



A WORK *in* PROGRESS

Formative assessments shape teaching and provide mutual professional development

BY JULIA STEINY

The 6th-grade language arts teachers at Twin Groves Middle School, in Illinois' Kildeer District 96,

chitchatted as they trickled in to what they assumed would be an ordinary session of common planning time.

They usually gather in Lauren Loessl's classroom, with walls nearly hidden behind student work, informational posters, and a wealth of pictures of dogs, both Loessl's own and others. The teachers comfortably took their seats to examine the results of a pretest they'd given to their 200 students.

To their surprise, the test results were loud and clear: The upcoming unit of study they'd carefully crafted



Loessl

would be completely repetitive for most of the students.

Everyone had to take a deep breath. The good news was that they would avoid wasting

everyone's precious time and patience. But the tough news was that they

were back to square one in terms of unit planning and curriculum building. Thankfully, they could trust the group's collective wisdom to help each other tackle this challenge. After revising their overall plan, they began to shore up each others' lesson plans with activities, assignments, and methods they'd learned on their own over the years.

Sparkling this flame of mutual professional development was a formative assessment. "Formatives," as the practitioners call them, are a technique usually adopted as a safety net for struggling students. But as districts are finding out, they are also very effective at honing teacher practice.

Everyone is all too familiar with summative assessments — the grades on student work, marks on report cards, and public reports of state and district tests. These tests summarize the extent to which students — and schools — have met expectations. They're the final word.

Kildeer Superintendent Tom Many describes the perception of summative assessments as, "Write the grade in the book, shut the book, and move on — we're done. But the problem is that they don't tell teachers much about what is happening during instruction."

Formative assessments are a different animal, and not meant for public viewing. They're written and given by a group of teachers — the 5th-grade team, or 7th-grade social studies teachers. The tests assess with some precision where the kids' learning and skills are in relation to a current or upcoming unit or topic. What, if anything, do the kids know about the subject before it is taught? After teaching a unit for four weeks, how much material stuck with the kids? Why did some kids get it, and some didn't? There could be lots of reasons for the difference between the students' retention of the information,

Twin Groves Middle School
Buffalo Grove, Ill.

Grades: 6-8
Enrollment: 565
Staff: 49 certified, 24 educational support staff
Racial/ethnic mix:

White:	82.1%
Black:	1.2%
Hispanic:	1.9%
Asian/Pacific Islander:	14.7%
Native American:	0%
Other:	0%

Limited English proficient: 1.1%
Languages spoken: 29
Free/reduced lunch: 1.8%
Special education: 14%
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but until teachers know what the kids know, student by student, they can't identify the root of any problems.

A passionate advocate of formative assessment, Many says, "We used to say that kids fell through the cracks. The truth is we knew little about student learning until the end of a unit. Formative assessments help teachers make adjustments during instruction so kids have a better chance to learn what they need to learn. This closes the cracks."

According to Kildeer's grade-level reading standards, it was time for Loessl and the 6th-grade team to teach the elements of figurative language and sound devices — simile, metaphor, alliteration, personification, and onomatopoeia. After working with formatives for some time, this team has gotten into the habit of simultaneously mapping out the lessons themselves while drafting the assessment that will act as a dipstick

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look into the kids' knowledge tanks. Typically, a formative asks seven to 10 questions, depending on the number of standards being assessed. Loessl says, "But in this case, to really understand what the kids know about five distinct conventions of language, a single question could mask information." A 6th-grader might understand the concept of a simile, but be baffled by "My love is like a red, red rose." So the teachers asked four to seven questions for each figure of speech. The result was a 40-question pretest that they gave before teaching the unit.

Loessl says, "Preassessment is great because we sit down together and ask ourselves what we're going to do. We knew the students were ready to focus on interpreting (the figures of speech) instead of merely identifying them. We knew they'd had some instruction before, and we didn't want to be repetitive."

Little did they dream just how repetitive they were about to be. The team had planned to spend four weeks helping as many children as possible to achieve at least an 80% on the posttest. Only 57 students scored below 80% on the pretest.

