



# Teacher Innovation in Response to Current Educational Needs:

Factors that Support Teacher Learning  
about the Formative Assessment Process

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# Teacher Innovation in Response to Current Educational Needs: Factors that Support Teacher Learning about the Formative Assessment Process

## Introduction

The formative assessment process is arguably one of the most powerful avenues to promote meaningful student learning in the classroom (Black & Wiliam, 1998; Nyquist, 2003, Wiliam, 2007). At the same time, it honors the professionalism and privileges the expertise of teachers' daily practice in the classroom. However, there is important knowledge and skill teachers need to develop to successfully enact the formative assessment process (Heritage, 2007). Learning to effectively implement the formative assessment process takes time and is not achieved by many teachers despite the promise for enhanced learning outcomes. In this paper, we present five key factors that can help teachers to learn about and effectively implement the formative assessment process.

We draw on our experience from the field working with Coaches, Learning Team Members, and related professional learning opportunities in the Formative Assessment for Michigan Educators (FAME) program to identify five key factors that promote teacher learning about the formative assessment process.

## Formative Assessment for Michigan Educators (FAME)

The Formative Assessment for Michigan Educators (FAME) program is a statewide professional learning program designed to support teacher learning about and use of the formative assessment process. The overarching goal of the FAME program is to help educators learn about and use the formative assessment process in classroom instruction. The Michigan Department of Education (MDE) conducts FAME workshops and provides other resources and services for educators to help them develop school-based Learning Teams. The program provides resources on formative assessment research, theory, and practice to promote teachers' capacity to reflect on, implement, and refine their instructional and assessment practices in the classroom. To achieve these goals, FAME provides support to Learning Teams in which a group of educators and a Coach work collaboratively to learn about and practice the formative assessment process in local contexts.

New Learning Teams form every year and engage in learning and implementing the formative assessment process over the course of several school years. The multi-year learning process is essential for participants to go beyond "head knowledge" to reflection and enhancements of their instructional practices. Such instructional changes typically take two or more years to be able to learn to use effectively on an on-going basis.

## Background

The expectations on teachers and the purpose of schooling have changed over the 200-year history of education in the United States. In the recent years, with issues that have emerged due to the Covid-19 pandemic, social justice crises, and increasing demands of accountability in education, the need for ambitious instruction and the formative assessment process is now needed more than ever.

## Ambitious Instruction

Ambitious teaching is a term that has recently entered the educational landscape as a way to capture the push to improve classroom teaching. Myriad sources have co-opted the term, each with a slightly different interpretation of what precisely ambitious teaching means. Varied meanings may ultimately empty ambitious teaching of its meaning and, if so, it will be discarded on the pile of outdated, overused, and misused terms of decades past.

However, a clear definition of the term and an understanding of how it connects to the formative assessment process can support teacher learning and practice. While there are different conceptions of ambitious teaching, there are several core features in common. We define ambitious teaching as teaching that 1) builds on student understanding, 2) encourages student input on clearly articulated learning goals, 3) elicits evidence of student understanding, 4) provides students feedback from the teacher, student, and self, and 5) uses feedback to take action that improves learning and teaching. Although not exhaustive, we argue that in order for teaching to be considered ambitious, the following aspects must be in place:

- Teachers and students work together to craft and understand desired goals for learning
- Learning activities require students to construct knowledge rather than memorize knowledge facts and figures constructed by others
- Teachers and students diligently surface evidence of student learning
- Student ideas are taken seriously and explored deeply
- Teachers respond to evolving student understanding both in the moment and in later lesson preparation and feedback
- Students receive feedback in reference to learning goals from teachers, peers, and self
- Both students and teachers make learning and teaching decisions based on evolving understanding and feedback
- Mastery of academic content and not accumulation of class points is the goal of instruction

## The Formative Assessment Process

Implementation of the formative assessment process has the potential to improve student learning outcomes and involvement (Black & Wiliam, 1998; Brookhart, 2013). Thoughtful classroom assessment can have a significant impact on student learning and achievement, especially for low-achieving students (Black & Wiliam, 1998). Formative assessment also can support teachers to be more reflective about students' understandings (Furtak, 2012) and to help students identify barriers to learning (Marshall & Drummond, 2006). Teachers and students must play an active role in understanding students' current thinking and moving instruction and student learning toward clear learning goals.

## Focus on Teacher Learning

Curriculum, instruction, and assessment that meets students where they are and provides what they need to move forward is critical to respond to the changes experienced by students and schools. Teachers will benefit from clear understanding of the high-leverage, research-based practices that enhance student learning outcomes as well as support to implement the necessary changes in their classrooms. To achieve the aims of ambitious instruction through the implementation the formative assessment process, a focus on teacher learning will need to come first.

