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Changing Classroom Practice

Meeting regularly in teacher learning communities is one of the best ways for teachers to develop their skill in using formative assessment.

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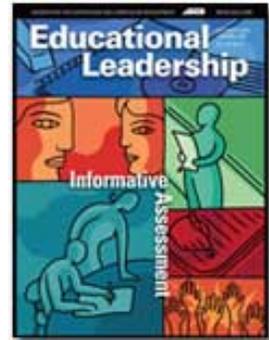
Today's schools face unprecedented challenges in preparing students for the unpredictable demands of the future workplace. In an effort to meet these challenges, a number of policy reforms have focused on raising student achievement. Some (for example, No Child Left Behind) have depended primarily on sanctions, leaving schools and districts to find solutions for themselves. Others have involved curriculum changes, increased use of information technology, or changes in the way schools are governed or organized (for example, charter schools or high school redesign).

The evidence to date is that none of these initiatives has had a large effect. When you control for the demographics of student populations, the net impact on student achievement appears to be effectively zero (William, 2007).

Thus, it's hardly surprising that there has been considerable interest in one development that does have a solid body of research showing its effect on student achievement—formative assessment. Five reviews of the research in this area (Black & William, 1998; Crooks, 1988; Kluger & DeNisi, 1996; Natriello, 1987; Nyquist, 2003) synthesized a total of more than 4,000 research studies undertaken during the last 40 years. The conclusion was clear: When implemented well, formative assessment can effectively double the speed of student learning (William, 2007).

What happened in response to these findings was predictable. A number of publishers started putting the label "formative" on any assessment that was designed to be administered more often than once a year. Such a label may be legitimate if the assessment is used to shape instruction. For example, the results of standards-based tests might show that teachers are paying too much attention to one standard and not enough to another, allowing the teachers to adjust the curriculum. Or the assessments might indicate that certain students are not making enough progress to reach proficiency on the state test, enabling the school to provide extra instruction for these students.

It is *not* legitimate, however, to claim that the existing research indicates that such use of standardized benchmark assessments will raise student achievement (Shepard, 2007). Almost



December 2007/
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all the research reviewed in the five studies mentioned focused on short- and medium-cycle formative assessment, in which the length of the feedback cycle was minutes, hours, or days rather than the weeks or months most commercially available assessments require. Although common assessments, benchmark assessments, interim assessments, and the like play an important role in monitoring student progress and providing system-level information for policymakers, there is no evidence at this time that such assessments increase student achievement (Popham, 2006). Instead of putting their faith in such solutions, schools need to implement the kind of formative assessment that research clearly supports.

The Right Stuff: Effective Formative Assessment

In an article in *Educational Leadership* two years ago, I and some of my colleagues at Educational Testing Service's Learning and Teaching Research Center laid out five nonnegotiable components of an effective formative assessment system (Leahy, Lyon, Thompson, & William, 2005). To tap the full potential of formative assessments, teachers must

- *Clarify and share learning intentions and criteria for success with students.* For example, some teachers share work samples completed by previous students and have current students discuss which ones are strong and which are weak, and why.
- *Engineer effective classroom discussions, questions, and learning tasks.* Well-planned questions can prompt students to think and provide teachers with information to adjust instruction. Teachers need to use effective questioning techniques that keep all students engaged and that gauge the understanding of the whole class instead of just selected students.
- *Provide feedback that moves learners forward.* Comments that address what the student needs to do to improve, linked to rubrics when appropriate, promote further learning more effectively than letter grades do.
- *Activate students as the owners of their own learning.* For example, have students assess their own work, using agreed-on criteria for success.
- *Encourage students to be instructional resources for one another.* Peer assessment and feedback is often more acceptable and engaging for students than teacher feedback is.

Since we wrote that article, we have worked with hundreds of schools across the United States, and we have learned a great deal about the kinds of supports that are necessary for implementing effective formative assessment practices. In particular, we have learned that the necessary changes in classroom practice, although often apparently quite modest, are actually difficult to achieve.

For example, a few months ago, an elementary school teacher in northern New Jersey was telling me about her efforts to change her questioning techniques. She wanted to use popsicle sticks with students' names on them as a way of choosing students to answer her questions at random—a technique that increases student engagement and elicits answers from a broad range of students instead of just the usual suspects. However, she was having difficulty calling on specific students because she automatically started most questions with phrases like, "Does

anyone know ... ?" Frustrated, she wondered why she was finding this simple change so difficult. This teacher has been teaching for 25 years, and we worked out that, over her career, she has probably asked around half a million questions. When you've done something one way half a million times, doing it another way is going to be pretty difficult!

That's the bad news. The good news is that, if a school understands just how hard effective formative assessment is to implement and puts the right supports in place, the necessary changes are achievable in every classroom. But to bring these changes about, schools need to make sustained investments in a new kind of teacher professional development.

Beyond Traditional Professional Development

A football coach who coached quarterbacks by merely having them read books, watch videotapes of games, and listen to presentations from various experts would probably not last long in the job. These practices have a role to play, of course—but ultimately, success in quarterbacking is about being able to execute the plays.

