

---

## Revising the Definition of Formative Assessment

### Background to the Original Definition

In 2006, responding to growing national interest around formative assessment, the Council of Chief State School Officers (CCSSO) formed the Formative Assessment for Students and Teachers (FAST) State Collaborative on Assessment and Student Standards (SCASS). The purpose of the FAST SCASS is to provide guidance and resources to state-level policy makers on formative assessment. One of the first tasks the FAST SCASS addressed was the development of a definition of formative assessment based on the research literature available at that time. The original FAST SCASS definition is below:

*Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.*

The definition and a set of attributes that support effective formative assessment practice (CCSSO & McManus, 2008) have been widely used for over a decade across FAST SCASS publications and by member states. While the definition has served the FAST SCASS well, it was time to update it in response to the ways the bodies of formative assessment research, practice, and policy have evolved.

### An Updated Definition

During 2016-2017, FAST SCASS members reviewed the original definition and attributes, identified areas emphasized in current formative assessment research, theory, and practice that were not addressed adequately in the original 2006 definition. The updated definition FAST SCASS members developed follows:

*Formative assessment is 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 of intended disciplinary learning outcomes and support students to become more self-directed learners.*

*Effective use of the formative assessment process requires students and teachers to integrate and embed the following practices in a collaborative and respectful classroom environment:*

- *Clarifying learning goals within a broader progression of learning;*
- *Eliciting and analyzing evidence of student thinking;*
- *Engaging in self-assessment and peer feedback;*
- *Providing actionable feedback; and*
- *Using evidence and feedback to move learning forward by adjusting learning strategies, goals or next instructional steps.*

The revised definition has remained true to the 2006 definition, with the focus on formative assessment as a process, distinct roles for teachers and students, and the use of evidence to inform next steps. The group elected to include in the definition key *practices* that students and teachers need to

engage in and integrate to use formative assessment in a meaningful way, rather than a separate set of attributes. In the sections below we describe and justify the revisions made to these core concepts.

### ***“Planned and Ongoing” Process***

One central emphasis of the original definition is on the process nature of formative assessment. This stance was taken as a direct counter to the concept of formative assessment as an instrument or specific assessment (for example, see the September 17, 2008, Education Week article titled “Test Industry Split Over ‘Formative’ Assessment”), which ignored many of the other aspects of formative assessment beyond the direct collection of evidence of student learning. A small change in the opening words of the definition now note that this process is both *planned* and *ongoing*.

The emphasis on the *planned* nature of formative assessment draws attention to the work that teachers should engage in prior to being in the classroom with students. Teachers are able to capitalize on opportunities when observing students engage with a task or during the flow of a discussion that allow a teacher to identify an emerging idea that he or she has not anticipated. However, these opportunities do not diminish the need for careful planning. To maximize the likelihood of gaining useful insights into student thinking, a teacher must plan for specific questions to start a discussion, or the tasks that will best meet the range of learning needs in a particular class of students, or anticipate the kinds of struggles that students typically have with a concept. This planning allows a teacher to both develop strategies for identifying student learning and create a plan for addressing them, engaging in “contingent” planning (Threlfall, 2005; Wiliam, 2011) to anticipate decisions that might be made during a lesson depending on how students respond to the initial learning experiences. A teacher who appears to be adjusting on-the-fly may be enacting one of several plans that he or she has prepared ahead of time.

A second adjective – *ongoing* – reinforces that formative assessment is a classroom process that is enacted while the learning is occurring, not something done after the learning has taken place. There is a wide range of practices that fall under the formative assessment umbrella, some of which may occur more frequently than others. Shavelson et al. (2008) describe a continuum of formative assessment practices that includes on-the-fly, planned-for-interactions, and embedded-in-the-curriculum formative assessment. Critically though, formative assessment should be evident in every lesson, whether through a discussion of the learning goals, feedback from students on their self-assessments, observed patterns in student group discussions that would be productive to share with the whole class, peer feedback, teacher conferences with individuals or small groups to help them plan revisions of their work or their thinking, or a carefully planned question for the end of the lesson to support planning for the next day.

### ***From Instruction to Learning and Teaching***

One of the more subtle changes to the definition is the description of the event during which formative assessment takes place—more specifically, moving from the term “instruction” to “learning

and teaching.” Although the original definition notes that formative assessment is a process in which both teachers and students engage, *instruction* generally carries the connotation of teacher responsibility. The broader term *teaching and learning* more clearly acknowledges both student and teacher responsibility and roles in this process. In a similar vein, we are also emphasizing the collaborative nature of this work and that it is students who actually do the learning, by identifying participants as “students and teachers” rather than listing teachers first.

