

Necessary Conditions for Successful Implementation of Formative Assessment

Prepared for the Dell Foundation Formative Assessment Project

Authors: Margaret Heritage, Nancy Gerzon and Marie Mancuso

The purpose of this document is to highlight the conditions that the WestEd Formative Assessment Team has found are more likely to lead to successful implementation of formative assessment by teachers. We draw from decades of experience in directly supporting teachers and in assisting leaders to provide the right context for teacher professional learning and the transformation of classroom practice. We have also learned from our collaborations with international colleagues that these conditions are salient to formative assessment implementation in other countries, which lends increased significance to their importance.

We have identified three essential conditions:

- *Understanding formative assessment as a set of practices, grounded in disciplinary learning, rather than as a test event;*
- *Sustaining a long-term commitment to lead formative assessment implementation; and*
- *Establishing a culture, structures and supports for ongoing professional learning for teachers, principals and district leaders.*

Understanding formative assessment as a set of practices, grounded in disciplinary learning, rather than a test event

Formative assessment is routinely misunderstood and misconstrued. Many educators come to formative assessment with an idea that it is shorter-cycle assessments, common assessments, or, something that

My vision of formative assessment has really grown. I think I had pigeonholed it into what teacher behaviors would it change, and I didn't look toward what kind of behaviors is it going to change in our students. I didn't recognize what a big impact it would have on students and the shared responsibility for [learning] and how much kids love that.

Elementary Principal

is only done at the end of a lesson or sequence of learning. To reap the documented benefits of formative assessment it is important for educators committed to successful implementation to understand that formative assessment is the term used for assessment that is intended to inform learning during the course of its development, not to measure it or sum it up.

Formative assessment does not refer to a single test event, but rather to a set of interrelated practices that have been found to improve student learning.¹ When learning to implement formative assessment, teachers may focus on the practices in isolation as they build their knowledge and skills. However, it is these

practices, *when used in combination*, that render formative assessment such a powerful engine for improving learning.

Notably, formative assessment is not just for teachers; students are actively involved in the assessment process. The active involvement of students is consistent with contemporary perspectives on learning that acknowledge the importance of learner agency, understood as the ability to actively manage one's own learning through setting goals, monitoring progress toward those goals, and adapting learning approaches to optimize learning.

The practical application of formative assessment in the classroom includes sharing or co-creating learning goals and success criteria with students, obtaining evidence of learning while learning is taking place, timely feedback from teachers and peers, and self-assessment through which students monitor their progress against established learning goals and performance criteria, compare a current learning state with the goal and criteria, and then make judgments about how they can attain their goals.ⁱⁱ Taken together, these practices have been increasingly embedded worldwide into policy and the language of quality teacher practices.ⁱⁱⁱ

In our work we have found that teachers' disciplinary knowledge is a key requisite for formative assessment. This is consistent with new developments in the field where the importance of disciplinary knowledge is being increasingly recognized. For example, the CCSSO Formative Assessment State Collaborative has recently revised its definition of formative assessment to include disciplinary learning. 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 look different due to the differences in disciplinary learning across content areas.^{iv} Formative assessment implementation is enhanced when teachers have strong disciplinary knowledge, including an understanding of how learning develops within the discipline, and of the ways in which student learning can be limited, either through misconceptions and/or naïve or partial understandings.

Sustaining a long-term commitment to lead formative assessment implementation

In our experience, successful formative assessment implementation occurs when leaders make a long-term commitment to formative assessment as a core catalyst for improved learning in their schools (and districts), rather than treating it as the initiative *du jour*. In this regard, school (and ideally district) leaders must understand formative assessment, how it contributes to learning, and what they must do to support teachers in their implementation. It is fair to say that without the commitment and active engagement of leaders, formative assessment implementation has little to no hope of getting off the ground in any meaningful and sustainable way.

We have found that in schools with a small number of teachers engaged in formative assessment, leaders tend not to provide the level of support to teachers, including the time set aside for teacher professional learning, that is required for successful implementation. In schools with fewer participants, leaders are less likely to take the time to learn about formative assessment, and may not learn how to support teachers' implementation through school-based professional learning necessary for teachers to develop new practices. In addition, teachers whose school-site colleagues are not engaged in the process have few opportunities to reflect on and refine practice through the implementation cycle. For these reasons, we strongly suggest that formative assessment implementation takes place with *a critical mass of teachers within a school-site*.