Knowing that is different from *knowing how*. But in the model of learning that dominates teacher professional development (as well as most formal education), we assume that if we teach the *knowing that*, then the *knowing how* will follow. We assemble teachers in rooms and bring in experts to explain what needs to change—and then we're disappointed when such events have little or no effect on teachers' practice. This professional development model assumes that what teachers lack is knowledge. For the most part, this is simply not the case. The last 30 years have shown conclusively that you can change teachers' thinking about something without changing what those teachers do in classrooms.

For example, Mary Budd Rowe (1974) found that the wait time that teachers allowed after asking a question was frequently less than a second, leaving students with no time to think. Subsequent work by Kenneth Tobin (1984) showed that increasing this wait time to three to five seconds improved student achievement. So all we need to do is tell teachers about these findings and their students' scores will rise, right? Wrong! Most teachers have heard about the research on wait time, but they still allow less than a second for students to respond. Knowing what to do is the easy part. Actually doing it is what's hard.

If we want to change what teachers do in classrooms, then we need to focus on those actions directly. As Millard Fuller, founder of Habitat for Humanity, has said, "It is generally easier to get people to act their way into a new way of thinking than it is to get them to think their way into a new way of acting."

Aside from individual coaching for every teacher, which would be beyond the budgets of most schools, the most promising approach we have found for focusing on teacher actions is *teacher learning communities*. In these small, building-based groups, each participating teacher develops a specific plan for what he or she wants to change in his or her classroom practice. The groups meet regularly to support team members in carrying out and refining their plans.

Of course, teacher learning communities are not the best model for all teacher professional development. For example, if a school wanted to increase teacher content knowledge, teacher

learning communities would be a bad idea; direct instruction would be much more successful. But teacher learning communities appear to be the most effective, practical method for changing day-to-day classroom practice.

Planning Teacher Learning Communities

During the last three years, my colleagues and I have explored a number of different models for teacher learning communities. Through these experiences, we developed and refined a model that appears to work well in a diverse range of settings. Here are our practical suggestions for setting up teacher learning communities to implement and sustain formative assessment.

Plan for the teacher learning community to run for at least two years. Don't treat formative assessment as just this year's quick fix. When conceived broadly, formative assessment provides a framework for a whole career's worth of professional development.

Start with volunteers. We've worked with volunteers and we've worked with conscripts—and trust us, volunteers are better. Formative assessment cuts across many established practices in school, and volunteers are far more likely than conscripts to find ways around the obstacles (see, for example, Clymer & William, 2006/2007). Working with volunteers, at least to start with, provides a beaten path that the less enthusiastic can follow. Formative assessment, like any reform, is a match you only get to strike once; make sure there's enough kindling to allow it to catch.

Meet monthly for at least 75 minutes. We've experimented with meetings at intervals of two, three, four, and six weeks. Monthly meetings offer the best compromise. Meetings every two or three weeks are too frequent; often the teachers have not had time to try out new ideas in their classrooms. On the other hand, when the meetings are six weeks apart, the program can lose momentum. To ensure time for all individuals to report back, the meetings need to last at least 75 minutes—ideally, two hours.

Aim for a group size of 8–10. When the group is too small, there are often not enough differences of opinion to provide for good teacher learning. When the group is too large, meeting time may run out before all members can talk about what they've been doing.

Try to group teachers with similar assignments. Teachers with a variety of assignments can provide a welcome degree of diversity, but the most productive discussions recognize the specificities of the subject or the maturity of the students. What makes a good question in math is different from what makes a good question in social studies, and what works for 5th graders may be inappropriate for 1st graders. So aim for teachers with similar grade assignments in elementary schools, and go for cognate areas (for example, math with science) in middle and high schools.

Establish building-based groups. Meeting with teachers from other schools is a good way to get new ideas, but teachers actually don't need a lot of new ideas. Instead, they need to take a small number of ideas and integrate them fully into their teaching. This requires support from a group of trusted colleagues. By all means, hold cross-building meetings in which teachers can

share with their colleagues in other schools, but remember that these are sources of information, not sources of change in teacher behavior. They are no substitute for building-based meetings.

Require teachers to make detailed, modest, individual action plans. At the first meeting, each teacher needs to make a specific plan about what he or she wants to change. The five principles of effective formative assessment (Leahy et al., 2005) can provide participants with some ideas.

Many teachers will want to try out lots of different ideas, but in our experience, teachers who attempt to change more than two or three things at a time invariably fail. Their classroom routines break down, and they go back to doing what they know how to do. Teachers who concentrate on making a small number of changes and on really integrating them into their practice make more progress. It is also important that teachers identify how they are going to make time for the new strategies—what they are going to do less of. For a list of questions that we've found useful in helping teachers develop their action plans, see Figure 1.

Figure 1. Creating an Action Plan

Teachers can use questions like these to format their own action plans. Sample teacher responses are in italics.

