

## **Why Collaborative Inquiry Teams?**

The National Center for Literacy Education (NCLE) supports teams of educators in collaborative, inquiry-based professional learning. Effective collaborative inquiry teams build sustainable capacity in schools by giving teachers skills, structures, and support systems to continually learn from and refine their shared practice. Both empirical research and international comparisons tell us that investments in this kind of adult learning lead to powerful changes in student learning. Research also provides clear evidence about the specific characteristics that make collaborative inquiry teams effective. NCLE's portfolio of supports for collaborative inquiry teams will be closely guided by a framework derived from this research. This document briefly summarizes literature on the impact of teacher collaboration on student learning and the specific characteristics that make teams effective.

### **The links between teacher collaborative inquiry, school change, and student achievement**

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U.S. classroom teachers practice their craft in isolation, compared both to how other professionals function and to the working conditions of teachers in other developed nations. The 2009 MetLife Survey of the American Teacher finds that U.S. teachers spend an average of 93% of their official workday in isolation from their colleagues. Compared to other nations that outperform the United States on international assessments, American teachers spend much more time teaching students and have significantly less time to plan and learn together (National Council of Teachers of English, 2011; National Council on Staff Development, 2009). The U.S. is particularly far behind in providing public school teachers with the kind of high-intensity, job-embedded collaborative learning that research shows is most effective in changing practice and improving learning.

A 2010 report by the international consulting firm McKinsey and Co. identifies characteristics of school systems around the world that have demonstrated consistent improvement. One trait that all of the systems studied have in common is that teachers share and work on their practice together, "becoming learners of their own teaching." Similarly, scholar Michael Fullan (2010) identifies "collective capacity" built through planned collaboration as the "hidden resource" that U.S. school systems have neglected to cultivate. And in the Stanford Social Innovation Review (2011), Carrie Leana reports on research linking the "social capital" that educators produce through collaboration to gains in student achievement, going so far as to call social capital "the missing link in school reform." Other studies showing links between professional collaboration and student achievement include Louis & Marks (1998), Goddard et al. (2007), Bryk et al. (1999, 2010), and Odden & Archibald (2009).

## HOW does collaborative inquiry improve student achievement?

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NCLE and its stakeholders are investing not in the broad concept of “teacher collaboration,” which has reached such buzzword status in the profession as to become almost meaningless, but in the kind of focused, purposeful shared inquiry shown in the literature to have clear links to student learning. To understand how best to support effective collaborative inquiry, it is important to be clear on how it works—what are the specific mechanisms that allow teacher inquiry to improve student achievement?

Scholars of the topic emphasize the notion of collaboration that builds collective capacity. Stoll et al. (2006) define capacity as “a complex blend of motivation, skill, positive learning, organizational conditions and culture, and infrastructure of support,” concluding from their extensive review of the literature that a focus on building collective capacity within schools is critical for sustainable improvement in student learning. Fullan (2011: p. 72) explains that collective capacity works for two reasons: “One is that knowledge about effective practice becomes more widely available and accessible on a daily basis. The second reason is more powerful still—working together generates commitment.”

Similarly, Seashore et al. (2003) specify that “By using the term professional learning community, we signify our interest not only in discrete acts of teacher sharing, but in the establishment of a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student learning.” Rick DuFour, whose name has become almost synonymous with the concept of “professional learning community,” cautions that putting teachers in a room together is far from enough (2011). Badly applied and/or poorly supported, he warns, collaboration can devolve into gripe sessions, excuse-making, or simply an innocuous activity in which “getting along can be a greater priority than getting results.” To pay off in achievement gains, he argues, professional collaboration must be embedded in the routine practice of the school, must focus on common questions that make a difference for student learning, and must be grounded in the rigorous examination of sound information about student learning.

From our review of the literature on collaborative inquiry that makes a difference for student learning, we have derived a framework of conditions and practices that support effective collaboration, summarized by the following six domains:

- (1) Taking shared ownership for professional practice
- (2) Using evidence effectively
- (3) Creating collaborative culture
- (4) Maintaining an inquiry stance
- (5) Developing and acting on shared purpose
- (6) Supporting collaboration systemically

This framework will guide the investments and support services offered by NCLE to make collaborative inquiry teams as effective as possible. The rest of this document will briefly review the literature supporting each of the domains in the framework as an essential element of effective teams.