## Five Factors that Support Teacher Learning About the Formative Assessment Process

There are five primary factors that we have identified from over 14 years of experience working with teachers in a variety of contexts to support their learning about the formative assessment process. The support for teacher learning we are referring to includes conceptual knowledge as well as application and transfer to different contexts to implement the formative assessment process in classrooms with students. Our focus is on teacher actions to effectively implement formative assessment in addition to meaningful student involvement. The following five factors support teacher learning about the formative assessment process:

- Teachers learn from access to resources to build formative assessment knowledge and skill
- Teachers learn from a clear model of effective practice, detailed success criteria, and a supportive coach
- Teachers learn from engaging in deliberate practice
- Teachers learn from collaboration and reflection
- Teachers learn from ongoing support

### Factor One: Teachers Learn from Access to Resources to Build Formative Assessment Knowledge and Skill

We have found that providing teachers with high quality resources is essential to support their learning about the formative assessment process. The resources are characterized by the following:

- Resources that include comprehensive content
  - Connections to high-leverage instructional practice
    - Ambitious instruction
- Research background
  - Relevant research to provide context and empirical evidence
- Formative assessment overview and description
  - Overview of guiding questions and description of individual elements
- Disciplinary guides
  - Specific content to show the use of the formative assessment process in specific content areas.
- Practical application

- Implementation of the FA process illustrated through examples and templates
- Resources available through a variety of mediums
  - Written texts and guides
  - Video resources
  - In-person training
  - Webinars and online sessions
  - One-on-one and small group coaching
  - Conferences
  - Newsletters and books
- Resources provided for teachers at different levels of understanding
  - Introductory materials for teachers who are interested in learning about the formative assessment process
  - Entry level materials and training for teachers beginning to learn about the formative assessment process
  - Year 1-2 FAME Learning Guide for teachers actively engaged in learning about formative assessment, implementing the practices in their classrooms, and reflecting on what they are learning.
  - Going Deeper Resources for teachers who are interested in further advancing their understanding in particular topics.
  - Reflection Guides for teachers at more advanced levels of understanding who are implementing the FA process in the classroom and reflecting on their practice with a peer.
  - Advanced learning training with an expert to deepen understanding of the formative assessment process.
- Resources designed to meet the current needs of teachers and are continually improved
  - Materials are developed in response to teacher requests
  - Content is reviewed by teachers and their input is used to improve the resource
  - Guides are continually being developed to reflect the current understanding the field and to be most relevant to the emerging needs of educators
  - Resources are developed in collaboration with teachers and by a team with a variety of expertise, experience, and perspectives.

These comprehensive resources are provided in a variety of mediums and provide different ways teachers can engage in their learning and deepen their understanding.

## Factor Two: Teachers Learn from a Clear Model of Effective Practice, Detailed Success Criteria, and a Supportive Coach

Teachers also benefit from having a clear model of effective practice, detailed success criteria for what the desired goal looks like, and a supportive coach that provides guidance and feedback along the way. Teacher learning from clear models, success criteria, and a supportive coach includes the following:

- Clear models of effective practice
  - Provide a model of successful implementation of the complete formative assessment process, including a definition and integration of the components and elements.
- Show what successful implementation of particular a component/element of the formative assessment process in the classroom looks like.
  - Detailed success criteria
  - Expert facilitation and coaching
  - Provide guidance, including materials and resources, to clarify the model of effective practice and a pathway for teachers to develop their practice.
  - Support a teacher to discuss, reflect on, and internalize the criteria for success
- Provide feedback to the teacher based on the criteria so they can close the gap between their current practice and the desired practice
  - Offer effective feedback and provide support through a variety of venues
  - Feedback in the moment: Just the right amount, at the just right time
  - “Nudge” learning forward

The comprehensive resources provide clear models of effective practice and success criteria for the teachers that include what success looks like in each component and element of the formative assessment process. This provides models so that teachers have access to understand the desired practice. Then they can begin to engage with experimenting in the classroom as they try on new ideas and practices. Teachers learn less from being told what they should do, or hearing about best practices, they learn from seeing how it is done, what it looks like, and examples of various levels of expertise in a variety of contexts. A variety of different examples and models enable teachers to develop a picture of what they are working toward. For many educators, learning about the formative assessment process involves a new approach to instruction and assessment. Many teachers teach the way they were taught as they learned from many years of apprenticeship-of-observation (Lortie, 2020) in which they watched what the teachers did in their years of schooling. These models have a strong influence on teachers’ conceptions of what teaching and learning looks like. For many, learning about the formative assessment process involves a shift in their paradigm about teaching and learning from a teacher centered approach to a student-centered approach. This shift in the role of the teacher and student requires an examination of the existing notions about schooling and an exploration of new beliefs and approaches to support students to become active agents in their own learning. Clear examples, criteria for success, and a supportive coach are essential in this process.

