

Integrating Assessment to Classroom Learning

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How to cite this article: Alma C. Valendez (2024). Integrating Assessment to Classroom Learning. *Library Progress International*, 44(3), 6140-6147.

ABSTRACT

Classroom interaction is a fertile ground for formative instruction and assessment, and knowing when and how to embed assessment in day-to-day student-teacher interactions is considered essential. Using the initiation–response–evaluation (IRE) model of classroom interaction, the study looked into how formative assessment is utilized by teachers among the selected Higher Education Institutions – State and Local Universities and Colleges – in Cebu City. The Colaizzi method of data analysis was used to identify the emerging assessment practices from a series of recorded classroom sessions that were segmented and analyzed according to the variables of the study. Data showed that teachers initiated formative interaction by maximizing learners' viewpoints, activating prior knowledge, and using a well-prepared instructional activity. They engaged students in active and collaborative learning interaction with teacher and peers through facilitated and active learning, small group management activity, and low affective filter learning environment; and they evaluated students' engagement in learning through evaluative, discursual, and descriptive feedback. These formative assessment strategies and activities can be readily tailored according to the needs of the learners, especially if teachers design learning to consider the four elements of the teaching and learning process, plus the assessment element. Finally, the methods utilized by teachers in implementing formative assessment in the classroom develop the student's cognitive abilities, and such processes can be readily tailored for application to flexible learning modalities.

Keywords: Formative assessment, Assessment practices, Assessment strategies, Interactive assessment

INTRODUCTION:

Empowering learners is a fundamental principle of modern learning where learners are no longer passive, but active constructors of knowledge. With knowledge and information at their fingertips, learners become responsible and independent while teachers face the challenge of assessing learning beyond numerical equivalents. When properly integrated into the teaching-learning process, assessment complements the instructional process [1], empowers students to ask reflective questions, influences classroom interactions [2], and shapes student understanding of what to learn and what learning is [3].

Formative assessment is a continuous process of gathering learning evidence that teachers can use to improve teaching and learning. Teachers use it to adjust their instructional methods and strategies, and students use it to adjust their approaches and strategies to learning [4]. Formative assessment focuses on everyday classroom interactions and activities such as conversations, daily routines, observations, interviews, and conferences to monitor student progress and adapt teaching methods accordingly [5].

While research identified a few effective formative assessment and feedback strategies in higher education, it also revealed a significant gap in quality evidence supporting these practices [6]. Similarly, teachers consider formative assessment to be important in learning; yet, classroom assessments remain predominantly summative [7]. Moreover, teachers have generally acknowledged the impact of formative assessment on learning; yet, assessment tasks and activities in the classroom remain highly summative [8]. Assessments are usually administered in the form of quizzes and tests [9].

Adopting the initiation-reply-evaluation (IRE) classroom interaction model [10], this study looked into the various formative assessment strategies and activities that teachers utilized in the different stages of the assessment process. In a capsule, the teacher asks a question; the student replies; and the teacher evaluates the reply. The initiation-reply structure of interaction occurs through a series of information exchanges between the

teacher and the student through simple conversations, informal conferences, clarificatory questions, observations, and the like. When the learner is actively engaged in this interaction, the teacher directs the initiation-reply pattern into a gathering-learning-evidence process that will enable them to identify learning gaps, provide an appropriate scaffold, and eventually help the learner achieve the learning target. Following the information-exchange process that turned into a gathering-of-learning-evidence process is the evaluation of student responses, also known as feedback [10]. Feedback-giving is aimed at closing the gap between the learner's actual and target performance [11] and provides gap information so that learners can make learning adjustments, thereby affecting positively future performance.

Literature shows that formative assessment improves student academic performance [12], especially the low achievers, or learners who are struggling in their studies [13], [14], and [15]. The increase in academic performance is attributed to the facilitative role of the teacher and the value of constructive feedback in promoting meaningful learning experiences for the learners, and to the applicability and transferability of the learning outcomes that learners have gained in the process. One study revealed that successful students see the assessment and its role in the formation of their knowledge and skills as a process where they can analyze and interpret feedback, and on their initiative, self-assess and link their current accomplishments with broader capabilities, goals and applications [16]. Formative assessment activities used in the aforementioned studies include progressive, low-stakes assignments where students could practice and hone their skills; teacher, peer, and self-evaluation guided by a pre-identified set of criteria; and, independent task time for learners where learners interact with teacher/peer evaluator and discuss ways to improve their work [13], [14], and [15].