To really implement this systemically you have to take the time to do it from the foundational work first, and you have to stay the course. You have to have leadership who has an understanding of [formative assessment] and who also is very supportive of it. Not just giving lip service to it but actually involved in the work, involved in the conversations, able to ask those questions. Those questions that will drive the work to the next level.

-Assistant Superintendent

District commitment to change will likely entail ongoing evaluation of current district and school-level

expectations around instruction and assessment and making changes to remove potential obstacles to implementation. For example, effective formative assessment requires teachers to pace lessons based on ongoing evidence from students, and making daily decisions about curriculum materials to best support students' next steps in learning. Consequently, requirements such as strict adherence to pacing guides or mandated use of resources will likely have to be reviewed and revised to support teachers to fully implement formative assessment.

District and school leaders can show their commitment to long-term change by developing a clear vision, aligning this vision to district goals, and creating opportunities for sharing their vision and goals. District-wide learning opportunities support the development of a shared vision of formative assessment, and allow teachers and principals to see the relevance of formative assessment in other initiatives. Leaders play a critical role in ensuring formative assessment is not seen as "one more thing," or "this year's fad", but is clearly integrated into existing initiatives and goals. Similarly, developing an understanding of how formative assessment fits within the larger district assessment system is an increasingly important role for district leaders.

Establishing a culture, structures and supports for ongoing professional learning for teachers, principals and district leaders

Successful implementation of formative assessment requires leaders to create a professional culture of learning. As already noted, formative assessment implementation involves most teachers in making some significant changes in their daily classroom practice. Making changes in practice can be scary, and

I would give advice to someone starting this out, someone who's at the district level, to really think strategically about the support structures. I think we underestimated the amount of support teachers needed, because teachers are such self-sufficient creatures. And we really felt that our support might feel intrusive. We have since learned that no, indeed they welcome the support. It does not feel intrusive. And in fact, it's a scary proposition to let go of control, and you need someone there telling you it's okay.

- Assistant Superintendent

so it is essential that a school culture supports all participants through a change process. Such a culture supports risk-taking so that teachers feel they can make mistakes as they try out strategies of formative assessment. Teachers need to see mistakes as sources of new learning, just as their students do. In a culture of professional learning, relationships among teachers and between leaders and teachers have to be characterized by respect and trust. How leaders model collaborative relationships with their teacher colleagues plays a big part in establishing the culture for these kinds of relationships.

For teachers, implementing formative assessment means changing the way they "think about teaching and their view of their role as a teacher".^v This is a powerful statement, and it is one that rings true with our experiences of working with teachers. Formative assessment practice requires teachers to think differently about the relationship between instruction and assessment, to see feedback as a central mechanism in promoting learning, and to regard students as partners in the learning and assessment process. For most teachers, these represent fundamental shifts in practice; and making these shifts takes time, commitment, and patience on the part of both teachers and leaders.

If teachers are not willing to make changes in how they think about their teaching and the role of students as learners, the implementation of formative assessment will amount to no more than incorporating a set of superficial techniques into existing practice, and once again formative assessment

loses its power for learning.

An initial step in formative assessment implementation is for school and district leaders to analyze their current structures for professional learning, and then enhance or extend those opportunities to: a) increase time for teachers to collaboratively learn about formative assessment; and b) develop mechanisms for teachers to receive feedback on emerging formative assessment practice. When leaders provide long-term structures and support for teachers, sustainable implementation is more effective. In the schools that we have worked with, teachers have met using a variety of schedules: weekly, every other week, and monthly. We have also observed instances of teachers meeting for half-days at a time during district/school professional development days. If meetings do not happen frequently, it becomes difficult to maintain momentum and commitment.

I used to think that I used formative assessment already when I taught, but now I think that formative assessment is much more intentional than a collection of strategies to check student understanding. It is a belief system for effective practice.

