FORMATIVE ASSESSMENT AS MOTIVATIONAL STRATEGIES FOR LEARNING: PERCEIVED IMPACT AND CHALLENGES BY SENIOR SECONDARY SCHOOL TEACHERS IN ILORIN

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Abstract

Formative assessment is used by teachers and students during instruction to improve students' achievement of intended instructional outcomes and motivation. However, the impact of formative assessment by the secondary school teachers is regrettable. Hence, this study aimed at investigating the teachers' perception of impact and challenges of using formative assessment in improving students' achievement motivation. Three research questions were generated and descriptive survey research design was used in the study to collect data from a sample of one hundred and fifty Senior Secondary School teachers in Ilorin, Kwara State. The instrument for data collection was a validated Questionnaire on teachers' perception of formative assessment (QTPFA). The result of the data analysis showed that the most perceived impact of formative assessment allows students to receive feedback about the quality of their work and what they can do to make it better. Also, the study revealed that poor time allocation and teacher's resistance to further the testing of students is the most perceived challenge of using formative assessment in the classroom. It was recommended that teachers should be motivated to design how best to adapt formative assessment to their needs and the needs of their students and that assessment guidelines and monitoring committee should be set up by the government in order to ensure high quality formative assessment practices.

Introduction

Assessment in its widest meaning denotes a process of collecting and interpreting information about learning and achievement of students. This is used to provide information to students and their parents about the progress in acquiring knowledge, skills and attitudes. It also provides support to teachers to modify their instruction and the learning activities of their students. The current methods of assessing students have encouraged them to focus mainly on point collecting and finding right answers, as opposed to authentic learning. Summative assessment has elicited negative responses in students who were not closer to the learning target. They feel hopeless, and panicked, think that he or she is a failure, and is embarrassed. Experts such as O'Cannor

(2002); Marzano (2006); Stiggin (2007); Reeves (2009) and Ruland (2011) have suggested making significant changes to grading policies to encourage a climate focused on learning, instead of point collecting. They offered the use of formative assessment attributes included in instruction and daily classroom experience as a method to address student problems concerning assessment.

Formative Assessment and Achievement Motivation

The reasons for these effects are numerous. Formative assessment helps identifying what students can do with help and what they can do independently. Participating in formative assessment involves students in active learning keep them on task, and focuses them on learning goals (Brookhart 2010). Formative assessment, especially peer evaluation and self-evaluation, helps students with the social construction of knowledge. But more importantly, formative assessment allows students to receive feedback on precisely what they need to do improve, and what to do next to get better (Brokhart, 2010). Therefore, formative assessment support further learning and as such increases student motivation engagement. Cauley and Mcmillan (2010) reiterated that, the purpose of classroom assessment is therefore to provide classroom-level data for improving teaching methods and for guiding and motivating students to be actively involved in their own learning.

Formative assessment according to Popham (2005) is a process used by teachers and students during instruction. It provides feedback to adjust ongoing teaching and learning so as to improve students' performance of intended instructional outcomes. Formative assessment are those activities undertaken by teachers and by their students in assessing themselves that provide information to be used as feedback to modify teaching and learning activities (Black & Wiliam, 1986). Formative assessment information can come from questioning and discussion with students, from their work (quizzes, assignment, homework), or from direct observation of students work. The tools in this assessment are designed to help with this exchange of information by focusing students on aspects of their work and putting those observations on paper where they are easy to be seen and discuss. When teachers routinely share information about the quality of student work relative to learning targets, learning improve (Brookhart, 2010). The key difference between summative and formative assessment according to Ruland (2011) is what is done with the information Summative assessment uses information to show how the student performed against othes or how many learning goals he or she has mastered at the end of learning. Formative assessment uses the information collected to determine where the gap of learning is and how to close the gap.

One way to think about formative assessment according to Cauley

and Mcmillian (2010) is to contrast it with summative assessment. In summative assessment, evidence only records current student achievement. Although formative assessment can be performed after a test, effective teachers use formative assessment during instruction to identify specific student misunderstandings, provide feedback to students to help them correct their errors, and identify and implement instructional correctives. Ongoing formative assessment is conducted primarily through informal observations and oral questions posed to students while content is being taught or reviewed. If the information from the observations and oral questions posed to students while content is being taught or reviewed is accurate, the teacher indentifies instructional adjustments that can help improve student learning. In this way, formative assessment is integrated with instruction and ideally provides a seamless process of assessment followed by instruction, followed by further assessment and instruction.

According to Yin, Shavelson, Ayala, Ruiz-Primos Brandon and Furtak (2008) formative assessment, unlike summative assessment is expected to improve motivation and achievement in the following ways:

(a) emphasized the learning process and closing the gap between student current situation and the desired goal, so that students may be more likely to form a task-involving goal orientation, which encourages students to process information more deeply than does the performance orientation (Schunk and Swartz, 1993).