Studies also show that formative assessment is most effective when it is transformed into a powerful tool for learning where students are engaged in the assessment process, when specific and timely feedback on errors and suggestions for improvement are provided; and, when students understand the teaching objectives and assessment criteria [17]. Moreover, formative assessment is found to be beneficial to the teaching-learning process because it encourages learners to self-evaluate, develops critical thinking, promotes motivation and self-esteem, encourages self-regulation, and fosters meaningful interactions among learners and teachers [18]. It likewise leads students to deeper and more elaborate processing, enhances learners' engagement, and allows learners to explore various learning strategies that promote deeper information processing and a greater sense of autonomy over learning [19].

While most of the literature on formative assessment centers on its impact on improving student learning, the present study delves into the various strategies and activities that English teachers use in integrating formative assessment in the classroom.

2) METHODS AND METHODOLOGY:

The study is descriptive qualitative which adopts the Colaizzi method in analyzing the first-hand experiences of the participants who are teachers from the selected Higher Education Institutions – State and Local Universities and Colleges – in Cebu City. The inclusion/exclusion criteria included participants who have taken assessment courses in the baccalaureate or master's degree program, have at least 10 years in the teaching profession, use English as a medium of instruction, are teaching major subjects, and most importantly, are recommended by the Dean of the College to participate in the study. Four participants were initially considered for the study, but only three signed and returned the consent form. The consent form indicated that the participants have the right to "withdraw" from the study at any time. Similarly, the study protocol was submitted to and was granted clearance by the ethics research committee before the conduct of the study.

The data were gathered by video recording three class sessions of each of the research participants, with one and a half hours per class session, having the same students but covering different topics. The recordings were considered primary data sources, segmented into episodes according to the variables of the study. A conscientious review of the recorded classroom interaction was similarly observed to make certain that information relevant to the study is noted as teachers integrated formative assessment in day-to-day classroom activities.

3) RESULTS:

The findings of the study revealed that teachers employed various strategies and activities in integrating formative assessment in the classroom during the different stages of the assessment process. Table 1 presents the data.

Table 1: Formative assessment strategies and activities in the classroom

Initiation stage	Engagement stage	Evaluation stage
Maximizing Learners' viewpoint	Facilitated and Active Learning	Evaluative Feedback
Activating Prior knowledge	Small Group Management	Discoursal Feedback

	Activity	
• Well-prepared instructional activity	• Divergent Questions	• Descriptive Feedback
	• Low Affective Filter Learning Environment	

4] DISCUSSION

This section describes the various strategies and activities that teachers use in integrating formative assessment in the classroom during the different stages of the assessment process.

Initiation Stage

During the initiation stage of the formative assessment process, the teacher encourages the learners to engage in active interaction with him and/or with peers. The strategies and activities that teachers employed in the process include maximizing learners' viewpoints, activating prior knowledge, and a well-prepared instructional activity.

Maximizing Learners' viewpoint. Personal viewpoint is the way the individual thinks and sees the world. A person's worldview is influenced by life's experiences and his understanding of them, which in the end, governs one's attitude toward certain aspects of life.

In this study, the teacher has successfully initiated interactions by utilizing students' varied viewpoints on the topic as a springboard for engagement. Because viewpoints are a product of one's analysis, interpretation, and evaluation of information from various sources, teachers and peers may accept or challenge them depending on their stand on the issue or topic.

The following are extracts from the different segmented video recordings:

Extract 1: "What can you say about this activity?" (RP1 and RP2)

Extract 2: "Do you think there can be an approach to understand the language?" (RP1)

Extract 3: "What are your realizations now after knowing the bilingual education policy of other countries?" (RP1)

It can be observed that the teacher's initiation questions do not have one definite answer. Rather, they focus on enriching the student's learning experience by inviting them to participate and engage in an active discussion with the class. As a result, students are encouraged to formulate their views on the topic which ignited an active exchange of ideas among them.

