FORMATIVE ASSESSMENT

Welly Ardiansyah[1], Murwani Ujihanti[2], Nurul Aryanti[3], Wasitoh Meirani[4]

English Department
Politeknik Negeri Sriwijaya

ABSTRACT: The use of formative assessments, or other diagnostic efforts within classrooms, provides information that should help facilitate improved pedagogical practices and instructional outcomes. However, a review of the formative assessment literature revealed that there is no agreed upon lexicon with regard to formative assessment and suspect methodological approaches in the efforts to demonstrate positive effects that could be attributed to formative assessments. Thus, the purpose of this article was to set out to clarify the terminology related to formative assessment and its usage.
Keywords: Formative assessment, learning outcomes

Assessment must be considered during the planning stage of instruction when learning outcomes and teaching methods are being targeted. It is a continuous activity, not something to be dealt with only at the end of a unit of study. Students should be made aware of the expected outcomes of the course and the procedures to be used in assessing performance relative to the learning outcomes. Students can gradually become more actively involved in the assessment process in order to develop lifelong learning skills.

The purpose of this paper is to help readers understand the importance and potential of formative assessment as a key component of a balanced and coherent assessment system.

LITERATURE REVIEW

Definitions of Assessment

When students and some teachers think of assessment, they might remember the pressure of final exams. Unpleasant memories of several exams in a couple of days usually make students' faces fall, and thinking about preparing and marking exams make teachers feel exhausted. But the fact is that, as Brown (2004) stated, testing and assessment are different.

Bachman (2004) defined assessment as "a process of collecting information about something that we are interested in, according to procedures that are systematic and substantially grounded". The result of an assessment procedure can be a score or a verbal description. Huhta as cited in Spolsky & Hult (2008) referred to assessment as "all kinds of procedures used to assess individuals (e.g., informal observations, self-assessments, quizzes, interviews, tests). Teachers assess their students every session. However, testing is a way of conducting assessment which is technically associated with definite timing and settled procedures.

When teachers consider an assessment task, they usually have some questions in their mind such as: "*When* and *how often* shall we assess the students?", or "*How*

should we conduct an assessment procedure?" The question of "*What*" and "*Why*" rarely come to teachers' mind (Bachman & Palmer, 2010). The reason of not asking *what*-question is quiet clear as teachers usually know what they want the learners to learn. However, it is somehow vague that why teachers do not ask *why*-questions; they either know the answer or seldom consider the reason of assessment. *Why*-question is important since it will define the decision to be made about the outcomes of an assessment.

The very first use of language assessment is to make decisions for individuals (micro-evaluation), programs (macro-evaluation), and other stakeholders (Bachman & Palmer, 2010). It can be used to select individuals, place them into appropriate course of study, make changes in instruction, predict future performance of test-takers, make changes in educational programs (formative or summative decisions), to formulate new research questions, and modify the understanding of a specific language phenomenon. Therefore, the decision going to be made is so essential that it can define type of assessment. In the following sections, classifications of assessment are presented based on the decisions which are going to be made according to their outcomes.

Formative Assessment and Learning
Formative assessment is a process that provides feedback and support during instruction, such that teachers and students can adjust ongoing instruction and learning to improve students' achievement of planned instructional outcomes (Black & William, 1998). Nicol and Macfarlane-Dick (2006) further interpreted formative assessment as an integral part of instruction and an important source for students and teachers to make reflections on. It can be the compass to guide students towards learning and academic achievement. Formative assessment has been recognized by educators and researchers as an important element in conducting learning activities for improving student learning effectiveness (Bell & Cowie, 2001). In traditional in-class teaching, it is a form of assessment that is integrated into the interaction between teachers and students for offering feedback to them (Perrenoud,1998). In the past decade, several studies have reported the effectiveness of applying formative assessment to the learning activities in web-based learning environments. For example, Gardner, Sheridan, and White (2002) developed a web-based learning and assessment system to support flexible education; Orsmond, Merry, and Callaghan (2004) employed a formative assessment model to develop a system incorporating peer and self assessment. In addition, assessment can be considered formative only if it results in action by the teacher and students to enhance student learning (Black, 1993).