1. What is one thing that you will find easy to change? What difference do you expect it to make to your practice?
 - *Wait time/think time. I expect that allowing wait time will encourage my students to think and come up with their own ideas.*
 - *It should be easy to start using the green/red circles for students to signal whether they feel they have, or have not, understood something and the ABCDE cards for answering multiple-choice questions. I expect that these strategies will tell me more about student thinking.*
2. What is one thing that you would like to change that will require support? What help would you need?
 - *Comment-only grading. I would like to go to a standards-based, color-coded system. I would like to change our grading system because it would benefit the kids, but I would need the support of the senior management.*
3. What other changes would you like to make later on in the year? What help might you need?
 - *I would like to change the way I use peer assessments. (I don't use them at all now!) I'd like to start with this technique, but I will need some support.*

4. What will you do differently or stop doing to implement these changes?
- *I would like students to take more ownership of the quality of their work. To do this, I plan to have small groups of students do peer evaluations of sample student work, using mark schemes to score answers. To make time for this, I am going to have to cut back on the number of assignments I give and, more specifically, the number of assignments that I grade.*
 - *I am planning to grade differently, and this should take less time. I will try to grade papers so the students have to find their own mistakes as part of their work.*

Have a facilitator, but not a guru. Someone needs to be in charge to make sure the meetings happen, that there is a room available, that refreshments are provided, that the agenda is followed, and so on. But it is important not to set this person up as an "expert" whose job is to tell the rest of the group what to do. The idea of a teacher learning community is that each person comes with a clear idea about what they want help with, and the group helps that person with the task.

We call these meetings *teacher* learning communities rather than the more common *professional* learning communities because only those who are attempting to make changes in their own classroom practice can be full members of the group. Administrators and other education professionals can provide support and advocacy, and we've seen institutions in which they have made important contributions to a teacher learning community. But they need to be aware of the limitations of their role.

Meetings that Sustain Effective Formative Development

Although experienced and skilled facilitators can sometimes achieve great results with relatively unstructured meetings, it is not reasonable to expect individual teachers to be able to do this, at least not to begin with. For this reason, schools should provide a clear structure for each meeting of the teacher learning community. After exploring a number of formats for meetings, my colleagues and I have developed a five-part format that works successfully in a wide range of settings.

Introduction (5–10 minutes)

Participants agree on the aims of the meeting and get ready to focus on the agenda. For example, many groups have found that irrelevant issues were raised throughout the meeting; they discovered that they could ameliorate this habit by allowing each person a "one-minute whine" at the beginning of the meeting. Each participant has a maximum of one minute (rigorously enforced with a stopwatch) to sound off about all the irritating things about the school that cannot be changed.

How's It Going? (30–50 minutes)

This segment of the meeting is the "active ingredient"—the part that has the greatest influence on teacher practice—and so it must not be squeezed out if time is short. Each participant gives a summary of what he or she has tried to achieve in the previous month and receives support from the rest of the group in taking his or her plans forward. It's crucial that *everyone* report back at *every* meeting; this practice gives all participants an incentive to work on their plans so that they will have something to talk about. As one teacher recently told me,

Just the idea of sitting in a group, working out something, and making a commitment —I was impressed with how that actually made me do something different. (Ciofalo & Leahy, 2006)

At first, this part of the meeting often falls into polite serial turn-taking, along the lines of "Oh, that's nice. Who's next?" To avoid this and ensure that the meeting focuses rigorously on formative assessment, we've found it useful to provide teachers with a set of sample questions or probes. After each participant reports on trying a technique from her or his action plan, other group members might ask, How did it go? Was it successful or unsuccessful? What was formative about it?

If the technique was not successful, possible follow-up questions include, What do you think is getting in the way? What help do you need to make this work? How could this technique be modified to work for you? If someone planned to try a technique, but has not, suitable questions include, Why haven't you tried it yet? What modifications to the technique might make it more appealing for you to try out? What support would you need to try out this technique?

New Learning about Formative Assessment (25–40 minutes)

Since the first, second, fourth, and fifth segments are the same for each meeting, there is a danger that the meetings can become stale. To avoid this problem, the middle section of the meeting should be different each month, providing variety and a way of introducing new ideas to the group. The Keeping Learning on Track program at Educational Testing Service offers a carefully sequenced series of activities and facilitator's notes for a two-year, 16-meeting program. Other possibilities for this segment include watching and discussing a video of a teacher doing formative assessment, conducting a book study in which participants read a chapter of a book before each meeting and discuss it, or doing some kind of shared activity, such as grading student work in pairs to provide formative feedback.

Personal Action Planning (10–15 minutes)

Some participants may want to revise their action plan as a result of what they've heard, whereas others may be content to maintain their original focus. Either way, it is important for participants to have time to think through, in detail, what they plan to do during the coming month.

Review of the Meeting (5 minutes)

Finally, participants return to the original objectives of the meeting and check to see whether

they were achieved. If not, the group makes plans for how to ensure that the objectives are achieved during the coming month or at the next meeting.

Putting Teachers in Charge

Formative assessment has the power to produce unprecedented improvements in student achievement, but teachers need substantial support and guidance to integrate formative assessment into their practice. Teacher learning communities have the potential to provide such support while putting teachers back in the driver's seat, in charge of their own professional development. After exploring a range of models in dozens of school districts, my colleagues and I are confident that the practices discussed here provide a workable model that will enable any school to initiate and sustain teacher professional development focused on formative assessment.