One implication that may be drawn out of this example is the teacher's scope of knowledge that will enable him to accommodate the varied views for discussion. Second, the teacher's facilitative role in the learning process is very crucial because the nature of interaction and engagement that would follow relies on how the teacher directs them toward the learning target. Third, asking the students about what they think of the topic sets the attitude that they do not only passively listen to the presentations but have to actively participate and analyze information presented to them as well.

Activating Prior knowledge. The recall of information from students' long-term memory provides students with an opportunity to engage in active interaction with teachers and peers.

Extract 3: "You still remember your child and adolescent subject? (RP1)

Extract 4: Was there a discussion about...?" (RP2)

Students' underlying knowledge of the concept is a rich resource of information that can accelerate the formative assessment engagement initiation process. As students connect old and new information, and as they make meaning out of this connection, their understanding of the concept is enriched by sharing, interacting, and exchanging meaningful experiences and ideas. In the process, cognitive processes are employed which result in the development of students' higher cognitive skills and abilities.

Well-prepared instructional activity. Instructional materials enhance the teaching and learning process. They facilitate the acquisition of information necessary for the development of the knowledge and skills to be learned through a coherent and logical delivery of instruction. Careful planning keeps instructional activities aligned and in consonance with the learning target. It also provides teachers with clear direction in the delivery of instruction. Moreover, planning and designing instructional materials that focus on the target outcomes is essential in teaching and learning. They result not only in meaningful and interesting learning tasks and activities but also in the development of higher cognitive abilities and the most anticipated supportive learning environment [20]. Likewise, learning activities that encourage the exchange of differing viewpoints among students through a nonthreatening learning environment facilitate learning outcomes that students appreciate as useful for success in

a multicultural society [21].

In the study, these activities include a word charade, a small group management activity, and accomplishing worksheets. They were carefully planned activities, and the clarity of the instructions enabled the students to carry them out smoothly and efficiently and provided them with opportunities to engage in a collaborative learning experience in class. Explaining the instruction clearly to the students before they perform the activity is essential to the success of the initiation process because how the activity is carried out in class affects the quality of students' engagement in learning.

Engagement Stage

Engagement refers to the student's active involvement in the learning process characterized by active and collaborative interaction and exchange of information with teachers and peers leading the learner closer to the attainment of the learning target. The following are the formative assessment strategies and activities that teachers used in engaging students in active and collaborative learning interaction with teachers and peers.

Facilitated and Active Learning. Facilitated learning encourages learners to take ownership and control of their own learning while the teacher provides the needed learning resources and support to the learners. In facilitated learning, the teacher creates and manages collaborative learning experiences that promote active interaction among learners. Active learning, on the other hand, focuses more on developing students' skills rather than on transmitting information. Learners construct knowledge while teachers provide learning opportunities; learners take responsibility for learning while teachers enable and activate learning.

It was observed from the teacher's initiation activities that learning targets had been identified and discussed in class. The process of the group presentations has been discussed and agreed upon such that on the day of the presentation, the teacher assumed his/her facilitative role by reminding the students/different groups of the rules and mechanics of the activity.

In response to the facilitative and formative roles of the teacher, the students designed their respective presentations, brainstormed for different activities needed for the presentation, conceptualized outputs, and shared comments and reactions on their outputs. It can be observed that as students take charge of the different activities, they also take control of the learning process and take responsibility for their own learning.

Extract 6: "Do you think such conversations exist now?" (RP1)

Extract 7: "What do you think is the relevance of our topic for today?" (RP3)

Extract 8: "Will there be an approach to address the pressing problem?" (RP1)

These questions promote an interactive discourse between teacher and student as well as among students because the questions have referential functions and do not have predetermined answers. Instead, the questions provide the students with opportunities to analyze, interpret and evaluate information forwarded by the class which can broaden their perspectives leading the students beyond the text information. Questions raised by both teacher and group facilitators picked up students' thoughts and ideas and incorporated them into the flow of interaction which developed to a higher level of dialogue between the teacher and the class [8]. Facilitated and active learning as a formative assessment activity has provided students with the opportunity to actively engage in learning while taking ownership of and responsibility for their learning.