(b) concentrates on improving students' learning, so it may be less likely to cause students to lose confidence. Instead, students tend to believe in collection of skill that people can master over time (Vispoel and Austin, 1995);

(c) formative assessment shapes self-efficacy in a way that benefits student learning and, consequently, student achievement, especially that of lower achievers (Geisler-Brenstein & Schemeck, 1996);

(d) formative assessment also improves students' interest in learning; and

(e) students engaged in formative assessment increase their self-regulation, reason, and planning, which are all important for effective learning and conceptual change (Black and Wiliam, 1998).

Research on the use of formative assessment has shown that when teachers practice good formative assessment and students participate in it, motivation increases. Meta-analyses and early studies have supported, with large amounts of evidence, that using formative assessment in the classroom had a large impact on student academic achievement, especially for those students who were perennial low achievers (Black and William, 1998b and

Black, Harrison, Lee, Marshall & William, 2004).

Stiggins, in an interview with US National Staff Development Council Observes: "The key is to understand the relationship between assessment and student motivation. In the past, we built assessment systems to help us dole out rewards and punishment. And while that can work sometimes, it causes a lot of students to see themselves as failures. If that goes on long enough, they lose confidence and stop trying" (1999, p.12). Stiggins (2007) claimed that the reason why formative assessment has this impact is that its philosophy is rooted in changing the student's affect concerning the use of assessments and in including the student as the number one user of that data. Leahy, Lyon, Thompson, and William (2005) have supported this claim, stating that education needs to change its function of collecting rights and wrongs, and to encourage teachers to collect information to inform instructional decisions.

Despite the plethora of research regarding the benefits of formative assessment student achievement and motivation, formative assessment remains underutilized. Students' results are increasingly criticized by both those in education and those in the public. Students' result in National Examinations Council (NECO), National Business of Technical Examinations Board (NABTEB) and West Africa Examinations Council (WAEC) calls attention to the need to improve public education nationwide. Researches have revealed that the current assessment practices by most of Nigerian Secondary School teachers are a far cry from what assessment is meant to achieve. That is why the impact is however regrettable. It is in view of the above, that this study investigates teachers' perception of impact and challenges of using formative assessment in improving learner's achievement motivation.

Research Questions

1. What are the perceived impacts of formative assessment on students' motivation for learning?

2. What are the perceived challenges associated with the use of formative assessment in the classroom assessment?

3. What are the perceived devices that can facilitate the use of formative assessment?

Methodology

The descriptive survey design was used in this study. This involves collecting data from teachers in the study area on their perception of impact and challenges, of using formative assessment in secondary schools. The area of study is Ilorin, Kwara State. Ilorin is made up of three Local Government

Areas: Ilorin East, Ilorin South and Ilorin west. The population for this study comprised all Senior Secondary School teachers from the 69 secondary schools in Ilorin. The study employed a multi-stage sampling technique to select 150 teachers from the population. The first stage was the stratification of Ilorin into the existing three Local Government Areas. The second stage was the selection of five senior secondary schools from each of the three Local Government Areas using simple random sampling technique. The final stage was the selection of 10 Senior Secondary School teachers from each of the sampled secondary schools using simple random sampling technique. In all, 150 Senior Secondary School teachers participated in the study. A validated researcher designed questionnaire titled "Questionnaire on Teachers' Perception of Formative Assessment (QTPFA)" was used in the study. Face and content validity of the instrument was determined by subjecting the instrument to the experts' scrutiny, while the coefficient of the reliability was 0.69 using test-re-test method of reliability. Data collected from this study was analyzed using mean and standard deviation.

Result and Discussion

Research questions were answered by subjecting the data collected to mean and standard deviation. The results of the analysis were presented below:

Research Question 1

What are the perceived impacts of formative assessment on students' motivation for learning?

Table 1: Perceived impact of formative assessment on students' motivation for learning

S/N	ITEMS	MEAN	SD	Rank	REMARK
1.	Formative assessment allows student to receive feedback about the quality of their work and what they can do to make it better	3.46	0.56	1st	Impact
2.	Formative assessment give a teacher information about the progress of the learner	3.43	0.56	2nd	Impact
3.	Formative assessment increase the active engagement of students, who are seen as ownership of their learning rather than being the passive delivery of curriculum	3.36	0.65	7th	Impact
4.	Formative assessment enhances involvement, motivation an d confidence in the students	3.40	0.58	3rd	Impact
5.	Formative assessment create effective management of the learning process through high quality interaction such as discussion, feedback and goal settings	3.39	0.62	8th	Impact
6.	Formative assessment improves students' interest in learning through mutually supportive interaction and positive interdependence among students.	3.38	0.61	4th	Impact
7.	Formative assessment increases both motivational and achievement needs of the students	3.39	0.61	5th	Impact
8.	Formative assessment involves students in active learning and focuses them on learning goals	3.22	0.72	9th	Impact
9.	Formative assessment involves students in active learning and focused them on learning goals	3.37	0.64	6th	Impact
10.	Formative assessment creates opportunities for dialogue to help learners set and achieve challenging goals based on high quality feedback on their progress.	3.19	0.71	10th	Impact

Senior Secondary School teachers. It revealed from the table that the teacher perceived all the identified impact of formative assessment as significant. The most perceived impact of formative assessment are: it allows student to receive feedback about the quality of their work and what they can do to make it better, it gives a teacher information about the progress of the learner, it enhances involvement , motivation and it improves students' interest in learning process. Others are: it increases both motivational achievement needs of the students, it involve students in active learning and focuses them on learning goal. This findings are supportive of previous studies of Stiggins (2007) , Cauley and Mcmillan (2010) and Brookhart (2010) who reported among other findings that formative assessment involves students in active learning, keep them on task, and focuses them on learning goals. But more important, it allows students to receive feedback on precisely what they need to do to improve, and what to do next to get better. Therefore, formative assessment support further learning and as such increases students' motivation engagement.