## **(1) Taking shared ownership for professional practice**

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The recent large-scale international review *Building a High-Quality Teaching Profession: Lessons from Around the World* conducted by the Organization for Economic Cooperation and Development found that sustainable systemwide transformation requires teacher ownership: “In moving beyond consultation to involvement, the reform process becomes oriented towards transforming schools into learning organizations, with teachers in the lead” (2011, p. 52). In a learning organization, professionals recognize an obligation to learn from and improve their joint practice (Hord, 2003; Senge, 1990). Michael Fullan uses the term “intelligent accountability” to define an approach to change through positive incentives, investments in capacity building, and transparent data about practice and results (2011, pp. 66-70), all of which tap teachers’ intrinsic motivation to serve their students well. Members of effective collaborative inquiry teams are accountable to each other and to their shared commitment to improving student learning. They make commitments to try new things and to share the results of their experimentation with their colleagues. Making and being accountable to such commitments is part of being a professional, as DuFour (2011) notes, citing examples from medicine, law, aviation, and engineering which define professional accountability as working in a coordinated way to uphold the standards of the profession and meet the needs of its clients.

A large element of professional accountability, and perhaps the most challenging one to enact for a profession historically practiced out of view of other adults, is the deprivatization of practice. In the most concrete terms, deprivatization of practice means that informal classroom observations and debriefs with peers are the norm and that multiple forms of data are widely shared and discussed. NCTE (2011b) defines deprivatization as “making visible tacit knowledge,” therefore increasing the shared store of learned wisdom from practice available to all members of the community.

The review of literature by Cordingley et al. (2003) found that collaborative continuing professional development that includes observation, feedback, and an emphasis on peer support rather than leadership by supervisors has positive impacts on students, including improved motivation and performance. One of the largest empirical studies to demonstrate the impact of such practices on student learning was the massive seven-year study conducted by the Consortium on Chicago School Research and summarized in the 2010 book *Organizing Schools for Improvement: Lessons from Chicago*. Among the “framework of essential supports” identified in the schools with the largest student achievement gains was “professional community,” defined specifically as “a continuous improvement process within a school [which] requires teachers to relinquish some of the privacy of their individual classrooms to engage in critical dialogue with one another as they identify common problems and consider possible solutions” (p. 55).

## **(2) Using evidence effectively**

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Effective collaborative teams ground their inquiry cycles in evidence of how their practice is impacting student learning. Some of the factors that determine whether teams use evidence effectively depend on supports provided by the larger system: timely and accessible data, training in how to use data effectively, and systemwide routines for data use (Copland, 2003). Other success factors depend on how the

team makes use of whatever data and analytical skills the group has to work with. A broad definition of what counts as evidence of student learning, leading to the inclusion of diverse sources, makes it more likely that group inquiry will get to the root of student learning problems (Wayman et al., 2006; Herman & Gribbons, 2001; Huffman & Kalnin, 2003). Close analysis of specific pieces of student work is particularly crucial in developing and applying shared standards for student success.

### **(3) Creating collaborative culture**

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Developing a culture that balances safety with rigor is crucial to the success of collaborative inquiry teams. Leana's study (2011) is one of many to highlight the importance of trust among colleagues in allowing them to take risks, learn from mistakes, and be willing to do so semi-publicly, so that other group members can benefit. Bryk et al. (1997) deem social trust "by far the strongest facilitator of professional community," elaborating on the mechanisms by which it operates: "When teachers trust and respect each other, a powerful social resource is available for supporting collaboration, reflective dialogue, and deprivatization." With trust as a foundation, collaborative groups are able to develop another normative stance identified by the Chicago research as critical: an orientation toward innovation and acceptance of shared professional responsibility to experiment with practices that will improve student learning (Bryk et al., 2010, pp. 55, 73).

### **(4) Maintaining an inquiry stance**

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Two sets of factors regarding the nature of the team's shared inquiry stand out in the literature on what makes such teams effective: the *content* of the inquiry (WHAT they are collaborating about) and the *process* by which they pursue their inquiry (HOW they collaborate). For impact on student learning, it is crucial that teams are focused on what DuFour (2011) calls "the right work," that is, work that directly addresses improving "our professional practice and the learning of our students." In a similar vein, the recent NCTE policy brief on Communities of Practice recommends that teams collaborate around "recurring problems of practice concerned with student learning" that are connected to larger schoolwide concerns. In terms of effective collaborative inquiry processes, many of the findings about teachers as "action researchers" translate to the group context. Effective action research has been variously characterized as a cycle or spiral in which action and formal inquiry inform each other through an iterative process (Costello, 2011). Mitchell and Sackney (2000) define effective teacher collaborative learning as "active deconstruction of knowledge through reflection and analysis . . . reconstruction through action in a particular context . . . [and] co-construction through collaborative learning with peers." Note that this definition does not stop with the analysis—the learning happens by continuing the cycle with testing the knowledge in practice, and reflecting on evidence from that experience with peers.