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Author's Note: The Keeping Learning on Track team at Educational Testing Service—Joe Ciofalo, Laura Goe, Siobhan Leahy, Dawn Leusner, Christine Lyon, Marnie Thompson, Cindy Tocci, Dylan William, and Caroline Wylie—contributed to the content of this article. Keeping Learning on Track is a sustained, interactive professional development program that helps teachers adopt minute-to-minute and day-by-day assessment-for-learning strategies. It is the result of a three-year research and development process led by the author and ETS's Learning and Teaching Research Center. More information is available at www.ets.org/klt.

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Learning Teams for Professional Development—Why?

*Adapted from materials used in the Assessment Training Institute Workshop
“Classroom Assessment for Student Learning,” September 23-24, 2004, Portland, OR.*

Open just about any issue of the *Journal of Staff Development* or the *Phi Delta Kappan* and you’ll find an article about the value of collaborative learning teams in professional development. You’ll likely see statements such as “It’s not enough to have facilitation skills; staff development doesn’t get done unless groups work together” (*Journal of Staff Development*, Vol. 20[4]: 2).

Although workshops, individual study, and learning teams are all viable professional development options under certain circumstances, there is considerable agreement that the use of collaborative group work and learning is the most powerful mechanism for developing the “professional learning communities” needed to support ongoing school improvement (e.g., Evans and Mohr, 1999; Garmston, 1999; Johnson and Johnson, 1999; and Putnam and Borko, 2000).

Change requires doing things differently in the classroom. As Putnam and Borko (2000) wrote, “for teachers to be successful in constructing new roles they need opportunities to participate in a professional community that discusses new teacher materials and strategies and that supports the risk-taking and struggle entailed in transforming practice” (p. 8). In fact, in several studies, teachers cite the opportunity to collaborate as the most important factor in instituting change (e.g., Bay et al. 1999). There is also research evidence that learning in groups significantly improves learning and that, although structures for group work vary widely, all are more effective than learning alone (Korthagen and Kessels, 1999; and Springer et al. 1999c).

Think about the last time that you, the reader, learned a complex body of knowledge and/or skills that resulted in a real change in ability, application, or performance. What were the features of the learning environment that facilitated this learning? If you are like most others, you probably cited some subset of the following:

Clear goals. The material to be learned was clearly framed—you were able to see where you were headed.

Self-assessment and reflection. You were able to monitor progress toward your learning goal(s). This enabled you to feel a sense of accomplishment as you grew. You were in control. You also had a chance to reflect on and articulate issues, concerns, and learning.

Relevance. New ideas or skills directly related to your needs. If theory was provided it assisted to help organize and extend your current knowledge and experience in ways relevant to your current needs.

Pacing. Learning began with your current understanding and proceeded at a rate comfortable for you.

Helpfulness. The new information or skills resulted in effects that were immediately obvious. If your learning topic had to do with teaching, the new information or skills quickly delivered benefits in student motivation, student learning, saving you time, and/or increasing your confidence.

Practice. You had the opportunity to practice with new ideas or skills in a relatively risk free environment. It felt safe to stretch.

Collaboration. Working with others helped to deepen and refine your understanding and application.

Flexibility/efficiency. Learning occurred in a way that fit easily into a diverse and busy schedule.

Long-term. You had an extended time to learn and practice.

Not surprisingly, these are also the features generally cited in the literature on professional development that happens within a learning team. This type of professional development results in change. (Bay et al. 1999; Darling-Hammond, 1999; Evans and Mohr, 1999; Guskey, 1999; Korthagen and Kessels, 1999; and Sparks and Hirsh, 1999). Researchers cite the need for “situated learning” (Korthagen and Kessels, 1999; National Staff Development Council, 1995; and Putnam and Borko, 2000) in which concrete experiences and needs provide hooks on which to hang theory.

How does this apply to learning in schools and among teachers? First, there is much consensus right now that for reform efforts to succeed, professional development must focus on topics needed to implement standards-based classrooms—understanding standards (being really clear on what students need to know and be able to do), being skillful with instructional methodologies that best promote learning, and assessment that provides information on the extent to which instruction has been successful.

Professional development must focus directly on learners and learning (e.g., Sparks and Hirsh, 1999; Guskey, 1999; Darling-Hammond, 1999). High-quality classroom assessment clearly must be in place for standards-based education to work. But, even more than this, we are used to thinking about assessment as the measurer of change—the index of what students have learned through various instructional innovations. But, as you know, we’re presenting classroom assessment as the change itself—a direct precipitator of learning; a way to significantly alter the relationships between teachers and students in ways that directly promote student learning to higher standards. Because of the complexity of what is to be learned about classroom assessment, we must approach professional development on classroom assessment in the same manner in which we approach other topics —through contextualized learning teams housed within schools and districts.

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Supporting the **GROWTH** of **Effective Professional Learning Communities**



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Districtwide



Teachers do not magically know how to work with colleagues; districts must support and lead that work if PLCs are to live up to their potential.