Classroom Teacher

We have also found that establishing clear meeting expectations from the outset helps build a culture of respect and trust and leads to successful outcomes. Teachers benefit from having specific times set aside to focus on formative assessment implementation. Additionally, having a clear focus and established protocols for conducting meetings is beneficial. For example, a learn-practice-review meeting cycle helps focus teachers on new learning, practice what they learned in their classroom and share successes and challenges with peers that generally lead to new learning. Teachers are increasingly looking for opportunities to receive meaningful feedback, and consider their grade-level or department peers as the most important sources of feedback.^{vi}

Readiness Factors for Formative Assessment

In this section, you will find a series of key *Readiness Factors* that emerge from the conditions described above to help District Design Teams consider district readiness factors, school-site selection and teacher selection during the initial planning for formative assessment implementation. The *Readiness Factors* may also serve as a tool during implementation to provide guidance to district and school leaders as they adopt specific roles in support of teacher practice, and to support formative evaluation to identify specific areas on which to focus improvement.

The *Readiness Factors*, below, are intended to help you think about the degree to which you have the necessary conditions in place for successful implementation. If you find that responses fall mainly into the “not at all” or “very little” categories, then that is an indication that you have work to do before embarking on formative assessment implementation. If responses are mainly in the “somewhat” or “to a great extent” categories, the prospects for successful implementation are better. If the responses fall across a variety of categories, it will be important to take stock of how your readiness can be strengthened across the board, and to identify specific strategies to strengthen implementation.

The Role of District Leaders:

District leaders have responsibility for creating coherence and aligning formative assessment

implementation to key district goals, such as improving student learning, and ensuring systems and opportunities for site-based professional learning. Implementation is improved when district leaders are actively involved throughout implementation. District leadership teams play a critical role in developing consistent implementation practices across school sites, sharing successes across sites, providing incentives for teacher learning, and providing ongoing professional learning for principals to understand and implement formative assessment.

When responding to the first six items in this District Leadership section, consider a recent initiative that your district, school, and/or teachers have participated in. The last item refers specifically to readiness for formative assessment implementation.

District Leadership Readiness Factors:

To what extent have district leaders...	Not at all	Very little	Somewhat	To a great extent
Developed a range of approaches to communicate the vision for a new initiative, and established strategies to support others to understand and meet the expectations of this vision over time.				
Identified and created incentives to support teachers' long-term involvement and commitment to a new initiative.				
Regularly collected, analyzed and applied data from pilot implementation to bring a new initiative to scale.				
Identified existing organizational structures and/or established new structures to ensure adequate site-based and cross-district professional learning.				
Ensured opportunities for district professional learning and ongoing support for principals through the implementation process.				
Provided opportunities and structures for leaders to observe and reflect together on teacher practice, using models such as classroom visits or learning walks.				
Developed a written definition that describes formative assessment as a process that takes place during instruction and is focused on the student role in learning.				

Current School-Level Conditions:

In formative assessment implementation, schools are the entry point for professional learning, as the operational structures that support ongoing adult learning are located at the school level. Similarly, necessary practices for formative assessment implementation must take place through ongoing dialogue and reflection on instructional practice, which is easiest to structure and sustain within schools. School

selection for engaging in formative assessment professional learning should consider key readiness factors related to the structures, protocols, and models for adult learning at the school site.

School Readiness Factors:

To what extent does the school have in place...	Not at all	Very little	Somewhat	To a great extent
Strategies through which strong instructional practices are disseminated and used throughout the school.				
Adequate opportunities and structures through which teachers can engage in honest dialogue about instruction, assessment, and lesson planning.				
Established cultural norms that encourage and support productive dialogue about challenging instructional issues.				
Mechanisms for teachers to receive feedback on their practice, through peers, instructional leaders, coaches, and/or administrators.				
An existing culture of learning that supports taking risks, being able to make mistakes, and use errors as new sources of learning.				
Times established during the school day that are specifically devoted to teacher learning (PLCs, common planning time, regularly scheduled release time, etc.)				

The Role of the School Leaders:

The school principal clarifies the vision of formative assessment and supports teachers to learn new skills that move them, and their students, towards that vision. Successful implementation of formative assessment requires that leaders model and showcase the value of adult learning, create a culture of learning amongst adults, actively engage with teachers throughout the learning process, and provide opportunities and structures for meaningful professional learning and feedback that will lead to improvements in student learning. School leaders can minimize competing priorities by providing a coherent approach to instructional improvement efforts. Through supportive leadership, teachers understand that formative assessment is not just “one more thing” they have to do, rather it provides a way to re-think daily classroom instruction in order to engage students in the learning process.