A coach can use exemplars and models to show the clear criteria for the formative assessment process. Then through expert facilitation, the coach can help the teacher to understand the criteria, create goals to work toward the criteria, gather evidence from his or her own teaching, and receive feedback to close the gap between current practice and the desired goal. The coach can use a variety of materials and provide support in person, over video, or through classroom visits. In this way, the coach uses the criteria to support the teacher to deepen knowledge, build skills, and develop experience with the formative assessment process over time.

### Factor Three: Teachers Learn from Engaging in Deliberate Practice

As the teacher is learning about the formative assessment process from the comprehensive materials, and working with a coach, it is important to engage in deliberate practice. This type of practice is purposeful, systematic, and ongoing. Rather than repetitive actions that do not have an intentional purpose, deliberate practice involves focused attention on a specific goal or purpose with ongoing reflection. Deliberate practice for teachers to learn about the formative assessment process includes the following aspects:

- Start small and choose a focus
  - Make it manageable
    - Focus on one element of the formative assessment process
      - Choose one subject area or class to start
        - Be consistent and practice
  - Practice is an ongoing process
    - It involves incremental shifts over time
- Consistency
  - Choose a focus, work at it, fail some, succeed some, receive feedback, and slowly, over time, develop competence in one area, then choose another area to focus on and build on the successes.
- Set a goal and stay the course
  - For the practice to be effective, it is necessary to continue to focus on one goal area and work on it long enough to become proficient.

Deliberate practice in learning about the formative assessment process involves a clear model of what successful performance looks like and what actions are needed to achieve that level of performance. Ericsson (2004) defines deliberate practice as, “purposeful practice that knows where it is going and how to get there.” It is important that this practice is not just about the amount of time doing something or about saying “I tried that and it did not work.” The focus of the practice is about *what* and *how* the teacher practices and how deliberate the teacher is about the practice. In addition, this practice requires guidance and feedback from a coach who understands both learning about and implementing the formative assessment process.

## Factor Four: Teachers Learn from Collaboration and Reflection

Teachers learn best when they have opportunities to collaborate with their colleagues and engage in rich dialogue. When teachers explore new concepts and theories and then talk through their ideas, they can make connections to their experience. Through discourse around their practice, they can reflect on what worked well and areas for growth. Teachers need this time to connect theory and practice to bridge the knowing doing gap. Reflection and review of evidence from implementing the formative assessment process in the classroom enables teachers to identify areas that went well and areas for growth to move their practice forward. The following aspects of collaboration and reflection support teachers to learn from their experience and identify next steps:

- Collaborate
  - Teachers benefit from rich dialogue and exploring ideas together
  - Discourse around practice promotes learning about the FAP
- Reflect
  - Time is needed to connect theory to practice.
  - Teachers need to reflect on evidence from classroom instruction to identify what did and did not work, to fine tune practice, and to plan next steps.

In the FAME program, teachers meet regularly in professional learning communities called Learning Teams. Many of these teams meet for 1-3 hours and discuss what they are learning from exploring the resources and their deliberate practice in the classroom. They reflect on student work or other evidence from the classroom and share parts of their lessons that went well and parts of their lessons that presented challenges. Through discourse, they ask questions, make connections, and explore ideas. This time to reflect on their practice provides valuable learning opportunities to inform their next steps. The coach can provide support, but often the coach facilitates the conversation and provides the structure for the teachers to engage in meaningful dialogue. There are several other opportunities in the program that promotes collaboration, including the Self-Reflection Guide and peer observation and reflection on the formative assessment process. Such observation tools can be used as a valuable mechanism for growth.

Through continued collaboration and reflection, teachers can learn from one another and incorporate their new learning into the actions and decisions they make in the classroom. They can also make connections between theories and models of effective practice to their instruction. This helps move from theoretical and conceptual knowledge, to transfer and application in different contexts.

