BY TERESA M. EGAN, BETH COBB, AND MARION ANASTASIA

Conferring at St. Johnsbury School are, clockwise from lower right, Bridget Ferrin, Brian Dumais, Lorraine Sprout, Michele Taylor, Matt McLean, and Jodie Elliott.

THINK TIME

FORMATIVE ASSESSMENT EMPOWERS TEACHERS TO TRY NEW PRACTICES

All of the students waited patiently while a classmate focused on the problem he was trying to solve on the board. He attempted one solution and realized it didn't work, then haltingly tried another. His classmates watched intently, apparently all thinking through their own solutions. Many of them referred to their writings on individual whiteboards in front of them. No one snickered. No one sighed impatiently. Eventually, the teacher offered the student the option to request help from a classmate. The classmate respectfully suggested he adjust his strategy slightly, and in doing so, both worked together to find a solution. The teacher then asked other students to offer alternate solutions, with several appropriate ideas proposed and accepted by the class.

ASSESSMENT FOR LEARNING IN THE CLASSROOM

As a former middle school teacher, I (author Teresa Egan) found the students' patient and cooperative attitude both surprising and refreshing. By integrating several key assessment for learning instructional strategies, Matt McLean, a 6th-grade math teacher at St. Johnsbury School in Vermont, had established a classroom environment where students were

given time to process their solutions, while all other students engaged with the question at hand and were prepared to serve as an instructional resource if help was requested. Although no longer a practicing teacher myself, I was interested in observing how middle school teachers and students were engaging with formative assessment practices in the classroom (Black & Wiliam, 1998a). At this school, I witnessed firsthand just what it looked and sounded like when done well. I also observed the complex changes in the classroom contract that exemplified fundamental changes in how students and teachers viewed their respective roles in the learning process. Students clearly understood that they had responsibility for their own learning and recognized that their peers were resources in this endeavor. Teachers were gradually transitioning to a role of sharing responsibility for learning with the learner.

Jeremy Ross, a literacy lab teacher at St. Johnsbury, explained the whole-school emphasis on changing classroom practice: "In the past, if I asked a question of a student, and that student needed a few minutes to think, that student's thinking would be interrupted by somebody else who'd be shouting out. Now we're really focusing on think time for students and really working with other students in the classroom to be respectful. That think time and wait time encourages respect among students and from student to teacher and teacher to student and extends beyond the classroom."

SUPPORTING AND SUSTAINING JOB-EMBEDDED LEARNING

These fundamental classroom changes are the result of a sustained effort to introduce teachers to research-based formative assessment theory and provide them with practical techniques for integrating forma-

tive assessment into their daily instruction. The new learning environment empowers teachers to take risks in trying new practices, knowing that they will have opportunities to discuss their efforts and get support and feedback from colleagues engaged in the same job-embedded learning. A key element of this framework for professional learning and growth is a district commitment to providing teachers with regular meeting time in teacher learning communities (TLCs), protecting that time against encroachment by other school demands, and structuring the time so that meaningful examination of practice will regularly occur. This structured meeting time is guided by a modularized curriculum that sets expectations for every meeting as a time when teachers will share what they have tried in the classroom, receive feedback and questions from colleagues, engage in new learning, and create an action plan for what they will attempt upon returning to the classroom (Educational Testing Service, 2007). Teacher learning communities are scheduled once a month on early release days. Parents, community members, and the school board are supportive of this school improvement strategy for professional learning.

Teacher willingness to take risks and learn from successes and failures, and to try again with help and support from colleagues, is another key factor in gaining the most significant benefit from community learning. "The TLC is probably the most professional thing I've ever participated in," Ross said. "It's really important that you are feeling safe to share what is working and what is not working in

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- Professional learning occurs among teams of teachers.
- Teams of educators evaluate student, teacher, and school learning needs through data review and evidence-based strategies such as formative assessments.
- Professional development may be supported by external assistance.

your classroom. Everybody is really eager to share what is working. It is hard to get to a point where you're comfortable saying, 'Well, I gave this a shot, and it blew up in my face.' When we get to that point, that's when I think a TLC becomes most effective. It's great to share what is most effective, but maybe it's more important to share what's not working, because you can get help from other people."