TIME TO REGROUP

Even if the five teachers had exactly the same training — they did not — they would still have collected five different sets of interests, favorite methods, activities, and tricks during preservice or while teaching. So, pulling from their collective bag of tricks, the teachers devised entirely new units of study, with new assignments, to challenge students to use these literary devices in writing tasks.

Loessl says of her colleagues, "We pool our resources. We share thoughts

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about activities or how to use the aide in the classroom. We are always learning from each other, every day, and the kids get the best of all our thinking — not the first practice we come up with, but the best.”

Jeanne Spiller, Kildeer staff development coordinator, says, “We’re trying to quit teaching towards the middle, and design instruction to reach all the cohorts.”

But to do that, teachers have to be learning right along with the kids. Spiller remarks, “At first teachers didn’t understand the purpose of being on collaborative teams, but the data is showing them why they need to work together. Together, the teams are having a really positive impact on student learning.”

Paul Louis, the district’s curriculum director, notes that when a

Barrington Middle School
Barrington, R.I.

Grades: 6-8
Enrollment: 862
Staff: 76
Racial/ethnic mix:

White:	96%
Black:	1%
Hispanic:	1%
Asian/Pacific Islander:	2%
Native American:	0%
Other:	0%

Limited English proficient: 0%
Languages spoken: English
Free/reduced lunch: 4%
Special education: 14%
Contact: Betty Calise, curriculum director
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teacher gets especially great results, other teachers start to ask, “How did you do that? How did you demonstrate? How did you have them prac-

tice?” He says that some teachers resist formatives until suddenly they say, “Hey, wait! We’re making big improvements. Teams (of like-subject teachers) tell me that they’re getting clearer and clearer about the expectations for each kid. This is deep, job-embedded professional development. We’ve really gotten away from going to workshops as our primary staff development opportunities.”

Many believes that “by talking about the assessment results, teachers: 1) sharpen their pedagogical skills, 2) deepen their content knowledge, and 3) maximize the impact of their instruction, all of which are great for teachers.”

THE COURAGE TO TAKE AND USE FEEDBACK

At Barrington Middle School in

Rhode Island, three 7th-grade math teachers take refuge from the school's din in a conference room. These teachers are not looking at a pretest like the Twin Groves group, but a formative posttest, one that came after four weeks of instruction. Pre- and post-formatives are often quite similar, since the point is to be assured that students learned a specific set of skills and content. Posttests raise a much more diverse array of questions and challenges than pretests. If the data reveal that the kids are having problems with the material, do the problems lie with the learner, the teacher, the design of the instruction, or the test itself? Teachers must solve these mysteries together.

Rob Lloyd, Megan Medeiros, and Julie Abbruzzi unfurl their spreadsheets with each of their students' scores. As math teachers, they natural-

ly slice, dice, and graph data on their own. They're excited to see each other's results.

As they pore through the data, they see first that every child in the teachers' three classes got question 6 correct, so they're not sure it's telling them anything useful. Asking good questions is key to effective instruction, so they make a note to work on this question for next year's formative on the same material.

Conversely, question 5 buffaloed a lot of kids. What could have gone wrong? Were the students confused by the vocabulary used in the question? Maybe. They toss out possibilities for rewording the problem. They decide to go back to their classrooms and each give the kids a few similar problems. Perhaps students really do understand the basic concept, and the question itself was somehow flawed. If

not, reteaching is in order, and they'll have to figure out what went wrong in the first place in order to develop the reteaching.

The Barrington teachers' data reveal that six students did not get 80% or better, the threshold signaling they should get extra help. It's only October. As a class keeps moving ahead, students who didn't get the basic concepts could easily fall further and further behind. By May, those students could be lost. But both Barrington and Kildeer have special intervention periods built into their schedules where struggling students can go on an as-needed basis. There, they get targeted help in the skills the formatives showed were lacking. No struggling child is left behind in some remedial purgatory, nor allowed just to flounder alongside his peers.

As Medeiros says, "The kids trust

that we're keeping them on a successful path."

Betty Calise, Barrington's curriculum director, puts it this way: "In the past, we'd wait for the end of the quarter, do a summative, and realize it didn't work. Now we're trying to nip problems quickly and figure out how to get the kids the extra help they need. The number of course failures at the middle school has dropped dramatically."