### **(5) Developing and acting on shared purpose**

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DuFour's definition of "the right work" for collaborative inquiry that makes a difference in student learning focuses closely on shared goals for student learning. From agreements about essential student outcomes come agreements about how best to assess them. From data about student progress come the

development of shared pedagogical resources and strategies. A study in the Netherlands (Visscher & Witziers, 2004) looking at the connection between departmental professional community and secondary math scores emphasized that collaboration alone was insufficient to impact teaching practice and thus student achievement. Departments that achieved impact, they report, “consistently translate their shared vision and willingness to cooperate into a system of rules, agreements, and goals regarding teaching and instruction, and evolve their professional activities around this by obtaining data on student performance.” They go on to contrast these lived agreements with the less effective “‘softer’ approach stressing reflective dialogue, sharing materials, [and] shared vision” (p. 798). Thus, effective collaborative inquiry teams achieve one of the holy grails of the last few decades of education reform: coherence. Whereas much of the reform literature stresses coherence through the alignment of top-down systems, collaborative inquiry teams build coherence from the classroom up.

## **(6) Supporting collaboration systemically**

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To be effective in the long run, collaborative inquiry teams need formal support from the system in which they work. The most important form of support is dedicated meeting time, protected from other demands, and, crucially, embedded in the regular working day (Louis et al., 1994; Stoll et al., 2003). International comparisons conducted by Linda Darling-Hammond et al. for the National Council on Staff Development and by McKinsey and Co. highlight the paucity of professional collaboration time in U.S. schools and provide a wide range of models for rethinking the use of time in schools. Dedicated time, however, is necessary but not sufficient for collaborative teams to have an impact on student learning. Empirical studies by Gallimore et al. (2009) and Emerling (2009) as well as the review of the literature by Cordingley et al. show that the impact of collaborative inquiry teams on teacher practice and student learning is increased by training in models of collaboration, protocols to support reflective dialogue, and demonstrated leadership support. Powerful forms of leadership support for effective teacher collaboration cited in the literature include protecting time and resources, promoting and rewarding the learning that emerges from collaborative groups, and making it not only safe but expected for teachers to experiment with their practice and act on their learning (see Stoll et al., 2003, pp. 235-241).

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For information on this publication, contact Kristen Suchor, NCLE Project Manager, at [ksuchor@ncte.org](mailto:ksuchor@ncte.org) (email), 217-278-3602 (phone), or 217-328-0977 (fax). ©2012 by the National Center for Literacy Education/National Council of Teachers of English, 1111 W. Kenyon Road, Urbana, Illinois 61801-1096. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, or any information storage and retrieval system, without permission from the copyright holder. A full-text PDF of this document may be downloaded free for personal, non-commercial use through the NCLE *Literacy in Learning Exchange* website: [literacyinlearning.org](http://literacyinlearning.org) (requires Adobe Acrobat Reader).



## Collaborative Inquiry Differs from Traditional Professional Development

18 May, 2012 - 13:09 | [Michael Palmisano](#)

This excerpt from Michael Palmisano's *Taking Inquiry to Scale: An Alternative to Education Reform* (in development) discusses the differences between collaborative inquiry and traditional forms of professional development.

### **What distinguishes collaborative inquiry from other approaches to educator professional learning?**

Collaborative inquiry offers an alternative to traditional educator professional learning through its approach and its results. Collaborative inquiry changes the professional learning experience by reframing how professional knowledge is constructed and applied. Professional learning is often approached as the acquisition of methods and structures developed by others outside of the classroom and the school, whereas collaborative inquiry places educators in the role of actively constructing professional knowledge through treating their classrooms and schools as sites for investigation.

Professional learning centers on investigating shared problems or questions of practice as they relate to student learning. The student learning problem, not a pre-packaged one-size-fits-all solution is the departure point for inquiry. Recurring cycles of [planning, action and reflection](#) characterize the professional learning experience. Educators engage in learning and conversation from inside their practice and build on their professional knowledge by examining and reflecting on new learning through the lens of prior knowledge and experience, new information and data, and the impact of their actions.

Collaborative inquiry engages educators in self-directed and participatory learning. It moves beyond learning passively together to learning with and from colleagues through action, and reflection. In the supportive context of collaborative inquiry, participants explore agreements about learning and teaching, uncover tacit knowledge, and come to individual and shared understandings of how, why and under what conditions instruction and leadership yield student results.

