What PLCs Get Results?

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"Telling can begin the process of delivering knowledge but it can never complete it, especially when the new knowledge departs significantly from existing understandings."
Lauren Resnick, et al., 2010

A growing number of schools focus on some form of communities of practice as a key to improving their performance. Schools typically refer to communities of practice as professional learning communities (PLCs). These work in a variety of ways and have different goals, but only some achieve their intended results. The Institute for Learning (IFL) has been working with several school districts on solving wicked problems (complex problems without a clear solution) using continuous-improvement PLCs. Examples of wicked problems of practice include increasing student engagement and motivation for learning, increasing student performance for minoritized students, and increasing attendance. The PLCs with which we are working highlight the fundamental characteristics that our experience and research show position them to achieve their aims better. They focus on social learning opportunities that provide a space for educators to be reflective about problems of practice and consider small changes to try in their classroom based on their analysis of the artifacts of teaching and learning collected in their classrooms. By collecting and analyzing artifacts such as samples of student work, scribing of teacher questions and student responses, or even quick intentionally designed surveys, educators in these PLCs remain focused on the goals of improving their practice and improving learning opportunities for students.

Learning Is Social

PLCs vary widely: Some are directive and tightly structured; others are less regulated. Because there are no agreed-on models, educators apply the label PLC to describe a variety of meeting structures that involve small groups of teachers and administrators coming together to discuss school-related problems. Most PLCs, however, are given the charge of improving teacher practice to render better learning outcomes for students. There is evidence from the research that well-developed PLCs have positive impacts on both teaching and learning.

cautioned educators regarding the severe limitations in teaching as a steady diet of direct instruction, or telling, and invited practitioners to engage in communities of learning. The term professional learning community emerged from the concept “community of practice,” which has turned out to provide a useful perspective because it forefronts the benefits of social collaboration. Generally, PLCs are made up of educators who share a concern or a passion for something they do, and those involved learn how to do it better as they interact regularly and share what they have learned from research and classroom experiences. Membership in a PLC implies a commitment to collaboration to solve problems of practice as well as a commitment to use the best available research and knowledge to work on those problems in a particular community’s context.

The Goal

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practice and student achievement. However, what does it mean for a PLC to be well developed?

During the last 20 years, the IFL has explored ways of working in PLCs. Through these experiences and research findings, we developed and refined a set of practices that work well in a diverse range of settings. Here are our practical suggestions for setting up PLCs to implement and sustain the practice of improvement.

Characteristics of a Well-Developed PLC

Collaboration

When teachers come together as a PLC, they benefit from doing more than acting as passive receivers of information and from spending their time sharing knowledge and working together to solve shared problems. The PLC has clear expectations for what it will achieve specific to improving teaching and learning in their classrooms. Teachers set agendas ahead of time, and they come to PLC meetings having prepared any necessary pre-work so that when the PLC meets, time can be devoted to sharing in pairs, small groups, and whole groups to allow for progress towards defined goals as opposed to spending time with administrative or clerical tasks during the meeting.

Time for collaboration is precious; it allows every voice in the room to have a place in the discussion and can provide participants with differing perspectives on why a problem of practice exists and how it might be solved. Collaboration in PLCs provides a space to network knowledge and sets the expectation that participants share what they have learned; it provides a protected, safe space for exploring perspectives on problems and testing those perspectives, or possible solutions, against relevant research and a field’s best practices.

Focus on Student Learning

At the heart of a well-developed PLC is a focus on student learning that goes beyond anecdotal evidence or a study of quantitative test data, although both might initiate the identification of problems of practice and contribute to their understanding. When PLCs focus on artifacts of student learning—that is, on student work samples and artifacts of teaching or transcripts or audio recordings of student talk—instructional shifts will be evidence-based and grounded in what students and teachers do together in specific contexts. Studying student artifacts also necessitates the use of agreed-upon protocols to focus the study on the problem at hand and to avoid only looking at student work from a deficit perspective (describing what students cannot do). The hard work of solving problems of practice is twofold. First, use real artifacts of student learning to describe what they bring to the table. Second, collaborate on instructional plans that bridge practice from where students are in their learning and to where students need to be in order to meet learning goals, the expectations of standards, and their understandings of their learnings. By looking at the relationship of content standards and their expectations, students’ current understanding of the content, and the pedagogy that can be used to advance student learning toward the standard, the PLC is not simply focused on what a teacher does in the classroom, but rather the impact of what a teacher does on student learning. A focus on improving the intellectual quality of student learning done through problem solving in PLCs increases learning and achievement because it allows teachers to experience themselves the benefits of collaborative student-centered learning in which they are the learners.

Teacher Authority

Teachers who participate in a PLC benefit from having ownership of the work and from experiencing firsthand the importance of collaborative student-centered learning. A well-developed PLC should not function using solely a top-down approach. Teachers should be empowered to interact, raise questions, bring relevant research to the discussions, challenge ideas, and make decisions about how they study and what they are studying. PLC members benefit from being collaborators in setting the agenda, bringing problems to the table, finding and sharing research to understand the problem, and bringing student work to be studied. Administrators and coaches who participate in PLCs with teachers are best positioned as colleagues in the learning. The participants benefit when decisions come from collaboration rather than from an overruling voice of authority, even when authority figures function as facilitators of the PLC work. Allowing all members to participate collegially, the PLC provides space for change and growth of instructional practice without being controlled by one person’s well-intentioned directives. It also allows teachers to take ownership of the work, a critical component for motivation to continue meeting to solve problems of practice as learners, as students, so to speak, of the problem at hand.