These assessments are also road maps for teachers. The teachers have quick feedback in the event the material is not getting across. Medeiros says, "For example, last year the (formative) tests showed that I'd run into a vocabulary problem. I thought I'd taught it well, and I hadn't. I needed to look at how I could do things differently."

Under tremendous pressure to produce summative results, teachers need to understand how mistakes happen so they can avoid repeating them. Many says that formatives "can expose the strengths and weaknesses of a teacher's practice. But it informs them so they can redesign quickly and become more effective quickly. Yes, teachers sometimes bristle at the feedback. But in the end, it's about the outcome and the quality of the work."

Calise says, "You always need to know what you don't know. Unless you do, you can't learn. The teachers now learn so much from each other.

This is perfect embedded professional development."

Of Rhode Island's 314 schools, 43 were deemed commended, which means they have shown consistent improvement over time or achieved at



an exceptionally high level. All six of Barrington's schools were among those 43. Officials immediately pointed to their formatives when asked how they were raising achievement across the district.

FORMATIVES MEET CHALLENGES AND OBSTACLES

Connie Kamm, a professional development associate for the Leadership and Learning Center in Englewood, Colo. is a formative-assessment evangelist.

Her colleague is Larry Ainsworth, who, with Donald Viegut, wrote *Common Formative Assessments* (Corwin Press, 2006), a seminal text on the subject.

Kamm notes with a sigh, "Many educators are caught in the cycle of teach, teach, test, move on. Formative assessment embraces the cycle of teach, assess, reflect, reteach. This methodology is not new. Researchers have known that students taught using the formative assessment cycle were outscoring traditionally taught students by at least 15%."

But the public, especially after No Child Left Behind, is wedded to summative assessments.

For background on the subject, Kamm recommended the article "Inside the Black Box," written in 1998 for *Phi Delta Kappan* by British researchers Paul Black and Dylan Wiliam. By "black box," they mean

any school's classroom, whose inner workings are opaque to the general public, except for the summative assessments that provide virtually the only image of education's efforts. In this age of superheated demands for accountability, the summatives are important because they provide the public with some sense of the results of their investment.

But Black and Wiliam believe that rather than contributing to effective teaching, summatives "encourage rote and superficial learning. ... The questions and other methods teachers use are not shared with other teachers in the same school and are not critically reviewed in relation to what they actually assess."

As a result, the authors note, "The giving of marks and the grading function are overemphasized, while the giving of useful advice and the learning function are underemphasized."

By contrast, the much more useful formatives "require careful scrutiny of all the main components of a teaching plan. Indeed, it is clear that instruction and formative assessment are indivisible."

Kamm says, "All assessments don't have to be for grades. With these new methodologies (formatives), teachers get a chance to provide students with multiple opportunities to successfully master specific concepts and skills. Teachers get feedback from one another about the effectiveness of their instructional strategies. So we're turning classrooms into laboratories where teachers study student learning as well as their own teaching methodologies. Teachers are becoming scholars."

In the Internet age, the latest research is at teachers' fingertips. "Teachers have started to look at students with a researcher's eye, constantly asking themselves lots of questions about student learning and getting

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into research for the answers,” says Kamm.

And since they now know what they don't know, teacher teams turn to their district to request specific outside professional development when they've hit a brick wall and know what they need.

As a consultant, Kamm says that often staff will resist implementing the use of formatives when they are unfamiliar with their benefits and processes. Professional learning is critical. Principals and districts must be committed to giving teachers the time and support they need to understand, create, and analyze formative assessments.

But once the issue of adequate time has been resolved, resistance melts quickly because teachers enjoy reaping the full fruits of their labor.

Tom Many concludes, “For the last 40 years, something like 4,000 studies have demonstrated that when done well, formative assessments may be the most powerful tool we have for leveraging higher levels of student learning. You're not guessing. You teach from knowledge instead of intuition. Formative assessments inform teacher practice. The more informed teachers are, the better their lesson plans. The better the lessons, the better students learn. They're a logical link that develops good information that cascades through the whole teaching and learning process.”

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