The results of educator engagement in collaborative inquiry speak to its effectiveness and viability as an approach to educator professional learning. [Evidence of improved](#)



instructional practice, increased student achievement, and organizational conditions that support high achievement are documented in multiple studies involving elementary and secondary schools in various settings serving diverse student populations. Results also demonstrate increased teacher agency for their practice and ownership for their professional learning. The persistent problem of transferring new learning into practice is overcome by centering professional learning in practice. Through collaborative inquiry, individual and collective action becomes more intentional, coherent, and evidence based.

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## Professional Learning Communities

### WHAT IS A PLC?

Professional Learning Communities (PLCs) shift the focus of school reform from restructuring to reculturing (Louis, 2006). A PLC is an ongoing process used to establish a schoolwide culture that develops teacher leadership explicitly focused on building and sustaining school improvement efforts. Generally, PLCs are composed of teachers, although administrators and support staff routinely participate (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Huffman, 2000). In some schools, PLCs are extended to community members and students, as appropriate (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Stoll & Louis, 2007). Through participation in PLCs, teachers enhance their leadership capacity while they work as members of ongoing, high-performing, collaborative teams that focus on improving student learning (Rentfro, 2007).

### Definition of a PLC

Although there is no universal definition of a PLC (Stoll et al., 2006; Williams, Brien, Sprague, & Sullivan, 2008), the following definitions offer a range of ways to describe a PLC:

- An ongoing process through which teachers and administrators work collaboratively to seek and share learning and to act on their learning, their goal being to enhance their effectiveness as professionals for students' benefit (Hord, 1997)
- A school culture that recognizes and capitalizes on the collective strengths and talents of the staff (Protheroe, 2008).
- A strategy to increase student achievement by creating a collaborative school culture focused on learning (Feger & Arruda, 2008).
- Team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision (Reichstetter, 2006).
- A group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive learning-oriented and growth-promoting way (McREL, 2003).
- Educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve (DuFour, DuFour, Eaker, & Many, 2006).
- An inclusive group of people, motivated by a shared learning vision, who support and work with each other to inquire on their practice and together learn new and better approaches to enhance student learning (Stoll, Bolam, McMahon, Thomas, Wallace, Greenwood et al., 2005).

While these definitions capture the spirit of PLCs, they are only a starting point for understanding them.

What makes a PLC difficult to define is that it is not a prescription, a new program, a model, or an innovation to be implemented. Rather, a PLC is an infrastructure or a way of working together that results in continuous school improvement (Hord, 1997).

### **ELEMENTS THAT DEFINE A PLC:**

It can become complicated when educators seek to operationalize PLC definitions at the school level. A PLC is more than simply a collection of teachers working together or a social network of educators who share stories, materials, and advice (Coburn & Russell, 2008; Protheroe, 2008). In fact, the PLC concept often is misused to describe committees, grade-level teams, and/or weekly planning meetings in which the participants undertake data-based decision making (DuFour, 2004; Jessie, 2007).

While these groups may share some similarities of purpose with PLCs, the philosophy and characteristics of a PLC differentiate and define it. Let's take a look at both of those features.

### **Philosophy of a PLC**

The PLC concept is relatively new, having grown out of the work in the mid-1990s to reculture schools by examining the effects of school organization on teachers' work and their commitment to school improvement (Rosenholz, 1989). Teacher workplace studies focused on how teacher working conditions—particularly how teachers learn from one another in school settings— influenced their job satisfaction and responsibility for student learning (Little, 1989; Louis, Marks, & Kruse, 1994). Professional community emerged as a concept that not only improved teacher well-being, but also could make a difference in terms of student achievement (Annenberg Institute for School Reform, n.d.; Little, 2003; Louis, 2006; Louis, Marks, & Bryk, 1998).

Concurrently, educators were embracing the notion of schools as learning organizations for adults and students; the focus was on learning rather than teaching (see, for example, Newcomb, 2003; Senge, 1995). School leaders began to accept learning rather than teaching as the fundamental purpose of schools (Eaker & Gonzalez, 2006). Because professional communities offered teachers opportunities to develop and share their expertise, their focus was readily expanded to include an emphasis on professional learning (DuFour & Eaker, 1998).