## Factor Five: Teacher Learn from Ongoing Support

Teachers need ongoing support as they are learning about the formative assessment process. Teachers need the following types of support:

- Sources of ongoing support
  - Themselves
  - Colleagues
  - Leadership

Although support is often thought of as being external, it is critical for teachers to develop self-efficacy. In this way, they can provide support to themselves through their own inner dialogue, reflection, and goal setting. Resilience and self-motivation enable teachers to try out new practices, make mistakes, learn and grow from them, and continue trying. Teachers also benefit from the support of their colleagues to listen to their experiences and share about their own successes and challenges. It is also essential that those in leadership positions provide continuous support for teacher learning. The administrators, coaches, and consultants need to have a strong grasp of the formative assessment process, and of the factors outlined in this document.

Educators benefit from ongoing engagement in the factors outlined in this document: comprehensive resources; clear models, criteria, and coaching; deliberate practice; collaboration and reflection; and ongoing support. Learning about the formative assessment process is done in the context of understanding ambitious instruction and deep disciplinary knowledge. It involves a coach who asks questions, offers feedback, and provides both feedback on the teacher's strengths as well as feedback on ways the teacher could grow based on clear criteria for effective implementation of the formative assessment process. This work is not done in isolation, it is done in a team where teachers can learn with and from one another. In essence, the fundamental elements of the formative assessment process and the thoughtful work done with students also needs to be done with teachers in professional learning settings. Teachers need to experience engaging in the tenets of the formative assessment process and they need to have it modeled for them. They also need the opportunity to benefit from the rich learning experiences that put them at the center of the learning process as active agents with full responsibility and ownership.

## Closing the Knowing Doing Gap

One key take-away we have had from this experience is that teachers need to learn by doing and by seeing what it looks like in practice. They need to try out new approaches to instruction and assessment in the classroom and have permission to fail or have it not turn out the way they expected. Teachers need to be involved in the same learning process of making mistakes and learning from those mistakes. Students will benefit from this as well as the teacher models the process of learning, making mistakes, trying again, and improving little by little as they keep working toward their target. Through this process, teachers need sources of ongoing support to cheer them on, provide encouragement for their progress and incremental success, and provide feedback on specific criteria.

Many times teachers say, “We know this but what does it look like in my context?” They often have conceptual understanding but do not know how to close the gap between knowing what to do and being able to do it in their classroom. In these situations, teachers can learn by doing it in practice with support from a coach and a team or they can learn by having models. The models can be provided through video examples of the formative assessment process enacted in different grade levels and content areas. They can also learn from models by observing in another teacher’s classroom. In addition, they can learn by having others come into their classroom to model the lesson focused on the formative assessment process. The power of the coaching model is through less telling and more showing and doing. By providing clear models, key questions, and feedback, teachers can become investigators of their own learning. Through an iterative process of deliberate practice, feedback, and reflection, teachers receive the ongoing support they need to make incremental changes in their practice.

For many teachers who have learned about formative assessment, it is not a lack of knowing what they “should” do. The key to effective implementation is found in an active process of ongoing support in which the coach is walking side by side with the teacher. They are not merely telling the teacher what to do or offering resources. The coach is taking the teacher’s class and teaching a lesson for him or her, they are observing, engaging in dialogue and reflection, offering feedback, and actively engaged in a collaborative process. This requires skillful expertise and time to close the gap between a teacher merely learning about the formative assessment process, and a teacher effectively implementing the formative assessment process in the classroom moment by moment.

## Sustained Systemic Support

Ongoing support also includes systemic support provided by administrators and individuals in leadership positions. Beyond teacher learning, to ensure sustained implementation of the formative assessment process for all students, additional support factors and conditions are necessary. Heritage, Gerzon, & Mancuso (2017) further outline the necessary conditions for the successful implementation of the formative assessment process. They highlight three essential conditions: 1) Understanding formative assessment as a set of practices, grounded in disciplinary learning, rather than as a test event; 2) Sustaining a long-term commitment to lead formative assessment implementation; and 3) Establishing a culture, structures and supports for ongoing professional learning for teachers, principals and district leaders. Beyond supporting teacher learning about the formative assessment process, leaders need to understand that formative assessment is a process, sustain a long-term commitment to formative assessment implementation, and to create a culture, structure, and support for professional learning and the transformation of classroom practice. In addition, the authors outline the readiness factors that are needed to embark on this work by district leaders, school administrators, schools, and teachers. There are also several readiness factors that are needed by students as the formative assessment process requires a shift in their role as a learner.

Beyond the factors that support teacher learning, additional features are needed to ensure the successful implementation of the formative assessment process. Some of these features may include funding necessary to

support a formative assessment initiative and development of district systems and mindsets focused on administrator and teacher learning, assessment literacy, and balanced assessment. In turn, sustained systemic support has the potential to promote the formative assessment process as a deeply embedded practice that becomes part of the culture of the school and of every students' experience in the classroom.

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