Small Group Management Activity. It can be observed that while group facilitators take control of the learning activities for the day, they are in constant consultation with the teacher. All groups have been advised on the process and the mechanics of the presentation and they are required to submit the plan of activities the day before the presentation. This allows the teacher to examine the content and form of every group before the actual presentation. This also allows the teacher to give a formative assessment of the student's work. The teacher may have provided the groups with content and may have instructed the groups to observe the same form but the activities and the process of implementation are all designed by the groups. This means that the learning activities that the students undertake go beyond the actual classroom presentations. Group interactions have already taken place as students design their presentations, brainstorm for the activities that would illustrate the concepts, conceptualize instructional materials, and share comments, observations, and insights on their work.

The small group management has demonstrated a comprehensive interactive learning activity where students are in complete control of their learning. Moreover, the activities students undertake during the preparation of the presentation are characterized by critical and creative thinking; and cognitive processes that would make them independent and lifelong learners. The teacher's facilitative role is highlighted in the type of questions she asked during the actual presentation.

Extract 9: "Have you given the instructions already?"

"What are the things to be done?"

"Can you give first the instructions?"

"How many minutes for every presentation?"

"The facilitator may not give that direction/instruction in the group..."

"Facilitator, any additional inputs especially on ...? (RP1)"

Divergent Questions. Classroom interactions are commonly initiated by questions whose role in the teaching and learning process is proven to be effective. Research shows that asking good questions is more important than getting the right answers [22] and that the quality of one's thinking is given by the quality of one's questions [23]. This statement implies that the quality of questions that teachers ask establishes the nature of interaction and learning engagement that transpire in the classroom.

Exemplified in the following extracts are divergent questions asked by the teacher. These are open-ended questions that require no specific correct answer.

Extract 10: "Do you think we took the idea of mother tongue-based curriculum from...?"

"Do you think there can be an approach to understanding the language? (RP1)"

Extract 11: "Do you think there can be a better approach? Or there will be an approach to address the pressing problem? What do you think?" (RP1)"

Divergent questions encourage students to express ideas from their individual perspectives; this means, ideas grounded on individual backgrounds, experiences, and prior knowledge. It makes classroom interactions and learning engagement even more meaningful because students express not only what they think but also how they feel. The more the students participate, the more they become at ease and spontaneous with the process making learning more collaborative and engaging. Finally, the learning process allows students to take ownership of the ideas they bring and share in the discussion and makes them more responsible for their learning.

Low Affective Filter Learning Environment. The teacher's attitude toward the students and learning is another factor that encourages students to actively engage and participate in the learning process. They need to be established and made evident to the students to allow them to feel comfortable and be assured that giving both the right and wrong responses is part of the learning process. This belief results in students lowering their affective filter which enables them to interact with the teacher and with classmates and make the learning process enjoyable and meaningful.

Evaluation Stage

Evaluation, as defined in the study, is the teacher's assessment of the student's responses to learning. It expresses the learning and instructional adjustments that students and teachers will undertake to achieve the target learning outcomes. The following are the different types of feedback used by teachers in evaluating students' responses.

Evaluative Feedback. Evaluative feedback aims to confirm, disconfirm and modify students' responses based on the teacher's predetermined response to the question. It may be expressed explicitly or implicitly [24]. In the study, evaluative feedback is demonstrated through immediate correction or error, words of praise, and confirmation. The following are examples extracted from the data source:

- Episodes of immediate corrections:

Extract 12: "National test" to mean "standardized test" (RP1)"

Extract 13: "ministry of education" to mean "department of education" (RP1)"

- Words of praises:

Extract 14: "very good" and "very nice" (RP3)"

- Confirmation of correct responses:

Extract 15: "I'm expecting that also" (RP1)"

Extract 16: "so it's also happening in the classroom" (RP1)"

- Implicit evaluation

Extract 17: "So the problem now is if the facilitators never have the idea of what to discuss because they did not study..." (RP1)"

Discoursal Feedback. Discoursal feedback aims to solicit students' ideas and insights which are incorporated into learning interaction to engage students in meaningful exchange of ideas. It emphasizes content such that errors in grammar and structure do not necessarily receive immediate correction, although they may be addressed by reformulating them into acceptable form. Discoursal feedback occurs with referential questions where there are no predetermined correct responses [24].