Today, PLCs have at their core a belief in teacher leadership and involvement in school improvement efforts. This corresponds well with the generally accepted belief that improving classroom instruction is a significant factor in raising student achievement (Annenberg Institute for School Reform, n.d.). Many PLCs operate with the understanding that one important key to improved learning for students is continuous job-embedded learning for educators (DuFour, DuFour et al., 2006; Haar, 2003; Phillips, 2003). In fact, in its standards the National Staff Development Council recognizes PLCs as a strategy for school improvement—specifically, as a means of supporting high-quality and ongoing professional development. Similarly, the

Annenberg Institute for School Reform (n.d.) identifies PLCs as a central element for effective professional development in any comprehensive reform initiative. As such, PLCs are grounded in two assumptions related to school improvement:

1. Knowledge is situated in the day-to-day experiences of teachers and is best understood through critical reflection with others who share the same experiences (Haar, 2003; Vescio, Ross, & Adams, 2006).
2. Actively engaging teachers in PLCs will increase their professional knowledge and enhance student learning (Vescio, Ross, & Adams, 2006).

### **Characteristics of a PLC**

A PLC is not a model, per se; rather, it is an approach or process. Most PLC definitions assume a set of characteristics that reflect the nature of a true PLC. An understanding of these characteristics provides educators with a shared lens through which to examine their own PLCs. They also can provide an infrastructure for shaping practice and assessing progress. A brief description of some of the most commonly cited characteristics follow:

**Shared values and vision** (Bolam et al., 2005; DuFour, 2004; Feger & Arruda, 2008; Hord, 1997; Kruse, Louis, & Bryk, 1994). Teachers and administrators share a vision focused on student learning and a commitment to improvement (Reichstetter, 2006). The vision is used as a context for decision making about instructional practice and collaborative learning efforts. The vision statement should result in a collective responsibility for and an unwavering focus on student learning (Leo & Cowen, 2000; Louis & Kruse, 1995; Stoll et al., 2006).

**Collaborative culture** (Bolam et al., 2005; Feger & Arruda, 2008; Kruse, Louis, & Bryk, 1994). PLCs are based on the premise that through collaboration, professionals achieve more than they could alone (DuFour & Eaker, 1998). Teachers benefit from the resources that each brings to the PLC (Newman, 1994). Collaboration provides a mechanism for sharing responsibility for student learning and a means to work together toward a common purpose (Reichstetter, 2006; Stoll et al., 2006). Collaboration (e.g., opportunities for teachers to engage in ongoing collegial opportunities where they talk about teaching, receive frequent feedback on teaching, design classes together, teach each other, etc.) has been found in successful schools and is missing in unsuccessful schools (Little, 1989, 2003).

**Focus on examining outcomes to improve student learning** (DuFour, 2004; Feger & Arruda, 2008; Kruse, Louis, & Bryk, 1994; Louis, 2006). PLCs promote results-oriented thinking that is focused on continuous improvement and student learning (Reichstetter, 2006). The focus goes beyond a team getting together to look at data. In PLCs, teachers respond to data that require mutual accountability and changing classroom practices. Data help motivate teachers to see what is happening and what they need to do collectively (White & McIntosh, 2007).

**Supportive and shared leadership** (Feger & Arruda, 2008; Hord, 1997; Kruse, Louis, & Bryk, 1994; Louis & Kruse, 1995; Mitchell & Sackney, 2006). PLCs often are viewed as a foundation for developing teacher leaders (Caine & Caine, 2000). Administrators are committed to sharing decision making with teachers and providing opportunities for them to serve as leaders

(Hargreaves & Fink, 2006; McREL, 2003). Leadership is shared and distributed among formal and informal leaders (Phillips, 2003; Reichstetter, 2006). The purposes and goals of a PLC grow from among the participants, based on their values, beliefs, and individual and shared experiences (Thompson, Gregg, & Niska, 2004). Teacher leadership capacity sustains PLCs. Sharing power and authority with teachers through decision making and shared leadership increases leadership capacity and builds a belief in the school's collective ability to affect student teaching (Olivier & Hipp, 2006).

**Shared personal practice** (Hord, 1997; Kruse, Louis, & Bryk, 1994; Thompson, Gregg, & Niska, 2004). A major focus of PLCs is on professional learning in which teachers work and learn together as they continually evaluate the effectiveness of their practices and the needs, interests, and skills of their students (McREL, 2003). Teachers share experiences, observe each other, and discuss teaching. Shared practice and collective inquiry help sustain improvement by strengthening connections among teachers, stimulating discussion about professional practice, and helping teachers build on one another's expertise (McREL, 2003). Through continuous inquiry and reflective dialogue teachers discover solutions and address student needs (Hord, 1997; Stoll et al., 2006).