Research Question 2

What are the perceived challenges of using formative assessment in the classroom?

Table 2: Perceived challenges of using formative assessment in the classroom

S/N	ITEMS	MEAN	SD	Rank	REMARK
1.	Lack of teachers' understanding and application of the principles of assessment for learning	3.28	0.69	8th	Challenge
2.	Poor time allocation and teacher resistance to further testing of their students	3.40	0.58	1st	Challenge
3.	Problem of large class size/high student –teacher ratio	3.38	0.61	2nd	Challenge
4.	Inertia of traditional teaching practices/adaptation to change	3.38	0.59	4th	Challenge
5.	Problem of disaffection among the students about their feedback	3.31	0.59	7th	Challenge
6.	Lack of valid and reliable methods of gathering assessment	3.34	0.62	5th	Challenge
7.	Lack of qualified teachers/ experts	3.18	0.71	10th	Challenge
8.	Poor teacher motivation and remuneration/inadequate funding	3.33	0.63	6th	Challenge
9.	Unstable/changing in government policy	3.27	0.64	9th	Challenge
10.	Teachers' knowledge of scoring and interpretation of test score	3.37	0.66	3rd	Challenge

Table 2 shows perceived challenges associated with the use of formative assessment in the classroom by senior secondary school teachers. It revealed from the table that teachers perceived all the identified challenges associated with the use of formative assessment as significant. The most perceived challenges are poor time allocation and teacher resistance to further testing of their students, large class size, poor knowledge of scoring and interpretation of test scores, adaptation to change, inadequate funds and students' disaffection of their feedback among others. This finding is in consonant with the view of Chukwu (2005), Ifamuyiwa (2006) and Akinsola (2007) that inadequate fund and validity of instrument used are major challenges associated with formative assessment. Kayode (2003) also supported the findings that teachers' poor understanding of assessment concept and their poor knowledge of scoring and interpretation of test are crucial problems of effective implementation of formative assessment

Research Question 3

What are the perceived devices that can facilitate the use of formative assessment?

Table 3: Perceived devices that facilitate the use of formative assessment

S/N	Item	Mean	SD	Ranking	Remarks
1.	Employment of more qualified teachers that will help the students understand the standard expected of them	3.46	0.51	1st	Significant
2.	Setting of formative sub-tasks that can be built into a summative items	3.33	0.65	7th	Significant
3.	Enough time for discussion and reflection about criteria standards in the class	3.39	0.61	2nd	Significant
4.	Routine sharing of work among the qualified teachers	3.20	0.70	8th	Significant
5.	Involve students in the drawing up of assessment criteria	3.38	0.60	5th	Significant
6.	Allow the students to identify the kind of feedback they find the most useful	3.29	0.66	4th	Significant
7.	Periodical staff development in assessment strategies	3.39	0.61	2nd	Significant
8.	Using of peer review to get students to comment on each other work prior to submission	3.20	0.70	8th	Significant
9.	Get students to re-submit their work after receiving feedback on a particular assessment	3.38	0.60	5th	Significant
10.	Encouraging students to draw up a list of action points, based on the feedback they have just recover	3.17	0.71	10th	Significant

Table 3 shows perceived devices that facilitate the use of formative assessment by senior secondary school teachers. It shows that teachers perceived all the identified devices as significant. The most perceived means are employment of more qualified teachers, allocation of enough time, periodical staff development in assessment strategies, building of formative sub-task into summative items, students' involvement in drawing assessment criteria and students peer review among others. This finding corroborate the view of Leahy, Lyon, Thomson and William (2005) and Stiggins (2007) who opined that formative assessment attributes should be included in instruction and daily classroom experience as a method to address problem concerning assessment.

Conclusion

The impact of formative assessment on achievement motivation of secondary school student is numerous. It depends not only on the feedback but on the characteristics of the people involved (teachers and students) and the materials used in the assessment. With these formative assessments, it will allow the students to receive feedback on precisely what they need to do to improve, and what next to get better in order to achieve learning goals and get motivated. Therefore, formative assessment provided avenue further learning among secondary school students.

Recommendations

- Teacher should also figure out how best to adapt formative assessment to their needs and the need of their students by attending workshop training on formative assessment strategies.
- Teacher should be motivated to be become more committed to effective use of formative assessment.
- Secondary school teachers should also equip with the essential skills needed for formative evaluation.
- Assessment guideline and monitoring committee should be set up by the government in order to ensure high quality formative assessment and with the power to sanction teachers that deviate from the norm.
- In view of the importance of formative assessment to the students, the students should be involved in the evaluating of their own work, but they need to be taught how to be taught how to do this objectively.

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