By Rebecca A. Thessin and Joshua P. Starr

When business professionals and company executives are asked what skills they look for in recent graduates, they most often mention problem-solving skills and the ability to work in teams. Researchers agree that these skills are necessary for success in a global marketplace (McLaughlin and Talbert 2001; Murnane and Levy 1996; Toch 2003). Yet, as we try to provide more classroom opportunities for students to learn how to solve problems collaboratively, we aren't paying enough attention to an important, related goal — the need for teachers to learn to do the same.

Students are only one part of an ingrained system of schooling in our country that has emphasized individual achievement and survival of the fittest for much of the last century. Teachers have also learned to close their classroom doors in order to innovate and succeed independently while presiding over their own classroom kingdoms (Elmore 2004; Tyack and Cuban 1995). Now, in the face of increased accountability and districts' desires to improve educator effectiveness, many school systems are implementing professional learning communities (PLCs) to support teachers in collectively using assessment data and student work to identify instructional strategies to meet students' learning needs. As schools and districts race to implement PLCs to provide teachers with



A SOPHISTICATED PRIMER

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Deepen your understanding of this article with questions and activities on page PD 4 of this month's *Kappan Professional Development Discussion Guide* by Lois Brown Easton, free to members in the digital edition at kappanmagazine.org.

Elements of the Stamford PLC Cycle

Inquire – Research It

PLC members will read/research the instructional area of focus that they strive to address.

Analyze Data

Analyze available data in the instructional area of focus to identify the learner-centered problem to be addressed. Specific data that might be examined include results or outcomes from state tests, common departmental or grade-level assessments, nationally normed tests, classroom observations, number of failures in classes, and GPA.

Look at Student Work

Examine examples of student work (beyond standardized assessments) that may provide a clearer picture of student thinking and understanding within the focus area.

Examine Instruction

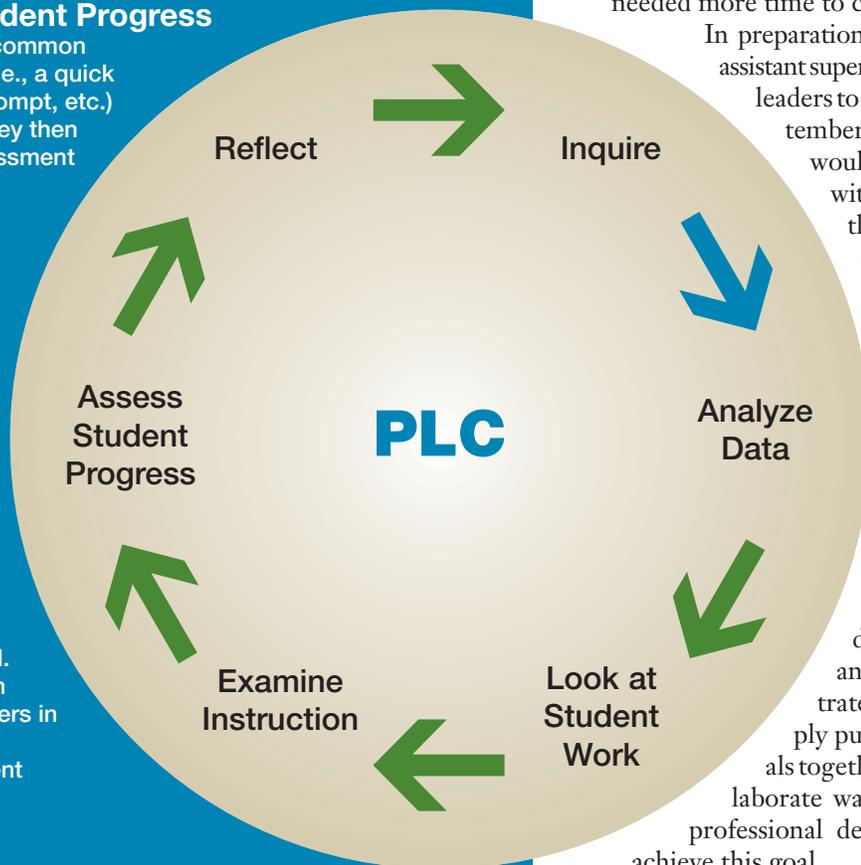
The learner-centered challenge is reframed as a challenge of practice. PLC members observe one or more teachers (one of the PLC members) providing instruction by using a protocol developed to address the instructional area of focus. Teachers provide feedback to the presenting teachers and debrief the observational process.

Assess Student Progress

Teachers give common assessments (i.e., a quick quiz, writing prompt, etc.) to students. They then grade the assessment and determine areas in which reteaching and review may be necessary.

Reflect

Teachers reflect on their teaching and student progress in the targeted instructional area and establish an action plan for moving forward. This action plan supports teachers in monitoring and adjusting student learning.



time to collaborate, they are also realizing that learning how to work in teams does not just magically happen. Districts must be deliberate in their efforts to teach teachers how to collaborate.

A school's existing capacity to do collaborative work before introducing PLCs and the readiness of school leaders to engage in this work greatly influenced PLCs' growth.

Stamford (Conn.) Public Schools introduced PLCs in the district's 20 schools in the 2007-08 school year (Year 1 of PLC work). PLCs were part of an overall system redesign led by Supt. Joshua P. Starr and supported by a grant from the G.E. Foundation Developing Futures Program. PLCs were established in response to teacher comments that they needed more time to collaborate with peers.