## **WHAT DOES THE LITERATURE AND EMERGING RESEARCH TELL US ABOUT THE BENEFITS OF PLCS?**

Although PLCs have received a great deal of attention in the literature, few research studies have been conducted to determine their effectiveness. In general, the literature and research base has explored the following topics:

- Identifying teacher benefits
- Confirming PLC characteristics
- Assessing the impact on student performance

### **Identifying Teacher Benefits**

A PLC can contribute to instructional improvement and school reform (Annenberg, n.d.; Little, 2003). PLCs can be most effective when their purpose is to enhance teacher effectiveness for the ultimate benefit of students (Stoll et al., 2006). By participating in PLCs, teachers may experience a variety of benefits that contribute to improved student achievement, including:

- Reduction of isolation
- Increased commitment to the mission and goals of the school
- Shared responsibility for student success
- Greater job satisfaction and higher morale
- Lower rates of absenteeism (Hord, 1997)

Sustained school improvement efforts also have been attributed to PLCs (DuFour & Eaker, 1998).

### **Confirming PLC Characteristics**

PLCs often are defined by the presence of certain characteristics (Stoll et al., 2006). Investigators have attempted to identify characteristics in PLCs that are operating smoothly—such as supportive and shared leadership, belief that the school is a learning community, shared vision, focus on student achievement, continuous inquiry and reflective dialogue, collaboration—and participants' perceptions about those characteristics (Hord & Rutherford, 1998; Huffman, 2000; Thompson, Gregg, & Niska, 2004).

Investigators also have considered characteristics in schools at different stages of PLC development as in the following examples:

Three themes—proactive administrator and teacher leadership, purposeful decision making, and job-embedded professional development—distinguish more advanced PLCs from less developed ones (Huffman, Hipp, Pankake, & Moller, 2001).

A strong vision that is connected to student learning and continuous improvement is found in more developed PLCs (Bolam et al., 2005). Shared vision is evident in more established PLCs (Huffman, 2003).

Shared leadership structures, including opportunities to build teacher leadership capacity, are more evident in schools that have more developed PLCs (Moller, 2006). However, it should be noted that structures for shared leadership are emerging in less developed PLCs.

### **Assessing the Impact on Student Performance**

Improvement in student performance is at the center of PLC work. However, it can be challenging to show direct relationships between PLCs and student outcomes. Part of the difficulty lies in being able to first determine the presence of a PLC and then show that the work of the PLC resulted in improved student outcomes. Several studies have attempted to study this relationship. Consider these examples:

Researchers (Hughes & Kritsonis, 2007) selected a sample of schools from a database of schools with staff who had attended PLC workshops and that were possibly implementing PLCs. The mean length of time that sample schools (n=64) reported functioning as a PLC was 2.5 years. During a three-year period, 90.6 percent of these schools reported an increase in standardized math scores; 81.3 percent reported an increase in English/language arts scores between 5 points and 26 points.

Case studies of three elementary schools showed that during a five-year period, students from minority and low-income families improved their scores on state achievement tests from less than 50 percent proficient to 75 percent proficient. Strahan (2003) conducted interviews to examine the role of a collaborative professional culture on instructional improvement and found that working collaboratively in PLCs was a characteristic of these schools.

Using multiple sources of data from a four-year evaluation of PLCs in an urban district, Supovitz (2002) found that an explicit focus on instructional improvement is necessary for PLCs

to have a positive impact on improving teaching and learning. Without such focus, PLCs may have a positive effect on culture and teachers' feelings of well-being, but not necessarily on student achievement. Researchers found similar results in another large urban district (Supovitz & Christman, 2003).

### **HOW HAVE SCHOOLS USED THE PLC APPROACH IN THE CONTEXT OF IMPROVING STUDENT ACHIEVEMENT?**

The literature is replete with numerous case descriptions of PLCs. In fact, the website *All Things PLC* (<http://www.allthingsplc.com>) invites schools to share their PLC stories and results in terms of teacher benefits and student achievement gains. While these descriptions are not offered as research-based evidence for the efficacy of PLCs, they show the promise of PLCs to improve practice and contribute to an emerging knowledge base that documents their growing use and acceptance at the school level. Consider these examples:

**South Elementary, Missouri** (as reported in Rentfro, 2007). PLCs were established to increase accountability and improve the literacy needs of students. Teachers met during collaborative sessions to plan and pace their literacy instruction and to problem solve for at-risk learners. They used frequent, common assessments to monitor student learning and to identify students who required additional interventions. Communication arts scores rose 24.1 percent from 2001 to 2005. The number of first graders scoring on grade level rose 12.2 percent between 2001 and 2006.

