



Formative Assessment

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Introduction

Of all the instructional topics to have gained popularity in recent decades, formative assessment (FA) is one of the most noteworthy. The origins of FA date back to 1967 [1], however, the past 20 years have produced substantial research on the topic [2]. Studies consistently support FA as an essential practice, with Dylan Wiliam, a leading researcher in FA, claiming that effective FA can lead to a “50 to 70 percent increase in the rate of learning” [3].

This growing popularity, paired with surprisingly large impacts in the research literature, give rise to three important questions:

- What is formative assessment?
- Why is formative assessment beneficial for students?
- How can busy educators effectively use formative assessment to improve teaching and learning?

Key Findings

What is Formative Assessment?

The Michigan Department of Education defines FA as “a planned, ongoing process used by all

students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding ... and support students to become self-directed learners” [4]. This definition clarifies an ongoing misconception by defining FA as a *process*, not a *thing*, such as an exit ticket or quiz.

The definition also highlights the need for *all* students to participate in FAs. Activities should be designed to gather evidence of learning from every student.

Because its purpose is to guide learning, formative assessments are typically low-stakes, ungraded activities accompanied by actionable feedback. Research suggests that higher-stakes, graded FAs move attention away from the task or content and closer to the self, *reducing* the likelihood that students will respond to feedback in productive ways [5], [6], [7], [8].

Why is formative assessment beneficial for students?

Research has touted numerous benefits to FA. As mentioned in the introduction, FA improves student learning by helping teachers identify what students know and align instruction with student needs [9], [10]. It helps teachers to ensure that students have learned what is

taught before moving on. In short, FA makes teaching a “contingent” activity [3]. How and what a teacher teaches is contingent on what students currently know and need.

FA also increases student involvement and engagement. Rather than passively listening to instruction, students engaged with FA provide evidence of their learning [11].

How can busy educators effectively use formative assessment to improve teaching and learning?

The key to using FA effectively in the classroom is to integrate all of the necessary components of the FA process into each lesson. This has been described by the Assessment and Learning Network (ALN) using the FA Cycle [12] shown in Figure 1.

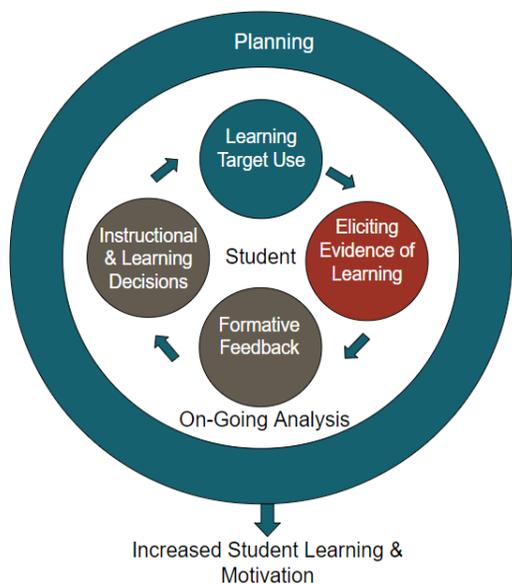


Figure 1: The ALN's Formative Assessment Cycle

FA begins with knowing the students. Positive relationships establish the trust necessary to grow from feedback.

Then, teachers establish a common understanding of the lesson's learning targets (LTs). They do this by planning activities rooted in knowledge of the content, standards, pedagogy, and their students. They design

learning progressions that connect new learning to past and future learning and provide models of mastery work. FA activities are crafted in advance to ensure they align with the LTs.

When it's time, they elicit evidence of student understanding through skillful questioning strategies. Students explain their thinking and connect ideas.

Finally, the teacher uses this evidence to provide students with feedback and make decisions about future instruction. This feedback can come from the teacher, peers, or even self-assessment. The only requirement is that the feedback must be actionable.

Conclusion

The unfortunate reality is that students do not always learn what is taught. FA helps to bridge teaching and learning by providing evidence of student mastery [3]. For this reason, it is one of the most cost-effective strategies schools can use to improve student outcomes.

What does this mean for schools?

- Use the ALN FA Cycle to emphasize FA as a “process.”
- Beware of vendor-based “formative assessments” that emphasize a tool over a process [13].
- Take time to plan FAs as part of regular lesson preparation. When designing instruction, plan FAs that align with LTs, and select assessments that highlight student thinking.
- Share success criteria with students prior to an assessment, and provide examples of learning target mastery.
- Include all students in FA activities.
- Ensure feedback provides a “recipe for future action” [3]. Students should take and use the feedback they receive.
- Balance graded and ungraded FA opportunities or refrain from grading FAs at all, if possible.

Resources

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