In preparation for PLC work, the district's assistant superintendents worked with school leaders to ensure that, beginning in September 2007, teachers at every school would have time to meet weekly with other teachers to discuss their practice. "Both the middle and elementary school schedules actually included common planning periods for teams or grade levels, but the focus was on planning field trips and events. Now, the collaboration had to be on how to support and improve student achievement," said Deputy Supt. Winifred Hamilton.

But teachers sat together during PLC time confused and, in some cases, even frustrated by this new direction. Simply putting well-meaning individuals together and expecting them to collaborate was not enough. They needed professional development and guidance to achieve this goal.

How could the central office support teachers in

making the shift from planning activities to having conversations focused on instruction? Stamford learned from both its successes and its missteps. By the third year of implementation, we had identified the critical responsibilities for district leaders if PLCs were going to operate successfully.

When implementing PLCs systemwide, districts play four key roles:

- Ownership and support — Districts must involve teachers and administrators in developing and leading the PLC process;
- Professional development — Districts must teach administrators and teachers how to work together effectively in PLCs;
- Clear improvement process — Districts must show how PLCs fit into the district's improvement process so that each PLC's work fits into an overall plan; and
- Differentiated support — Districts must support schools according to their unique needs in order to help them move to the next step in their PLC growth.

OWNERSHIP AND SUPPORT

Districts must involve teachers and administrators in developing and leading the PLC process.

Creating a districtwide PLC Steering Committee helped provide central office direction and support in PLC development while also including teachers in the process. Initially, the steering committee consisted mostly of district and school administrators, but by the beginning of the 2008-09 school year (Year II of PLC work), the committee included one teacher or administrative representative from each of the district's 20 schools plus representation from the central office.

The PLC Steering Committee also became its own districtwide PLC. Elizabeth DeSantis, a teacher at Julia A. Stark Elementary School, said her role on the steering committee contributed to her own learning as well. "Being a member of the steering committee has greatly enhanced my understanding of the PLC process. Sharing our experiences among the schools allows each of us to view professional learning communities more globally by sharing successes and challenges from our own school communities and then bringing back suggestions and encouragement from colleagues at other buildings, grade levels, and fields of expertise. Working side by side with administrators has also allowed me to view the PLC process from a fresh viewpoint," she said.

Furthermore, these teacher and administrator

representatives recommended next steps for the central office in the districtwide PLC work. Committee members developed the district's Year II and Year III PLC plans; piloted and then improved protocols, templates, and guidelines to be used by teachers in PLCs; and served as liaisons between the district-level work and their own school sites. Central office team members determined how best to support the development and growth of PLC work largely from this committee's recommendations, thereby allowing district leaders to focus on meeting the real needs of teachers in PLCs.

PROFESSIONAL DEVELOPMENT

Districts must teach administrators and teachers how to work together effectively in PLCs.

We kicked off Year I of PLC implementation at the August 2007 administrators' retreat by initiating a book study on PLCs with central office and building administrators. Both internal and external consultants provided expertise and guidance throughout the year. The initial plan was to allow schools with some PLC practices in place to continue with their current work, while preparing administrators new to PLCs to support teachers in beginning to learn together.

This meant that during Year I, administrators learned more about what a PLC is and what it does, but it also meant that many teachers sat down for PLC time with neither the knowledge of what they should be doing nor a clear goal. The superinten-

Simply putting well-meaning individuals together and expecting them to collaborate was not enough.

dent's desire to allow some autonomy to schools in Year I led to more confusion among teachers than initially anticipated. As the district prepared for Year II, we knew that teachers needed to learn the skills to facilitate their own professional learning. Results of a teacher survey in November 2007 also indicated that PLC practices varied widely across schools. Teachers and administrators across the district wanted more direction and support.

As a result, we introduced PLC facilitators' training sessions at the beginning of Year II, the 2008-09

school year, with the support of the G.E. Foundation Developing Futures Program. Interest in the training sessions was overwhelming. To meet the expressed need, we offered eight voluntary, six-hour sessions on Saturdays, holidays, and after school during the 2008-09 school year so that teachers could be trained to facilitate and contribute to the work of their own PLCs.

“The PLC facilitators’ training sessions were empowering experiences. They laid a foundation for what’s possible when educators come together with a common focus and shared understanding of how to become more effective at what we do,” said Mark Woodard, then a teacher and now an assistant principal in Stamford. In addition to building ownership and understanding of PLC work, the district then had administrative and teacher leaders at each school site to teach colleagues the Stamford PLC improvement process.

The superintendent’s desire to allow some autonomy to schools in Year I led to more confusion among teachers than initially anticipated.

By the end of the 2008-09 school year, 260 of the district’s 1,400 teachers had participated in the training sessions and were asking for more. Teachers who had completed the first training session were asked to consider attending a two-day level-2 training to learn how to lead professional development sessions on PLCs, in collaboration with administrators, at building sites. In the level-2 trainings, teachers in high-functioning PLCs also shared their knowledge and interest in building collaborative learning teams schoolwide.