**Boones Mill Elementary, Virginia** (as reported in Burnette, 2002). PLCs were established to sustain the high achievement that the school was experiencing. For more than a decade, school staff had implemented effective schools research that served as the foundation for the PLC. Teams committed to a specific measurable student achievement goal, identified the action steps teachers would take to achieve the goal, and outlined evidence they would monitor to assess their progress. Student performance on state standards tests rose in the following areas: English 85 percent to 91 percent; math 87 percent to 97 percent; science 91 percent to 93 percent; and history 79 percent to 96 percent.

**Lewis and Clark Middle School, Missouri** (as reported in McREL, 2003). After analyzing data on classroom instructional practices, teachers discovered that the level of active teaching and learning in classrooms was lower than they expected. They implemented a PLC approach that included professional development strands. Each strand incorporated instructional content or methodology designed to increase student engagement and, ultimately, student achievement. Study groups for each strand meet with a teacher-facilitator throughout the year to gain expertise and learn best practices. Changes from 2000 through 2002 showed improvement in the following areas: student disengagement in core areas decreased from 8 percent to 0 percent; student disengagement in exploratory areas decreased from 29 percent to 7 percent; teacher-led instruction in core classes rose from 35 percent to 48 percent; and teacher-led instruction in exploratory areas rose 21 percent to 25 percent.

**Woodsedge Middle School** (pseudonym), **Texas** (as reported in Phillips, 2003). As part of a PLC, teachers created curricula to help low-achieving and underachieving students. Achievement scores on the state standardized test increased during a three-year period. Student

scores went from Acceptable-with 50 percent of the students passing subject area tests in reading, writing, math, science, and social studies-to Exemplary two years later, with more than 90 percent of the students passing each subject area test.

**Phoenix Union High School District, Arizona** (as reported in Beyond the Book, n.d.). About half of the students enrolled in algebra were earning Ds or Fs, and only 17 percent of students met the Arizona state algebra standards. PLCs were established in 2003 to address student needs. Results in 2005 showed an increase in math standards scores-an increase from 17 percent to 53 percent in students passing, and an increase in the number of students taking algebra (3,800 students compared to 1,800 students).

**San Clemente High School, California** (as reported in Buffum & Hinman, 2006; Hinman, 2007). Faculty formed PLCs to answer three core questions posed by DuFour (2004): "What is it we want students to learn? How will we know if they have learned it? What do we do if students have not learned it?" Teachers analyzed data and developed a pyramid of interventions to address student needs. In five years, the failure rate for sophomore, juniors, and seniors declined from 33 percent to 18 percent. The failure rate for freshman declined from 41 percent to 20 percent. Further, the pass rate on the high school exit exam rose from 63 percent to 93 percent.

## **WHAT SUPPORTS ARE NECESSARY TO DEVELOP AND SUSTAIN A PLC?**

It can be difficult to build and sustain PLCs (Moller, 2006; Wells & Feun, 2007). While organizing into small collegial groups may improve school culture, it does not necessarily result in improved instruction and student achievement (Supovitz, 2002).

PLCs require organizational structures and supports to be successful (Supovitz & Christman, 2003). A summary of two often-cited supports follows:

- Supportive leadership
- Structural supports

### **Supportive Leadership**

Strong, supportive leadership is necessary to build and sustain PLCs (Eaker & Gonzalez, 2006; Mitchell & Sackney, 2006). Even though principals' roles may change as they redistribute and share leadership, their support is one of the resources necessary for schools to become a PLC (Hargreaves & Fink, 2006; Huffman et al., 2001; Huffman, Pankake, & Munoz, 2007; Louis & Kruse, 1995).

Principals actively build a context for PLC work. Their support includes such things as:

- Expanding leadership among teachers (Burnette, 2002). This may include encouraging teachers who may be reluctant to take on leadership roles (Moller, 2006) and defining autonomy and authority for teacher leaders (Supovitz & Christman, 2003).



