tu lebih banyak kepada **hands-on latih tubi** (Jibriel).*

I do not have specific method actually. If it is written exercise, it will be more of hands-on activities (Jibriel).

Shindy and Jibriel believed that hands-on activities are the most effective formative assessment method that can be used to monitor students' progress. Even so, there are many enrichment activities and formative assessment strategies that can be incorporated into the classroom to improve students' performance. Meriam had a different perspective on the formative assessment method. She asserts that she used oral, observational, exploratory, and written tests as formative assessments the majority of the time to track students' progress.

Secara lisan, pemerhatian saya, soal jawab, kadang-kadang ada penulisan dan untuk tahap yang akhir saya akan buat macam ada ujian bertulis (Meriam).

Orally, through my observations, questioning and answering, sometimes writing and for the final stage, I will conduct a sort of written test (Meriam).

Hands-on activities, according to Shindy and Jibriel, can provide a clearer picture of students' learning processes during formative assessments. Based on the findings reported in this study, teachers have different understanding of formative assessment methods. Some of them still perceived hands-on activity as the only tools that can measure students' progress.

Based on the literature, formative assessment is more than giving grade to students. When teachers use formative assessment as a testing tool, they tend to administer a test after students have finished a particular chapter or topic. However, previous studies also indicated that formative assessment method is not limited to hands-on activity. Nevertheless, based on the finding, most of the teachers are still using hands-on activity to monitor and measure students' progress. This demonstrated that teachers still lack a thorough understanding of formative assessment and have limited knowledge and expertise regarding this method.

6. Conclusion

Concisely, based on the interview session that had been conducted, it can be concluded that teachers still have lack understanding of formative assessment. This finding also found to be aligned with study done by Arumugham (2018) on Teachers' Understanding Of Formative Assessment. According to Arumugham (2018), secondary school teachers continue to lack knowledge of formative assessment. In addition, Yan and Brown (2021) found that the actual adoption of formative assessment was far from satisfactory (Yan *et al.*, 2021). Most of the researchers agreed that the success of implementing formative assessment in classrooms relies on personal factors such as belief, attitudes, knowledges and skills (Black & Wiliam, 1998; Yan, 2014). In this context, we believed that strong knowledge and skills were necessary to design and implement formative assessment in the classroom. The knowledge and skills here refer to the understanding of formative assessment as a whole, as well as its conceptual

underpinnings and methodology. Therefore, to overcome this issue, it is advisable for the policy makers to observe and guide teachers in any way possible in order to ensure that they are on the right path and in line with the education policy to achieve the goal of the national education philosophy.

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