

FORMATIVE ASSESSMENT FOR THE CLASSROOM TEACHER

Analyzing the current skill level of students in a classroom at any given time and determining the best course of action to ensure they all meet the target learning goals can be a challenge, even for seasoned teachers. The idea of using formative assessment to meet students' individual needs is not new. In fact, researchers as far back as Benjamin Bloom have shown that one-to-one tutoring is the most effective form of instruction because of the tutor's ability to pinpoint misconceptions and provide immediate feedback and correctives (William, 2011). Despite continued research that shows formative assessment can enhance student success, many teachers struggle to use the full array of formative assessment practices available. The question then becomes: What can teachers do to effectively improve and enhance their use of formative assessment in the classroom environment?

What Is Formative Assessment?

Over the course of the last century, researchers have debated the specifics of the definition of formative assessment. In her most recent book, *Science Formative Assessment: 75 Practical Strategies for Linking Assessment, Instruction, and Learning*, leading researcher Page Keeley defines formative assessment as “a systematic process of collecting evidence about students’ thinking and learning to inform instruction and provide feedback to the students while simultaneously promoting learning. It happens *during* the learning process” (Keeley, 2016, p.6). Furthermore, the *Assessment Reform Group* outlined seven elements of formative assessment that promote learning: (1) it is embedded in the teaching and learning of which it is an essential part; (2) it involves sharing learning goals with students; (3) it aims to help students to know and to recognize the standards they are aiming for; (4) it involves students in self-assessment; (5) it provides feedback, which leads to students recognizing their next steps and how to take them; (6) it is underpinned by confidence that every student can improve; and (7) it involves both teachers’ and students’ reviewing and reflecting on assessment data.

Over time, one key element has emerged: assessment is in the service of the learning process rather than serving to evaluate the effectiveness of the learning process (Furtak et. al., 2016). In the works of Keely (2016) and the Assessment Reform Group (Furtak et. al., 2016), the principles that characterize formative assessment ultimately focus on a student-centered approach. By focusing on formative assessment as a student-centered endeavor, teachers can empower students to continue their own learning once the teacher is no longer available to offer support.

Why Should I Consider Doing This?

A key aspect of formative assessment is that it is an ungraded process which provides both the student and teacher with feedback that shows levels of understanding, marks progress towards learning goals, and indicates potential next steps for instruction (Stewart and Houchens, 2014). Additionally, when student self-assessment and descriptive feedback are embedded into the learning and provided consistently, teachers have the ability to drive student achievement and motivation for learning significantly (Cauley and McMillan, 2010; Clark, 2012a). Finally, when teachers use tools such as formative assessment probes, predict-

explain-observe (P-E-O) probes, and formative assessment classroom techniques (FACTs), students learn to act as resources for one another rather than relying solely on the teacher (Keeley, 2019). Viewing formative assessment as an ongoing multi-faceted process in this way provides teachers with the tools they need to better recognize the growth and development of their students.

How Does It Work?

The teacher plays a vital role in the formative assessment process in the classroom setting by framing the interaction, emphasizing the role of feedback with their students, providing time and space for students to self-assess and guide their progress, and fostering self-determination in students (William, 2011). By incorporating these actions into standard practice, formative assessment can become naturally integrated into the classroom so that students view assessment as a natural part of their learning process rather than an event.

Framing the Interaction

It is important that students have a clear understanding of what teachers expect of them. Providing clear learning targets along with strong and weak student work samples enables students to see where they are and where they are going. Student work samples are a powerful tool because they can provide clarification as to why the teacher is giving students specific feedback (William, 2011).

The Role of Feedback

Feedback should be used during instruction as often and whenever possible. As students are working or answering questions, it is important to identify specific misconceptions and provide students with corrective feedback which enables them both to correct their mistakes and to identify them in the future. The most effective feedback focuses on skill development, understanding, and mastery, treating student misunderstandings as an opportunity to learn rather than just as a corrective action (Cauley & McMillan, 2010).

By showing students specific misunderstandings or errors that frequently occur in a content area or a skill set, and showing them how they can adjust their approach to the task, students can see what they need to do to maximize their performance. (Cauley and McMillan, 2010, pg. 3)

Providing Space for Students to Self-Assess and Guide Their Progress

It is not enough to provide an opportunity for students to receive feedback if that feedback is not geared toward ensuring students can self-assess and make changes on their own in order to achieve learning goals. The mere act of self-assessment ensures that students are able to take ownership of their learning experience rather than relying solely on the teacher as an expert who determines whether their learning has been successful (William, 2011). Something as simple as using an instructional strategy focused on asking students how they feel about work they are currently doing ensures that the students are able to identify their strengths as well as their mistakes and errors. This also serves as an opportunity to identify whether the students are able to correct their errors and make improvements toward their ultimate learning goals (Cauley & McMillan, 2010).

Fostering Self-Determination in Students

Through the use of tools like feedback and self-assessment, formative assessment provides students with the foundation for self-regulation of their learning (Clark, 2012b). Providing clear learning targets, offering feedback about progress toward meeting those learning targets, attributing student success and mastery to effort, encouraging self-assessment to support mastery, and helping students to set small and achievable goals for improvement all go a long way toward fostering and improving student self-determination (Cauley and McMillan, 2010).