In the study, discoursal feedback is demonstrated through the yes/no question which is followed either by example, elaboration, or explanation. For example, when the facilitator asked the class about the relevance of the activity to the topic, the teacher asked "*Is it relevant to ask that question?*" before anyone could answer. Although the question did not require the student to support his/her answer, the student followed the "yes/no" response with an explanation that provided support to the answer and convinced the teacher of its relevance. Had the explanation been lacking in substance, the student's response would have engaged the teacher and the student, or even the class, in an exchange of reasons to prove the relevance or irrelevance of the question. The relevance or irrelevance would not be established by any predetermined correct answer but by substance of reason. In like manner, if the question ends with a simple yes or no response, the question would have become an evaluative one.

Reflective Toss Questioning. Another discoursal feedback observed in the study is the reflective toss questioning. This was illustrated when one question was raised by the students:

Extract 18: "*Are code-switching and pidgin the same?*" (student)

The question was addressed to the teacher after the class could not agree on whether or not code-switching and pidgin are the same. Instead of answering it, the teacher addressed the question back to the whole class in order for the conflicting sides to come to a definite answer to the question [25]. At first glance, the question appears to be close-ended, an evaluative one. It is discoursal, however, because the response requires the students to compare and contrast the two concepts either by describing or by giving examples or by doing both. Moreover, the question may have a predetermined correct response but the process of giving the response involves higher cognitive processing.

Descriptive Feedback. Descriptive feedback was also observed to be utilized in the study. Examples of this were observed after the presentation of a group output.

Extract 19: "...the argument in an expanded paragraph form or one sentence..." (RP2)

Extract 20: "*Now in your case, you already cited the illustrative examples of Lisa Turner.*" (RP2)

It can be noted that the descriptive feedback sounds positive, neither implying correctness nor incorrectness of the answer. Instead, they simply describe how the answer is formed and what the answer contains. They are task-focused, describing what students are able to do, and informing students of their performance in relation to the target. They are also consistent with the teacher's initiation activity in the study.

Likewise observed in the study is that the teacher who demonstrated the aforementioned descriptive feedback was the same teacher who initiated learning engagement by setting performance goals to define to the students the result they desire to achieve. This means that the three components of formative assessment namely, learning target, monitoring of learning, and feedback are constantly aligned throughout the learning process. This also means that formative assessment is an effective instructional tool. Finally, this means that the teacher has successfully utilized formative assessment for instruction.

One can never tell how learning evaluation activities affect students in the process. What works well with some groups may not work well with others. What works well with others may be otherwise to others. Knowing where the students are in their learning, their skills and abilities, and their learning styles and preferences may have made the evaluative feedback an effective tool in assessing students' learning.

5] CONCLUSION

Formative assessment activities can be readily tailored to the learners' needs and preferences especially if they are designed considering the four elements of the teaching and learning process, namely: learner, teacher, content, and environment, plus the assessment element. Cliché sounding it may be, but designing instructional materials and activities to address students' diversity entails preparations that are characterized by teachers' diligence and dedication to teaching; many of which extend beyond the interactions that are observed during the actual teaching and learning process.

Finally, teachers' knowledge of formative assessment may significantly influence the integration of formative assessment in the overall instructional process, but the teachers' unparalleled commitment to the teaching profession has a significant impact on students' engagement in learning.

7] FUNDING STATEMENT:

"The authors did not receive financing for the development of this research".

8] DATA AVAILABILITY:

The data that support the findings of this study are available from the corresponding author.

9] CONFLICT OF INTEREST:

"The author declares that there is **no conflict of interest**."

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