In summer 2006, the Vermont Department of Education partnered with Educational Testing Service to host Keeping Learning on Track (KLT) professional development training for schools identified as being committed to closing student achievement gaps. During the pilot project, St. Johnsbury participants included a coach, six classroom teachers, and the principal. In 2009-10, the program includes 11 teacher learning communities, each facilitated by a Keep Learning on Track coach.

> **"It's great to share what is most effective, but maybe it's more important to share what's not working, because you can get help from other people."**
>
> *— Jeremy Ross*

The program's success was due to Coburn's (2003) dimensions of scale: depth, sustainability, spread, and shift. The depth includes the change in teachers' roles, practices, professional learning, and relationships. The change in the beliefs and attitudes of teachers has caused a transformation in classroom culture from teaching-centered to learning-centered. Sustainability is ensured through structures that include an internal KLT trainer, a schedule that embeds teacher learning communities within the workday, shared leadership roles, and administrative and school board support. Spread is evident through deep pedagogical principles that have influenced policy, school procedures, and professional development. Lastly, shift is promoted through the shared leadership roles of teachers.

> **One of the biggest challenges of formative assessment is the actual adaptation of instruction in real time based on evidence of student understanding.**

As developers of the Keeping Learning on Track program, Educational Testing Service was invited to observe St. Johnsbury classrooms where the program is in its third year of implementation. The program introduces assessment for learning content in a multiday workshop, then outlines a process for a gradual integration of formative assessment into classroom practice, with ongoing support through participation in school-based teacher learning communities. Both the content (assessment for learning strategies and techniques) and the process (teacher learning communities) of this program are based on research on classroom practice that is most effective in improving student learning (Black & Wiliam, 1998b). This professional development structure clearly aligns with NSDC context, process, and content standards, with a particularly strong emphasis on the importance of

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St. Johnsbury School
St. Johnsbury, Vt.

Grades: Pre-K-8
Enrollment: 715
Staff: 80 professional, 6 clerical, 50 paraprofessionals, 4 administrators, 2 contracted services
Racial/ethnic mix:

White:	94%
Black:	2%
Hispanic:	2%
Asian/Pacific Islander:	2%
Native American:	0%
Other:	0%

Limited English proficient: 0%
Languages spoken: N/A
Free/reduced lunch: 65%
Special education: 14%
Contact: Marion Anastasia, principal
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providing educators with the knowledge and skills to collaborate and the critical role of school and district leaders to guide continuous instructional improvement.

The Keeping Learning on Track program exposes teachers to a wide range of classroom techniques, all unified by one big idea: Students and teachers using evidence of learning to adapt teaching and learning to meet immediate learning. This one big idea is further defined through five key strategies for classroom practice:

- Clarifying and sharing learning intentions and criteria for success;
- Engineering effective classroom discussions, questions, and learning tasks;
- Providing feedback that moves learners forward;
- Activating students as the owners of their own learning; and
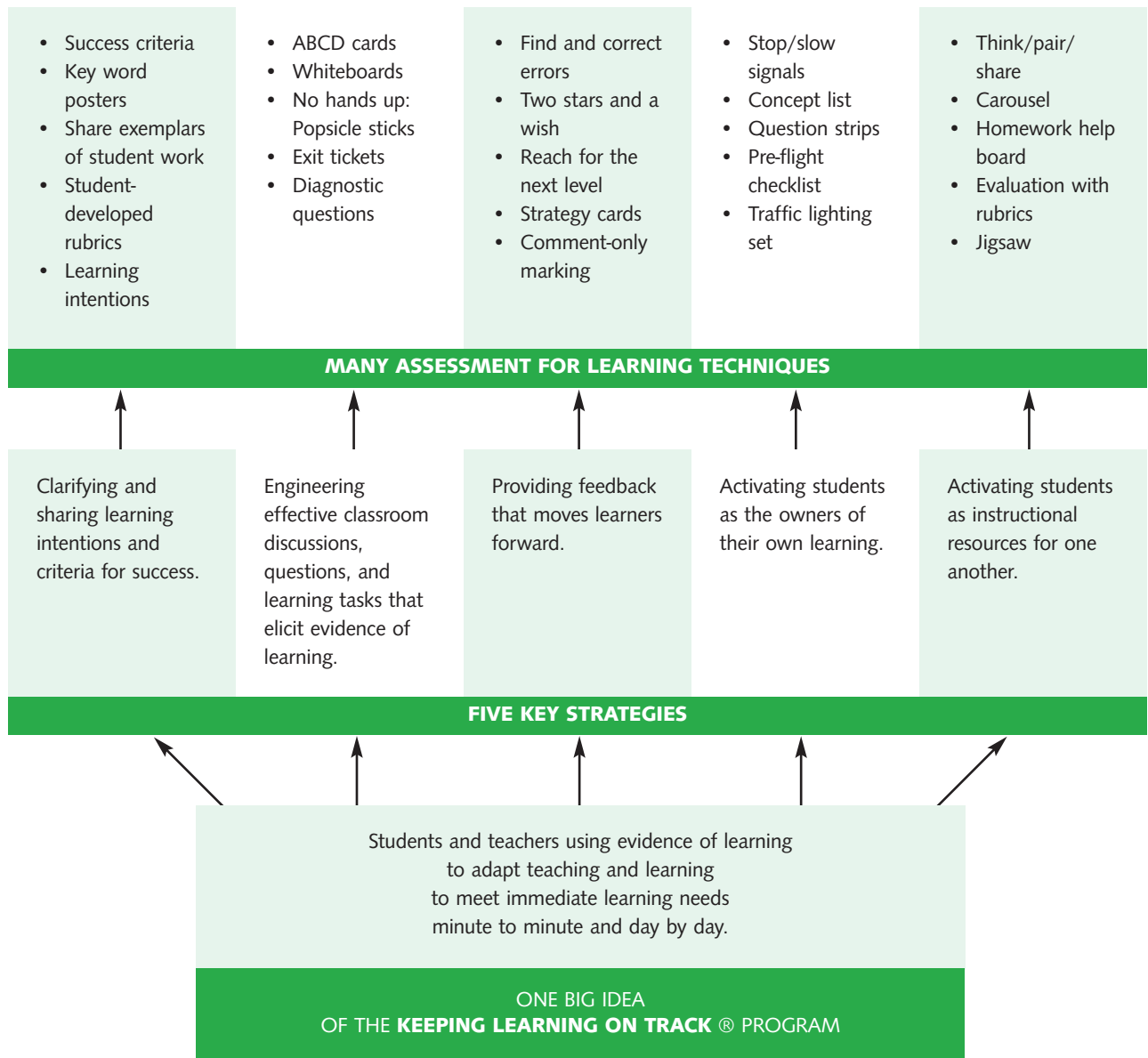- Activating students as instructional resources for one another.

This KLT framework, illustrated in the diagram on p. 44, provides a common structure for implementing formative assessment that is equally powerful for teachers of all content areas and at all grade levels (Leahy, Lyon, Thompson, & Wiliam, 2005).

In each of the three years of implementation at St. Johnsbury, a new cohort of teachers participated in the initial workshops, then joined teacher learning communities to support their efforts as they applied what they learned in the classroom. The teachers spoke freely about the value they found in these monthly opportunities to share practice and get honest feedback from colleagues. Deb Smith, a 5th-grade teacher at St. Johnsbury, commented on the changes she has begun to see in her classroom as she works with colleagues to develop clear learning expectations for students: "It's been great after 30 years to find something that reinspires you and really keeps the light under what you're doing — the fire. It's much more fun to teach with it because you feel like you saw the involvement that kids have — ownership — it's their work. They know what they have to do and how they're going to show it, and there's a responsibility level. I work, I plan backwards. We decide what it is we want them to know and then figure out a good way to get them there. And, of course, the whole idea of letting them in on the secret about what they're expected to know; it's not a big surprise at the end. So I think that's a big change from traditional teaching that I was trained to do and did for years."