“My school team was so motivated that we continued to meet during the summer, and we created a PowerPoint presentation on instructional goal setting and action planning, which we presented to our faculty at the beginning of the 2009-10 school year. The resulting goals and action plans in 2009 were more in line with our school improvement plan and reflected a better understanding of how teachers can collaborate to improve student learning,” said Heather LaLanne, a teacher at Westover Elementary

School who attended and presented at the level-2 training.

After the first level-2 training with teachers, we shifted our PLC professional development focus for administrators from “what is a PLC” to specific instruction on “how to lead PLC work.” We now realize that districts and schools planning to implement PLCs should provide administrators and teachers with sufficient training in Year I to ensure that both administrative and teacher leaders are prepared to lead PLC work at their school sites.

CLEAR IMPROVEMENT PROCESS

Districts must show how PLCs fit into the district’s improvement process so that each PLC’s work fits into an overall plan.

The confusion and questions that arose during Year I made it clear that Stamford needed a districtwide framework to guide PLCs. Holcomb (2001) and Garvin, Edmondson, and Gino (2008) indicate that an inquiry process can help facilitate change. David Garvin and his colleagues even identify learning processes as one of the key “building blocks of the learning organization” (2008: 110).

To develop a process that would help teacher teams become learning teams, the districtwide PLC Steering Committee examined a number of existing improvement processes, such as the Data Wise model (Boudett, City, and Murnane 2005), the Data Team model (Leadership and Learning Center, 2008), and the team learning process described by Richard DuFour and his colleagues (2004). We borrowed ideas from each of these models to design our own Stamford PLC Process: Inquire, Analyze Data, Look at Student Work, Examine Instruction, Assess Student Progress, and Reflect.

In addition to including an improvement process to guide the work of PLCs, the Year II plan established the district’s theory of action for PLC work: “If teachers and administrators work together to address student needs by engaging in a continuous process of instructional improvement, then teaching and learning will benefit, thereby leading to improved student achievement.”

The Year II plan also required each school to establish math and literacy instructional goals that were aligned to their state-mandated and locally approved school improvement plans. While elementary schools set school-level goals, middle and high schools established instructional goals for subject area departments. “When teachers establish an instructional goal, they bring purpose and accountability to their PLC work. And by articulating the goal together, they identify what they intend to do in order to improve student learning,” said Kathy Mason,

Stamford's external consultant.

Certainly, using the district's PLC framework did not radically change PLCs in Stamford overnight. But, as districtwide teacher survey results showed in spring 2009, about 56% of Stamford teachers said they were familiar with the Stamford PLC Process and 72% of teachers said they set an instructional goal to guide their work. In designing and implementing this process, central office staff, PLC Steering Committee members, and school administrators all played an important leadership role in clarifying the real work of PLCs districtwide.

DIFFERENTIATED SUPPORT

Districts must support schools according to their unique needs in order to help them move to the next step in their PLC growth.

Shirley Hord indicates that learning “is a habitual activity where the group learns how to learn together continuously” (2009: 40). In Stamford, during our first year of implementation, we learned that teachers needed help forging PLCs that would foster this continued learning. By Year III, we had recognized that schools' needs for support varied widely across the district.

To provide teachers with both team-building resources and skills, in Year II we developed and distributed a PLC toolkit that included articles and protocols for each of the six steps of the Stamford PLC process. The PLC Steering Committee also developed tools that PLCs across the district could use: an Instructional Goals Template, a PLC Minutes Template, an Action Plan Template to assist PLCs in planning their work to reach a goal, and a PLC Rubric that PLCs could use to assess their own development. These templates were developed in response to an expressed need for structure in PLC work and in an attempt to share best practices identified by the PLC Steering Committee. At the end of Year II, we also began to film “PLCs in Action” in Stamford to share PLC learning more effectively across schools.

Despite developing the Stamford model, offering professional development, and providing team-building tools, a districtwide survey at the end of Year II revealed that many schools were still struggling. It became clear that both a school's existing capacity to do collaborative work before introducing PLCs and the readiness of school leaders to engage in this work greatly influenced PLCs' growth. Therefore, in preparation for Year III, we developed a differentiated PLC support plan to move PLCs to the next level of work at individual school sites.

The extensive data we collected during Year II assisted us in developing a plan for differentiated sup-

port. These data included results of the districtwide teacher survey, reflections on the PLC process submitted by teachers across the district, observations of PLCs by central office administrators, and school participation levels in the districtwide PLC facilita-

Stamford's recommendation: Lead PLC work with clear expectations and provide differentiated supports in the first year.

tion's training sessions. After conferencing with principals at each school and analyzing our data, administrators at two schools began working with central office staff to implement peer observation practices with their PLCs. Another school received support in planning school-based professional development sessions to assist PLCs across the school in identifying grade-level and department-specific instructional goals to guide teachers' work.

We recognized how greatly the needs for support of PLC growth varied in Year III of PLC work, but districts now initiating PLC work for the first time should consider providing targeted support in Year I. It is certainly still imperative for districts implementing PLCs to provide clear direction and expectations to teachers at all schools engaging in this work. However, it's also necessary to assess schools' starting points so that the learning needs of individual teacher teams can be met, just as teachers themselves differentiate to meet their students' needs in the classroom.

