

Formative Assessment

Not Just Another Test

"Many educators think of formative assessment as another kind of test. Instead, it is a process to help instructors to understand their students' day-to-day learning and to develop appropriate interventions to improve that learning," says Nancy Gerzon, Senior Research Associate at WestEd. "We know from research that effective formative assessment has multiple components, but most educators use only one or two."

Gerzon directs the New York Formative Assessment Project, which aims to change how educators think about formative assessment. The three-year-old initiative is led by a New York Comprehensive Center (NYCC) Assessment Team, with support from the Assessment and Accountability Comprehensive Center at WestEd. The New York State Education Department and the Syracuse City School District also are partners in the project.

According to Gerzon, research shows that students make dramatic achievement gains when their teachers break instructional units into a progression of clear, well-defined learning targets; involve students in setting learning goals and assessing their own progress; give students immediate and corrective feedback; and set up peer collaboration activities to build content mastery.

Known as formative assessment, this comprehensive and interactive process is a model of mastery learning, in which a student progressively develops skills and confidence under the guidance of a seasoned professional.

Laying a Solid Foundation

The New York project has been guided by a specific definition of formative assessment adopted in 2006 by the Council of Chief State School Officers: "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 project began with a pilot initiative in Syracuse to provide intensive professional development focused on showing 4th and 5th grade teachers in 10 elementary schools, their mathematics coaches, and school administrators how to design and integrate effective classroom assessment strategies on a broad scale.

An outside review of the project by researchers from the University at Albany found "clear evidence" that the initiative had begun transforming instruction and learning.

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The researchers noted that teachers who received at least 60 hours of targeted professional development had significantly expanded their use of specific formative assessment practices — including higher-level questioning, hands-on performance tasks, and flexible grouping. A majority of teachers were using some type of formative assessment on a daily basis. These practices were viewed by district leaders, Gerzon says, as a contributing factor in students' passing the state's mathematics tests at higher rates, with the achievement gains most noticeable among girls, English language learners, and students with disabilities.

Training District-Level Coaches in Key Strategies

Project implementation began with intensive training of district-level mathematics specialists in the theory and application of formative assessment strategies. In addition to learning the research behind basic formative assessment practices, coaches worked directly with teachers to help them understand the related diagnosis and intervention skills used in the classroom.

An important feature of the Syracuse project, Gerzon says, was giving faculty members ample time to work with one another and with mathematics coaches to create and implement effective formative assessment strategies based on real mathematics units. Through these collegial exchanges, educators discovered the value of anticipating and planning for students to experience common stumbling blocks in learning, instead of being surprised and unprepared to react to trouble spots.

During the training, district-level coaches practiced implementing key strategies. To learn firsthand about setting a progression of clear learning targets, for example, math coaches looked at all the ways that students might become confused when learning about measurement on a number line, a common weakness on the state math exams. By pulling instructional units apart to identify the critical junctures of learning and then designing effective strategies for re-teaching the concepts, educators gained a deeper understanding of the math content as well as how to move students towards mastery.

"What we're trying to do is frame clear, concrete learning goals," says Gerzon. "Teachers articulate clearly what they think the progression of skills will be before they start the lesson. We urge teachers to ask themselves: What are my criteria for success in this lesson? What will students do differently as a result of what I'm doing today or this week? As teachers get more skilled at identifying the learning goal for the unit and the steps needed to get there, they can also more readily identify students who need help and engage them in specific learning activities that will help them master next steps."

Cultivating an Active Role for Students

Providing specific and prompt feedback to students is a vital part of formative assessment. In their 1998 comprehensive review of research, Paul Black and Dylan William* found that most schools overemphasize grading, rather than making the goals and stages of learning explicit for students as instruction progresses.

"Feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparisons with other pupils," Black and William explained in a 1998 article in *Phi Delta Kappan*. "Surprisingly, and sadly, many pupils do not have such a picture, and they appear to have become accustomed to receiving classroom teaching



as an arbitrary sequence of exercises with no overarching rationale. When pupils do acquire such an overview, they then become more committed and more effective as learners."

As frequent formative assessment helps students become more involved in setting their own learning goals and assessing their progress, they become comfortable analyzing and discussing with teachers and peers how well they understand target knowledge and skills. According to Gerzon, such self-reflection enables students to develop the habits of lifelong learners who keep asking new questions about a topic and layering new information onto what they already know.

"Teachers who used to say, 'I taught it; they didn't learn it,' now say, 'I taught it and here's what I now need to reinforce.' They were really doing a lot to catch every student. Reinstruction does not mean that you say it louder or more slowly. It means teaching something differently to meet the needs of all the learners in your class."

Getting Buy-In at State and District Levels

From the beginning, the state department of education in New York was an active partner in the formative assessment project, viewing it as a research-based, proven means to improve student achievement. Howard J. Goldsmith, executive coordinator of the department's Office of Curriculum and Instructional Support, worked with Gerzon's team to lay important groundwork for the pilot project, such as adopting a working definition of "formative assessment" and determining how formative assessment theory would be put into practice at the district and classroom levels. "This is a tremendous opportunity for any district...to really invest in its teachers and its students," he says. "We know about other factors that can raise achievement — longer school days, better equipment and books. While all are important, research shows that teacher quality is key."

Developing a common definition of formative assessment — what is essential and what is not — is an important next step as New York seeks to spread the success in Syracuse to other school districts. "There's a lot of misinformation and misunderstanding" about formative assessment, Goldsmith says. "I think it's important to get that single definition statewide." Another valuable lesson from the Syracuse project, according to Goldsmith, is the importance of getting buy-in from people at all levels of the education system and understanding that there are no quick fixes for improving schools.

"Formative assessment is all about good teaching, and helping students learn about themselves and work together in an effective classroom setting. What we do to help teachers help students is what makes the difference."

For more information about the New York Formative Assessment Project, contact Nancy Gerzon at 781.481.1108 or ngerzon@WestEd.org.

*Black, P., & William, D. (1998). Assessment and classroom practice. *Assessment in Education: Principles, Policy & Practice*, 5, 7-74.