School Leadership Readiness Factors:

To what extent does the school principal...	Not at all	Very little	Somewhat	To a great extent
Establish coherent communication that effectively describes the vision and rationale for complex initiatives.				
Effectively leverage structures, processes and procedures currently in place to support ongoing professional learning and teacher collaboration.				
Monitor implementation of new initiatives, demonstrate willingness to learn from successes and failures, and adjust implementation planning based on evidence.				
Engage in actively learning about new instructional practices, and develop understanding in order to support teachers as they are learning.				
Show comfort and willingness to learn alongside teachers, including regular attendance and participation in site-based and district-level professional learning.				
Have adequate structures in place to provide teachers with support and feedback (whether administrators, department/grade-level leaders, or peers), through observations, walk-throughs, or teacher goal-setting.				
Encourage teachers to take risks, learn from mistakes, and bring forward implementation challenges for shared resolution.				

The Role of Teachers:

During the early stages of implementing formative assessment, teachers often tell us that they expect implementation to be straightforward, since they are already “good teachers”, and formative assessment includes many elements that are “just good teaching”. However, teachers learn quickly that developing skills that change the ways in which students engage with their learning involves re-thinking fundamentals of instructional practice. To engage in this work, teachers must be open to rethinking their beliefs, consider ways to deepen their disciplinary knowledge, and, be willing to change practice. This involves reflecting on their own theories of how students learn, and embracing new approaches to learning that place students at the center. Teachers must be ready to take on this challenge over the long-term.

Teacher Readiness Factors:

To what extent does the teacher...	Not at all	Very little	Somewhat	To a great extent
Willing to engage in learning opportunities to improve academic content and pedagogical content knowledge.				
Demonstrate that he/she is open to learning new ways to engage students in their own learning.				
Exhibit a willingness to take risks, to learn, and to reflect and refine their practice.				
Seek out and incorporate feedback from peers and instructional leaders to guide new learning.				
Use multiple strategies to share and disseminate new learnings with peers and colleagues.				

Conclusion:

The *Conditions of Success and Readiness Factors* outlined in this document are culled from years of experience working with district leaders, school leaders, and teachers, to implement formative assessment. It is our hope that these factors in no way hinder implementation or serve as a barrier to teacher engagement in formative assessment. Rather, these are offered to guide District Design Team dialogue and site/teacher selection in ways that are most likely to be successful – both in the early stages of implementation, and as formative assessment is scaled across the district.

References

- ⁱ Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). Berkshire, England: Open University Press.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles Policy and Practice*, 5, 7-73.
- Black, P., Wilson M., & Yao, S-S. (2011). Roadmaps for learning: A guide to the navigation of learning progressions. *Measurement: Interdisciplinary Research And Perspectives* 9, Issue 2-3.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81-112.
- ⁱⁱ Absolum, M. (2010). *Clarity in the classroom: Using formative assessment to build relationships*. Winnipeg, Canada: Portage and Main Press.
- Heritage, M. (2012). *Formative assessment: A process of inquiry and action*. Cambridge, MA: Harvard Education Press.
- Wiliam, D. (2011). *Embedded formative assessment*. Bloomington, IN: Solution Tree Press.
- ⁱⁱⁱ OECD (2013). *Synergies for better learning; An international perspective on evaluation and assessment. OECD reviews and assessment in education*. Paris, France; OECD Publishing.
- ^{iv} 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.
- Shepard, L. A., Penuel, W. R., & Davidson, K. L. (2017). Design principles for new systems of assessment. *Phi Delta Kappan*, 98(6), 47-52.
- ^v Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). Berkshire, England: Open University Press.
- ^{vi} Goe, L., Wylie, E.C., Bosso, D., Olson, D. (2017). State of the States' Teacher Evaluation and Support Systems: A Perspective from Exemplary Teachers. Council of Chief State School Officers, National Network of State Teachers of the Year, Educational Testing Service.