### ***Eliciting and Using Evidence***

While the second part of the definition identifies a set of five practices that need to be integrated for effective formative assessment practice, the first part of the definition highlights the main processes of formative assessment: the intentional elicitation of evidence of student learning and the use of that evidence to inform immediate or near-immediate next steps. Regardless of whether this is done by the teacher, the individual student, or peers these two aspects are central to the process.

### ***Focus on Disciplinary Learning***

The original definition identifies that the purpose of formative assessment – and associated next instructional steps – is to improve student achievement of intended instructional outcomes. In the revised definition, this outcome is restated as improving “student understanding of intended disciplinary learning outcomes.” This change was driven in part by the desire to recognize that the focus on formative assessment has shifted from a more generic set of practices to be applied to any grade level and any subject, to paying greater attention to the ways practices may be applied flexibly due to the differences in disciplinary learning across content areas (Coffey, Hammer, Levin, & Grant, 2011; Cowie and Moreland, 2015; Shepard, Penuel, and Davidson 2017).

For teachers to support students as they deepen their understanding of the ways in which reasoning is done within a specific discipline, teachers themselves need to have a unique combination of *knowledge of students and content* (Hill, Schilling, & Ball, 2004) to be able to understand, predict, and recognize students’ errors, justifications, and misconceptions, and to be able to support their developing disciplinary thinking. Teachers need to be able to listen to (or read) a student’s explanation, which might be partially incorrect or not fully articulated, and make sense of it in the context of subject matter, a process that Davis (1997) referred to as “interpretative listening.” One support for this process can be learning progressions, those descriptions of how students’ understanding within a key concept develops from a rudimentary to a more sophisticated perspective (Heritage, 2008). An awareness of key learning progressions can help a teacher anticipate common student responses and monitor student discussions either as a whole class or in small groups (Smith & Stein, 2011).

Askew and Wiliam (1995) found that “Learning is more effective when common misconceptions are addressed, exposed, and discussed” (p. 8). However, teachers also need a wide range of pedagogical

strategies to be able to identify next steps in supporting this kind of student learning which can be the most challenging part of the formative process (Heritage, Kim, Vendlinski, & Herman, 2009).

### ***Extending Learning Outcomes to Include Self-Directed Learners***

A final addition to the definition is the expansion of the outcomes of the formative assessment process to include “students becoming more self-directed learners.” In other words, not only should students learn important content and the critical ways of thinking within a disciplinary area, they should also learn how to learn, and to take control of their own learning. Formative assessment should be a process that is done *with* rather than *to* students, and should provide students with the skills needed for lifelong learning (Clark, 2012). Research since the original definition was developed has sought to integrate ideas from the literature of self-regulation and co-regulation (Allal, 2011; Andrade & Brookhart, 2016; Clark, 2012; Heritage, 2016). The process of articulating clear learning goals that are transparent to students, providing ongoing learning and feedback cycles that are the heart of formative assessment, and supporting students to engage in self-assessment and goal setting are all central to formative assessment, and to supporting self-directed learners.

### **Explicating the Specific Practices within the Formative Assessment Process**

The 2006 FAST SCASS definition of formative assessment is accompanied by a separate document that describes a number of attributes of effective formative assessment (CCSSO & McManus, 2008). The consensus of the group was that with the revised definition it was important to identify a clear set of practices that together embodied the key ideas of formative assessment, and to keep them more tightly tied to the definition. While, some of the original attributes are contextual factors that would support formative assessment such as collaboration, others are more clearly recognized as specific components of the practice such as student, self-, and peer feedback. Previously neither the definition nor the attributes noted anything about the elicitation and analysis of evidence, so the revision provided an opportunity to rectify that omission. Another minor change is the adjective used to describe feedback. Rather than describing it as *formative*, it is now described as *actionable* to clarify that students must have an opportunity to **use** meaningful feedback to improve their current level of their work or understanding of a concept or principle. When teachers regularly check whether and how their feedback helps students improve, they should get better in giving feedback.