Continuous Teacher Learning

As students change, as curriculum changes, and as standards change, opportunities to learn are always available. We also know that problems of practice require continuous attention. PLCs can provide a space for teachers and administrators to study together collaboratively, use evidence to chart progress, and propose and study new problems of practice as they arise (but also to know when to go back to previous problems if a change is not evident in students’ work).

Continuous Improvement and Well-Developed PLCs

When PLCs approach solving problems of practice through the use of continuous improvement (CI) processes (see graphic below), they first collaborate to identify problems and their possible root causes using a wide range of data collected from within the system. They can, for example, study district data to shed light on why particular groups of students are graduating at lower rates than their peers or why particular groups of students are showing signs of not being on track in 9th grade for graduation. Alternatively, they could study student performance and patterns of student performance related to writing or engaging in mathematical problem solving to identify what students

Continuous Improvement Process

- Analyze multiple sources of data
- Identify new problem
- Gather and analyze additional data
- Identify root causes
- Identify potential solutions
- Develop and implement interventions
- Collect data and analyze
- Tackle small changes
- Evaluate impact, consider the next change

- Identify

- TEACH

- Analyze Results

- Develop and Implement

- Assess Impact

- Identify Next Change

- Data Sources

- Review

- Plan

- Strive

- Evaluate

- Adjust
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can do and are not yet able to do.
PLCs study multiple sources of relevant data to fret out problems. Once the PLC identifies the problems, the next step focuses the PLC on understanding the root causes of those problems. The causes might be directly discernible in the data, but it could just as well take additional digging to get to the causes. With problems in writing and mathematics, for example, the PLC might want to conduct empathy interviews with students and teachers to better understand how those impacted by the problem perceive it. Such interviews can be enormously valuable if they proceed from well-thought-out and focused questions that get the students and the teachers to talk about their experiences with the subject matter and their successes and failures. The PLC can ask students and teachers what they might change in instruction or what they think they need to be successful. The compilation of this kind of data can give PLC members substantial insights into root causes after they study the interviews through lenses that reveal major themes, trends, and contradictions. PLC members can also study the kinds of tasks regularly presented to students and the teaching approaches that they and their colleagues use, and they can draw conclusions about both of these that would point to the intellectual rigor of the work given to students and measure students’ engagement.

Once a PLC focused on instruction understands problems and root causes, teachers have the authority to dig into the literature and research to develop a theory of change. From this theory of change, they develop possible interventions or tests of change. They can propose changes or approaches to instruction based on their theory of change, and from this theory, they can propose what improvement science refers to as change packages that they and their colleagues test out in classes. An instructional theory of change might be, for example, that equitable, rigorous writing instruction will lead to student writing achievement. A change package, to continue with this example, might focus on instruction that engages students in a repertoire of writing genres on a regular weekly schedule. The instruction also could be embedded in student-centered approaches to writing instruction that forefronts opportunities for students to work in groups of 2 or 3 to support each other’s drafting and revision through feedback and editing.

For such work, change packages are often recommended or designed. Change packages are intentionally created as a set of small tests of change that are interrelated and sequenced. These resources include specific sets or arcs of lessons designed to address specific problems. Teachers may vary the implementation of a change package or work specifically on one aspect of the change package, with the goal of eventually implementing the whole change package. In association with a change package are simple, practical measures by which the PLC members can know whether or how those lessons were successful when engaging students. Such measures can be quick surveys of students right after the lesson, lenses for analyzing students’ work, or feedback from teachers observing students’ engagement in the lesson. The emphasis on practical measures is on their ability to provide disciplined feedback quickly that can be displayed in simple charts or summaries so that the PLC members and other teachers can see the results of their tests of changes and make decisions about their next steps. These measures necessitate understanding change through an evidence-based focus on student learning. Decisions on PLC’s next steps during an improvement cycle are grounded in the real and evidenced experiences of teachers and students enacting the change.

PLCs who are working with an instructional focus using continuous improvement methods might just as well be called mini-research groups since they take up understanding problems, their causes, and testing solutions using the disciplined methods of improvement science. In fact, the literature on improvement science often compares the work of these PLCs to action researchers who use their classrooms and those of colleagues as spaces in which they continuously test changes; study their results with simple, practical measures; and make adjustments until they are satisfied that they have change packages that can be pushed out with confidence to others.

Bibliography


Partner Spotlight

School will work with the IFL this year to collect and code data. By looking at transcripts from classrooms and at student work, a lot can be learned about to what extent practices are being implemented. It is the hope that this year the teachers in the PLC will see both an increase in the depth of the discussions in their math classrooms, as well as an increased amount of writing in math in which the students clearly express their reasoning around and understanding of the mathematics.

When asked about their role related to the PLC work, Watson and Struvee shared, “[We] will be facilitating the PLCS with support from Kristin Klingensmith, mathematics fellow, of the IFL. We are so excited to be partnering with the IFL to support all learners in our school community.”

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