MOVING FORWARD

Stamford's results show that PLC time has enabled teachers to work together and make a difference for their students. The 2009 Connecticut Mastery Test results illustrated strong improvements in achievement, especially in grades 6 and 8 in math, grades 5 and 8 in reading, and grade 8 in writing. Particularly, white, black, and Hispanic students showed higher overall achievement in the percentage of students scoring at or above “goal” when compared to students' performance statewide. In 2010, Stamford students' performance on Connecticut's state test continued on an upward trend, particularly in math. In grades 3, 5, and 8, the gain in the percentage of students who scored at or above goal in

Stamford exceeded gains by the state. Overall, since the 2006-07 school year, math scores improved by 13% in grade 5 and 15% in grade 6.

No one reform can be cited for Stamford's improvements, but teachers clearly believe that PLCs have helped them improve their practice. "PLCs have afforded us dedicated time on a weekly basis to discuss and share best practice strategies with colleagues in order to meet the individual needs of students. Prior to having this time, we had no way to

Districts must be deliberate in their efforts to teach teachers how to collaborate.

learn what a teacher who may have had a lot of success in teaching a specific skill had actually done in the classroom to yield those results," said Amy Bel-dotti, an elementary learning needs coach and a member of the PLC Steering Committee.



"That's it? That's your teacher recruitment plan?"

Based on our successes and our own learning through this process, we encourage other districts implementing PLCs to lead PLC work with clear expectations and provide differentiated supports in the first year. Like students, adult learners who are engaging in problem solving and teamwork for the first time need differentiated supports to ensure that they can work together effectively to meet their students' learning needs. By providing teachers with the time to collaborate and the necessary supports to build high-functioning learning teams, districts and schools can begin to ensure that teachers become effective team members and, as a result, effective instructors in the classroom. **K**

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Basics of Questioning: Clarifying and Probing Questions

Making the distinction between clarifying questions and probing questions and using them appropriately will help move your team forward.

Two questions to consider as you facilitate your team.

1. How can you create opportunities for your team to probe each other's thinking?
2. How can deeper thinking by your group move the teams learning forward?

Clarifying Questions

These questions of fact help both parties clearly understand what is being asked and what is being said. They get to the basic elements of what they are saying. During group work, they are used so the participants can gain understanding, ask good probing questions, and provide useful feedback.

Clarifying questions are for the team members, and help to clarify their understanding. The questions should not go beyond basic information. The responses are brief and factual, often a simple "yes" or "no," and don't provide any new insights. If the person supplying the information has to search for an answer, it is probably a probing question.

Some examples of clarifying questions:

- How much time does this part of the lesson take?
- How were students grouped?
- Was the handout available before group work began?
- What other resources did the students have available for this project?

* We tend to need clarification before diving deeper into our thinking.

Probing Questions

These questions are intended to help the person responding to the question to think deeper about their action or response. If a question does not do this, it is a clarifying question or a recommendation/consulting. A question that starts with “Don’t you think you should...” is going beyond the purpose and would be a more of a recommendation. Keep in mind that the responder often doesn’t have a ready answer to a good probing question.

Consider the following when constructing questions:

- Check to see if you have a “right” answer in mind. If so, remove the judgment from the question. Go back to the focus of the presenter’s information and purpose.
- Check your questions for relevance and keep it in the presenter’s perspective.
- Sometimes a simple “why...?” is a great thinking point.
- Try using verbs: What did you hope by...? Want? Get? Assume? Expect?
- Don’t avoid discourse but avoid judgment and assumption.

Questions tend to be on a continuum, from recommendation/ consultation to questions that probe for thought.

Good probing questions

- are general,
- don’t place blame,
- allow for many responses,
- help create a shift in thinking,
- encourage someone to make their own sense of the situation,
- take time to reflect on, and
- allow for multiple perspectives.

Example of Question Continuum		
↓	Recommendation Question	Could you have students use the rubric to assess themselves?
	Probing Question	What would happen if students used the rubric to assess themselves?
	Better Probing Question	What do the students think is an interesting topic to explore?
	Deeper Probing Question	What would have to change for students to have the opportunity to explore topics they are passionate about?

Stems for Building Probing Questions

“Why” and “how” are usually good starter stems for building probing questions. “What if” also elicits deep thinking from the responder. The table below outlines various stems to build good probing questions.

Stems for Building Probing Questions	
Emotional reflection	What do you think is best?
	What do you feel is right in your heart?
	What do you wish or hope for?
Elicit thought to identify options	What’s another way you might...?
	What would it look like if...instead of...?
	What could be changed...?
	What do you think would happen if...?
	How was ...different from...?
	What is the connection between...and...?
Reflective thinking	What assumptions did you start with? Were they accurate?
	What sort of an impact do you think...will have?
	What would happen with your students’ work and thinking if...?
	What is your best guess about...?
	What if the situation was completely opposite of what it is now? How could that happen?
Identify factors that are part of continuous improvement	What criteria were used to design/implement/assess...?
	When have you done/experienced this before?
	How did you decide/determine/conclude evidence for success?
	What was your intention when you implemented...?
	Based on what you have learned, what would make this situation/ lesson/project better?