It is through the teacher–student interactions during learning activities (Newman, Griffin, & Cole, 1989) that formative assessment is done and that students receive feedback on what they know, understand, and can do. It is also in these student–teacher interactions during learning activities that teachers and students are

able to generate opportunities for furthering the students' understanding. As formative assessment is viewed as occurring within the interaction between the teacher and student(s), it is at the intersection of teaching and learning (Gipps, 1994). In this way, teaching, learning, and assessment are integrated in the curriculum.

Therefore, the process of formative assessment always includes students. It is a process through which they find out about their learning. The process involves them in recognizing, evaluating, and reacting to their own and/or others' evaluations of their learning. Students can reflect on their own learning or they may receive feedback from their peers or the teacher.

Formative assessment is also the component of teaching in which teachers find out about the effectiveness of the learning activities they are providing. It can be viewed as the process by which teachers gather assessment information about the students' learning and then respond to promote further learning.

The Roles of Teachers and Students in Formative Assessment
The kind of classroom evoked by the sociocultural constructivist theory of learning is one in which teachers and students share responsibility for learning (Heritage, 2010). In this classroom, one would see teacher and students working together as part of an interactive community of learners, in roles that may be new to some (Brown & Campione, 1994), including engaging in formative assessment. Formative assessment calls upon teachers not only to determine *whether* students have learned something, but also to probe students' ways of thinking to get at *why* any learning gaps exist. In addition to using assessment evidence to plan future instruction, teachers are expected to use it to help students (1) judge the state of their own knowledge and understanding, (2) identify the demands of a learning task, (3) judge their own work against a standard, (4) grasp and set learning goals, and (5) select and engage in appropriate strategies to keep their learning moving forward (Black & Wiliam, 1998). These metacognitive skills are critical to the development of intentional learning and of independent, self-propelled learners who can regulate their own learning and self-correct as needed (Bransford et al., 2000).

Students are expected to be active agents in their own learning by engaging, in increasingly independent ways, in the previously enumerated skills (Clark, 2012). As Black and Wiliam (2009) observe, "Since the responsibility for learning rests with *both* the teacher *and* the learner, it is incumbent on each to do all they can to mitigate the impact of any failures of the other" (p.7). International studies on the impact of formative assessment practices show that such practices can indeed support students' ability to take responsibility for and regulate their own learning, but that this occurs only when students understand that assessment can serve purposes other than summative purposes. Perrenoud (1991) notes that formative assessment places demands on students to take a more serious approach to learning and to work harder—demands they may not happily embrace; however, when they do, they may be their own best sources of feedback about their own learning. Student self-

assessment does contribute to higher student achievement, and it is most likely to do so when students are trained in using sets of performance criteria, such as rubrics, to evaluate their work or when they receive other direct instruction on self-assessment (Ross, 2006). While the self-assessments of students may not always be in sync with their teachers' assessments of them, discrepancies can form the basis of "productive conversations about student learning needs" (Ross, 2006, p.9).

Some forms of formative assessment require students not only to be active agents in their own learning but also to be, at times, facilitators of each other's learning through a process of peer assessment. Peer assessment has students serving as instructional resources to each other in much the way that collaborative learning does (Black & Wiliam, 2009). Students' feedback to each other during peer assessment is another source of information about their level of understanding (Black & Wiliam, 2009). For students to adopt such roles requires that they have a clear understanding of learning goals and performance criteria. Some suggest having teachers and students jointly construct assessment criteria in order to increase the reliability of peer assessment (Topping, 2010) or having teachers model the process for students in order to facilitate their participation (Black & Wiliam, 2009, p.25).

Formative Assessment to Foster Teacher Growth
A comprehensive teacher assessment and evaluation system, according to Danielson and McGreal (2000), should have two distinct components:

1) ongoing, consistent, formative assessments of performance for the sole purpose of fostering professional growth and improved practice; and
2) periodic summative evaluations of teacher performance for the purpose of approving continued employment. These two assessment components should share the same standards for growth and performance. However, they must remain distinctly separate from one another.