Attributions are the reasons students cite to explain their successes or failures, such as ability, luck, help from others, and lack of effort. Students commonly attribute their successes to their individual efforts; this attribution is highly effective in the classroom because it places students in control. Effort attributions suggest that the student is capable of learning. (Cauley and McMillan, 2010, p. 4)

Tips & Tricks

Beginning with simple strategies—or formative assessment classroom techniques (FACTs)—to shape instruction provides a meaningful and productive way to check for understanding among students (Keeley, 2016). Keeley (2016) goes on to describe some tips and tricks when selecting which FACTs to use to aid in forming future teaching and promoting student learning, which she considers the first step in using assessment *for* learning.

Think Like a Diagnostician

Teachers need to find ways to determine students' understanding of ideas continuously in such a way that it becomes second nature to them (Keeley, 2016, pg. 25). One such strategy that can be used to support this is Fist-to-Five. This strategy can be used often to indicate the extent to which students understand concepts, procedures, and even directions.

Make the Students' Thinking Explicit During Inquiry

Teachers should encourage their students to make predictions about the outcome of a problem and stick to their original prediction throughout the learning process. When the evidence that arises during the learning process does not support their initial claim, the conversation that results is a pivotal point in student self-reflection and motivation to seek additional information to help make sense of the work (Keeley, 2016, pg. 25). One such strategy that can be used to support this is the C.E.R.T.I.fy Your Thinking (Claim, Evidence, Reasoning, Test, Improve) strategy. This strategy provides a scaffold for students to use evidence as they formulate and justify their own arguments.

Create a Classroom Culture of Ideas, Not Right Answers

Encourage students to share their thoughts and answers regardless of whether they are “right” or “wrong” and do not provide them with the correct answer at the start. Many students come from classrooms where the culture is centered around getting the answer right when the goal should be centered around learning how to work through problems and weighing various viewpoints and evidence that help them reconstruct their thinking and

understanding (Keeley, 2016, pg. 25). One such strategy that can be used to support this is the Affinity Process strategy. This strategy enables students to synthesize large amounts of information by organizing it into themes. This strategy ensures every student has a voice in the decision-making process as they create connections among similar ideas. In the Affinity Process, the teacher provides students with a prompt that can result in multiple answers. After students respond, they work together to group similar answers until all ideas are arranged in themes.

Develop a Discourse Community

One of the key features of FACTs is the way that they promote learning through discussion. When students use language familiar to them to help aid in their arguments, they construct meaning and activate their own thinking as well (Keeley, 2016). One strategy that can be used to support this is the Socratic Seminar strategy. This strategy promotes careful analysis of an issue or a text through the classical rhetorical processes of discussion, observation, interpretation, and consensus-seeking. Students engage in a formal discussion process that enables them to clarify and examine issues, ideas, and values. They then articulate these ideas to their peers.

Encourage Students to Take Risks

In a classroom with an established set of norms that aid in the creation and sharing of ideas, students are more likely to share their ideas without fear of being corrected or judged (Keeley, 2016). Rather than using one specific instructional strategy for this purpose, weave an attitude of encouragement and scholarly risk-taking into a number of strategies as long as students feel empowered to go beyond their comfort zone.

Encourage Students to Listen Carefully

Students need to learn how to analyze information critically from all points of view before determining which information is correct or changing their thinking (Keeley, 2016). One strategy that can be used to support this is the Partner Speaks strategy. With this strategy, students discuss a prompt in pairs and share their partner's explanation with the whole group. Students work in pairs to understand a partner's explanation of, and reasoning around, a prompt. Each student shares their partner's answer rather than their own, with the whole class. This strategy promotes active listening, the valuing of peer ideas, and giving voice to students who might otherwise not share their thoughts.

Use a Variety of FACTs in a Variety of Ways

As we use FACTs in the classroom, we should remember to vary the approaches and methods we use. This may mean varying up writing versus speaking or drawing versus writing. This ultimately leads to a greater chance of success in improving learning (Keeley, 2016, pg. 25).

Use a Variety of Grouping Configurations

Social interaction plays a big part in student motivation and the effectiveness of learning. Varying grouping strategies, such as using small groups versus whole-group discussion or rotating the peers with whom students work, provides students with a variety of viewpoints across the year (Keeley, 2016). This way, they learn how to listen and speak to others of all backgrounds and opinions (Keeley, 2016).

One strategy that can be used to support this notion is the Appointment Clocks strategy. This strategy prompts multiple participants to briefly think, collaborate, and discuss together. It can also be used to pair students in lasting partnerships they can return to in the future. Students partner up by setting up "appointment times" with their classmates.

Encourage Continuous Reflection

Teachers should encourage their students to self-reflect continuously on their learning and on their progress in meeting their learning goals. This ongoing reflection both provides students with a better understanding of where they currently are in their learning and where they still fall short; thus, students become more accountable for their own learning (Keeley, 2016). One strategy that can be used to support this is Emoji Reflection. With this strategy, students use emojis to summarize, demonstrate, and reflect on their learning. Emojis can be used in a variety of ways to enhance student learning. Additionally, students can use emojis as an annotation strategy or as a tool to help them reflect on their own learning.

With each of the above tips and tricks, teachers can balance methods for facilitating effective formative assessment with the expectations placed upon the students. This paradigm makes the process collaborative and ultimately ensures that students have the power to shape the direction of their own learning.

Conclusion

Whether drawing from the history of formative assessment research or observing how it can be practically applied in the classroom, formative assessment enables teachers to support learning as both a product and process. In cultivating students' sense of self-determination, the spirit of formative assessment hinges on teachers' knowledge that they can only do so much within a given day or a given academic year. As a collaborative tool between teacher and student, the effective use of formative assessment enables the student to pick up where a particular lesson leaves off. When formative assessment is approached iteratively and with the principles mentioned in this research brief, it provides both students and teachers the ability to see sustainable progress toward learning goals.



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