INSTRUCTIONAL DECISION MAKING

One of the biggest challenges of formative assessment is the actual adaptation of instruction in real time based on evidence of student understanding. In a 2nd-grade classroom at St. Johnsbury, teacher Kathy Merrill demonstrated how this works. She began her math lesson by asking students to complete an entrance task by drawing an example of a figure of their choice. Though Merrill's lesson plan was designed to focus on two-dimensional figures, she quickly rec-

KLT framework

- Success criteria
- Key word posters
- Share exemplars of student work
- Student-developed rubrics
- Learning intentions

- ABCD cards
- Whiteboards
- No hands up: Popsicle sticks
- Exit tickets
- Diagnostic questions

- Find and correct errors
- Two stars and a wish
- Reach for the next level
- Strategy cards
- Comment-only marking

- Stop/slow signals
- Concept list
- Question strips
- Pre-flight checklist
- Traffic lighting set

- Think/pair/share
- Carousel
- Homework help board
- Evaluation with rubrics
- Jigsaw

MANY ASSESSMENT FOR LEARNING TECHNIQUES

Clarifying and sharing learning intentions and criteria for success.

Engineering effective classroom discussions, questions, and learning tasks that elicit evidence of learning.

Providing feedback that moves learners forward.

Activating students as the owners of their own learning.

Activating students as instructional resources for one another.

FIVE KEY STRATEGIES

Students and teachers using evidence of learning
to adapt teaching and learning
to meet immediate learning needs
minute to minute and day by day.

ONE BIG IDEA
OF THE **KEEPING LEARNING ON TRACK** ® PROGRAM

ognized that many of her 2nd-graders had drawn three-dimensional figures. Merrill quickly adjusted her plan to briefly review characteristics of two-dimensional figures, then moved on to a discussion of the characteristics of three-dimensional figures, based on this evidence of student understanding. She did several quick checks on student understanding with diagnostic questions to ensure that her judgment was accurate (Ciofalo & Wylie, 2006). Brian Hulbert, a 4th-grade math teacher, explained: "To me, formative assessment means asking questions, doing various techniques that we have to try to gather information about students' performance at that very second, and then using that information, that data, to make a decision about how you're going to instruct the next piece of whatever subject area you're talking about. Each of the techniques gives me information about each of the students and about where the next step is to move them ahead in their learning."

What we observed was not just a schoolwide commitment to professional growth, but a transformed atmosphere where students exhibited skills that would serve them well for a lifetime beyond the school setting. "Providing these opportunities for students in the classroom now — whether they're in kindergarten or 8th grade — is certainly going to be something that's going to be beneficial to them on into the future," Ross

said. In addition to developing these lifelong skills, St. Johnsbury has also increased student achievement in standardized test scores across all subject areas and grade levels. There were overall gains in all content areas for all groups on the fall 2008 New England Common Assessment Program. Although the achievement gaps for students in poverty and with disabilities remain, the results of the accountability test show a decrease in the gap for all students. These documented achievements, as well as the increased leadership role of teachers within their learning communities and changed student attitudes about who is responsible for learning, have all combined to transform St. Johnsbury School into a model of successful professional development.

Principal Marion Anastasia reflected on the three years of school-based learning and teacher collaboration in their professional development process: "The teachers have taken on leadership roles so that it will be sustained." Werner Heidemann, a school board member, added: "There's no question that, especially this year more so than any other year, you can

> **What we observed was not just a schoolwide commitment to professional growth, but a transformed atmosphere where students exhibited skills that would serve them well for a lifetime beyond the school setting.**

feel that change among the teachers. Very simply, I think it will help kids to learn, to learn more effectively, to learn to think. The whole atmosphere it has created — the trust, the acceptance, and the eagerness with which I see most of the teachers embracing this concept — that's why I think this will work." St. Johnsbury's professional development effort has been a multifaceted success: teacher leadership and renewed enthusiasm, student ownership of their own learning, increased student achievement on accountability and local assessments, and a transformed school environment where everyone is learning together.

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