Teachers' engagement in formative, ongoing assessment to improve their practice should involve neither threat of punishment nor promise of reward. Assessments should occur on a regular basis. Formative assessments should also facilitate interaction and feedback among colleagues. They should allow peers, mentors, and professional coaches to provide teachers with feedback about their practice and engage teachers in learning processes that are free from employment-related decisions. Formative assessments may also use student learning measures to inform teachers of student progress and thereby help to improve student learning.

The Teacher's Role in Assessment
In the classroom, teachers are the primary assessors of students. Teachers design assessment tools with two broad purposes: to collect information that will inform classroom instruction, and to monitor students' progress towards achieving year-end

learning outcomes. Teachers also assist students in developing self-monitoring and self-assessment skills and strategies. To do this effectively, teachers must ensure that students are involved in setting learning goals, developing action plans, and using assessment processes to monitor their achievement of goals. Teachers also create opportunities for students to celebrate their progress and successes.

Teachers learn about students' learning and progress by regularly and systematically observing students in action, and by interacting with them during instruction. Because students' knowledge, and many of their skills, strategies, and attitudes are internal processes, teachers gather data and make judgments based on observing and assessing students' interactions, performances, and products or work samples.

Teachers demonstrate that assessment is an essential part of learning. They model effective assessment strategies and include students in the development of assessment procedures such as creating rubrics or checklists. Teachers also collaborate with parents and with colleagues regarding student assessment.

Principles of Assessment that Assist Learning and Inform Instruction		
1. An Integral Part of Instruction and Learning	**2. Continuous and Ongoing**	**3. Authentic and Meaningful Language Learning Processes and Contexts**
Assessment . . . • is meaningful to students • leads to goal setting • fosters integration with other curricular areas and application to daily life • reflects instructional strategies used • uses a wide variety of methods • reflects a definite purpose	*Assessment . . .* • occurs through all instructional activities (observations, conferences, responses, logs) • occurs systematically over a period of time • demonstrates progress towards achievement of learning outcomes	*Assessment . . .* • focuses on connecting prior and new knowledge (integration of information) • focuses on authentic context and tasks • focuses on application of strategies for constructing meaning in new contexts
4. Collaborative and Reflective Process	**5. Multidimensional, Incorporating a Variety of Tasks**	**6. Developmentally and Culturally Appropriate**
Assessment . . . • encourages meaningful student involvement and reflection • involves parents as partners • reaches out to the community • focuses on collaborative review of products and processes to draw conclusions • involves a team approach	*Assessment . . .* • uses a variety of authentic tasks, strategies, and tools • is completed for a variety of purposes and audiences • reflects instructional tasks	*Assessment . . .* • is suited to students' developmental levels • is sensitive to diverse social, cultural, and linguistic backgrounds • is unbiased
7. Focused on Students' Strengths	**8. Based on How Students Learn**	**9. Offers Clear Performance Targets**
Assessment . . . • identifies what students can do and are learning to do • identifies competencies in the development of knowledge, skills, and attitudes • considers preferred learning styles • focuses on celebrations of progress and success • provides for differentiation • provides information to compare a student's performance	*Assessment . . .* • uses sound educational practice based on current learning theory and brain research • fosters development of metacognition • considers multiple intelligences and learning styles • uses collaborative and cooperative strategies • considers research on the role	*Assessment . . .* • encourages student involvement (setting criteria, measuring progress, working towards outcomes and standards) • encourages application beyond the classroom • provides a basis for goal setting • provides students with a sense of achievement • provides information that compares a student's performance to

with his/her other performances	of memory in learning • reflects current models of language learning	predetermined criteria or standards

Assessment Objectives

Educational Assessment is the process of documenting, usually in measurable terms, knowledge, skill, attitudes and beliefs. Assessment can focus on the individual learner, the learning community (class, workshop or other organized group of learners), the institution, or the educational system as a whole (also known as granularity). The final purpose of assessment practices in education depends on the theoretical framework of the practitioners and researchers, their assumptions and beliefs about the nature of human mind, the origin of knowledge and the process of learning.