The definition also draws the reader’s attention to the fact that it is the integration and embedded nature of those practices that creates an effective formative assessment process, and the collaborative classroom culture that is necessary to support formative assessment. Formative assessment is not linear process, nor a set of discrete steps, rather the practices weave together and influence each other. While a novice formative assessment practitioner may focus on a specific practice along the way to developing fluency of that practice, any one of these practices in isolation is insufficient. Rather, it is the

integration—the use of the clear learning goals to help the teacher ask a clarifying question, the analysis of work by a peer against the success criteria, the carefully worded feedback that spurs deeper self-reflection and goal setting, the analysis of student responses that informs planning for the next lesson—that leads to a robust and effective enactment of formative assessment by both student and teacher in concert. None of these practices are effective in a vacuum—rather it is the integrated application of them that gives formative assessment its power to positively impact student learning. Not only are the practices integrated, over time their use becomes embedded as a regular part of daily classroom practice for both students and teachers. Formative assessment becomes an integral part of the work of learning and teaching each and every day in the classroom. It is also essential that teachers create a classroom environment in which students feel safe to express their ideas, even as they are emerging, and a culture that encourages students to work collaboratively with each other and with the teacher. Only then can teachers and students truly work together to move learning forward for all.

### **Supporting Teacher Learning and Development**

The revised definition of formative assessment by itself cannot effect changes in classroom practice on the part of either students or teachers. Rather, it has to be embodied in the everyday practice of classrooms, and for that to occur there is a continued need for supporting teacher learning and development. Teacher learning can be supported in a number of ways:

- School-based learning communities that provide ongoing opportunities grounded in local contexts for teachers to learn about and reflect with peers on their efforts to implement and integrate the formative assessment practices;
- Reflection on the implications for teachers' own practice after observing live or video-based exemplars of effective formative assessment practice; and
- Disciplinary-based learning opportunities that support teachers making connections between the content and practices of their subject area and formative assessment approaches, including an understanding of student misconceptions, naïve understandings, or critical learning trajectories.

While not a specific component of formative assessment, some teachers may also benefit from learning opportunities that focus on issues such as developing a positive, learning focused classroom climate or establishing classroom routines and practices that support learning. Other school-wide issues may also deserve discussion and reflection such as grading policies or pacing guides if they seem to be in conflict with the goals of formative assessment.

### **Conclusion**

It is the goal of the FAST SCASS to support ongoing research and development of formative assessment in states, districts, and schools. The intention of the updated definition of formative

assessment is to integrate new applications, research, and findings that have evolved since the definition was initially drafted. In the spirit of continuous improvement and in support of states' progress in formative assessment policy and practice, we hope you find this revised definition helpful and supportive of educators in your schools, districts, and state.

## References

- Allal, L. (2011). Pedagogy, didactics and the co-regulation of learning: A perspective from the French-language world of educational research. *Research Papers in Education*, 26(3), 329-336.
- Andrade, H., & Brookhart, S. M. (2016). The Role of Classroom Assessment in Supporting Self-Regulated Learning. In *Assessment for Learning: Meeting the Challenge of Implementation* (pp. 293-309). Springer International Publishing.
- CCSSO & McManus, S. (2008). Attribute of effective formative assessment. A work product coordinated by Sarah McManus for the FAST SCASS, CCSSO.
- Clark, I. (2012). Formative assessment: Assessment is for self-regulated learning. *Educational Psychology Review*, 24(2), 205-249.
- Coffey, J. E., Hammer, D., Levin, D. M., & Grant, T. (2011). The missing disciplinary substance of formative assessment. *Journal of Research in Science Teaching*, 48(10), 1109-1136.
- Cowie, B., & Moreland, J. (2015). Leveraging disciplinary practices to support students' active participation in formative assessment. *Assessment in Education: Principles, Policy & Practice*, 22(2), 247-264.
- Heritage, M. (2016). Assessment for Learning: Co-regulation in and as Student-Teacher Interactions. In D. Laveault & V. L. Allal. (Eds). *Assessment for Learning: Meeting the Challenge of Implementation*. New York, NY: Springer.
- Heritage, M. (2010). *Formative Assessment and Next-generation Assessment Systems: Are We Losing an Opportunity?* Washington, DC: The Council of Chief State School Officers.
- Heritage, M., Kim, J., Vendlinski, T. Herman, J. (Fall, 2009). From evidence to action: a seamless process in formative assessment? *Education Measurement: Issues and Practice*, 28(3), 24-31.
- Shepard, L. A., Penuel, W. R., & Davidson, K. L. (2017). Design principles for new systems of assessment. *Phi Delta Kappan*, 98(6), 47-52.
- Threlfall, J. (2005). The formative use of assessment information in planning—the notion of contingent planning. *British Journal of Educational Studies*, 53(1), 54-65.
- Wiliam, D. (2011). *Embedded formative assessment*. Bloomington, IN: Solution Tree.