Oral Test

The oral exam is a practice in many schools and disciplines in which an examiner poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the subject to pass the exam. The oral exam also helps to reduce (although it does not eliminate) the risk of granting a degree to a candidate who has had the thesis or dissertation ghostwritten by an expert.

Written Test (Objective and Subjective)

Assessment (either summative or formative) is often categorized as either objective or subjective. Objective assessment is a form of questioning which has a single correct answer. Subjective assessment is a form of questioning which may have more than one correct answer (or more than one way of expressing the correct answer). There are various types of objective and subjective questions. Objective question types include true/false answers, multiple choice, multiple-response and matching questions. Subjective questions include extended-response questions and essays. Objective assessment is well suited to the increasingly popular computerized or online assessment format.

Informal and Formal

Assessment can be either formal or informal. Formal assessment usually implies a written document, such as a test, quiz or paper. A formal assessment is given a numerical score or grade based on student performance, whereas an informal assessment does not contribute to a student's final grade. An informal assessment usually occurs in a more casual manner and may include observation, inventories, checklists, rating scales, rubrics, performance and portfolio assessments, participation, peer and self-evaluation and discussion.

Open Book and Take Home Exams

Open book exams allow you to take notes, texts or resource materials into an exam situation. They test your ability to find and apply information and knowledge, so are often used in subjects requiring direct reference to written materials, like law statutes, statistics or acts of parliament.

Open book exams usually come in two forms:

☐ Traditional sit-down / limited-time exams, with varying degrees of access to resources and references.

☐ Take home exams–open book exams you do at home. Question(s) are handed out, answers are attempted without help from others, and the exam is returned within a specified period of time (often the next day).

Material Used in Open Book Exams

The materials you can take into an Open Book exam can vary. Some restrict the type of materials (e.g. formula sheets and tables or a limited number of texts), others may be totally unrestricted (any quantity of any material).

Effects of Formative Assessment

Assessment is more apparent in the form of summative testing in educational world rather than informal formative tasks. Students look for ways to be the "top student" through assessment and they rarely try to see a connection between assessment and learning. However, Black and William's extensive review of literature (1998) has changed the view towards assessment.

Black and William (1998) reviewed more than 250 articles and books to examine the effect of formative assessment on students' performance. They found that employing different methods to assess the student during the course would enhance students' success. The works on formative assessment suggest that new methods to increase effective feedback will change classroom practices and bring adjustment in learning and teaching. Motivation and self-assessment are also encouraged in formative assessment.

Nevertheless, in spite of the clear benefits of formative assessment, techniques which enhance this type of assessment have usually been neglected because of practical problems in the classrooms. Marking problems (generous or unfocused), unrealistic practices, teacher-made tests which reflects standardized tests format, lack of negotiation among teachers about formative assessment, overemphasis on giving scores while useful feedback is neglected, norm-referenced assessment in which low-achieving students start to believe they cannot learn, and lack of care about students' performance in previous classes are just some problems mentioned in Black and William's review. Furthermore, if pressure of various external tests is added, there will be no room for actual formative assessment in classroom routine.

The problems mentioned in Black and William's study make scholars to examine formative for-learning assessment in all educational areas. Although

scholars such as Bachman (1990) and Shohamy (1998) highlighted the role of feedback in teaching and feedback, studies which aimed at formative assessment in EFL/ESL classes have been started since 2000.

CONCLUSIONS

Formative assessment has long been recognized as one of the most influential methods to improve learning and teaching. Classroom assessment, on the other hand, has potentials to be formative and for-learning. However, Black and William (1998) showed that practical problems in classrooms can hinder effective formative assessment to be conducted. Therefore, by considering the importance of formative assessment in ESL/EFL teaching and learning, the difficulties and complexities teachers face in applying formative assessment in their classes, and lack of studies on this area, scholars should also focus their attention to the problems of making classroom assessment as formative as possible and suggesting ways to improve classroom assessment.

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