- Securing fiscal and human resources to support teacher development (Bolam et al., 2005; Huffman, Hipp et al., 2001).
- Modeling the vision and shared focus of the PLC (e.g., maintaining an unwavering focus on student learning) (Huffman, Pankake, & Munoz, 2007; Leo & Cowen, 2000). Principals promote learning rather than teaching as the fundamental purpose of schools (Eaker & Gonzalez, 2006).
- Creating communication mechanisms to keep all of the staff informed (Burnette, 2002). Progress is monitored and acknowledged (McREL, 2003).
- Ensuring that student data are available (Eaker & Gonzalez, 2006; Supovitz & Christman, 2003). When data are not available but desired, principals find ways to provide them.
- Establishing a high-trust environment in which it is safe to learn and grow (Hargreaves & Fink, 2006). Approaches that support interdependent teaching roles (e.g., team teaching, integrated lesson design) are encouraged and fostered.
- Supporting teacher-determined professional development (DuFour, 2003; Supovitz & Christman, 2003).

District support also is essential. Examples of district support include:

- Establishing a clear priority for PLCs districtwide and providing each school and/or department with the authority to chart its own course for achieving the goals (DuFour, 2003).
- Making resources (e.g., time, professional development, student data, etc.) available to support PLC development (Supovitz & Christman, 2003).
- Working out agreements with teacher unions as necessary, especially when time is being modified to fit shared meeting arrangements or teachers are being asked to take on new responsibilities (White & McIntosh, 2007).
- Embedding PLCs in mission statements and district policy (Tucker 2008). District policy can influence the depth of interactions (Coburn & Russell, 2008). School leaders influence the degree to which interactions are consistent with reform aims and how teachers talk about curriculum and instruction (Supovitz & Christman, 2003).
- Linking PLCs to existing district, school, and state program requirements and expectations (Burnette, 2002).

### **Structural Supports**

In addition to administrative support, PLCs require supportive conditions in which to develop and thrive (Hord, 1997). At the very least, PLCs require suitable spaces for meetings (Hord & Rutherford, 1998). Communication structures used to keep people involved and informed (e.g., meetings to discuss problem areas and new ideas, schoolwide announcements and distribution of information) also are in place (Burnette, 2002; Hord & Rutherford, 1998; McREL, 2003).

Perhaps the most significant resource that is required is time-PLCs require sufficient time to meet and talk (Burnette, 2002; Hord & Rutherford, 1998; Supovitz & Christman, 2003; Reichstetter, 2006). Numerous strategies have been attempted to provide structured time. Examples include:

- Classes are scheduled to create common planning periods (DuFour, 2003; McREL, 2003).
- Particular school days are extended to bank time for professional learning (McREL, 2003).
- The schedule is built so that teachers are freed up by "specials" (music, art, physical education, student assemblies, etc.) (Burnette, 2002).
- Monthly faculty meetings and district professional development days are used for PLCs (Burnette, 2002; DuFour, 2003).
- Combine classrooms to free teachers to meet (Murphy, 1997). This should only be done when the teacher who is covering the class has expertise in the instructional content.
- The schedule is adjusted (Murphy, 1997; White & McIntosh, 2007). For example, every other Thursday, student start time is delayed 20 minutes; classes start late one day and teachers arrive 30 minutes earlier on that day.

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## WEB SITES

The following web sites provide a wealth of resources on PLCs.

### ***All Things PLC***

<http://www.allthingsplc.info>

The All Things PLC website provides research, articles, data, and tools for educators who seek information about PLCs at work. This information is provided so schools and districts have relevant, practical knowledge and tools as they create and sustain their PLCs. The site contains:

- Inspirational stories
- A blog, including questions and answers
- A section where schools can post effectiveness data and compare their data to those of other schools
- Tools and resources (e.g., agendas, activities, links)

### ***Annenberg Institute for School Reform***

[http://www.annenberginstitute.org/Products/schools\\_PLC.php](http://www.annenberginstitute.org/Products/schools_PLC.php)

The Annenberg Institute for School Reform (AISR) at Brown University works with urban school systems that are pursuing systemwide efforts to improve educational experiences and opportunities. In the context of a comprehensive reform initiative, AISR promotes the use of PLCs as a central element for effective professional development. The report, *Professional Learning Communities: Professional Development Strategies that Improve Instruction*, describes AISR's current approach to PLCs and is available online. Reports on other related topics also are available.

### ***Effective Professional Learning Communities***

<http://www.bris.ac.uk/education/eplc>

The Effective Professional Learning Communities (EPLC) research project is a collaborative of several universities and institutes in England. EPLC's mission is to study effective PLCs to determine how they are created and sustained. The site offers the following resources:

- *Creating and Sustaining Effective Professional Learning Communities* (full report and research brief)
- Surveys used to gather information about PLCs

### ***Learning Policy Center***

<http://www.lpc.pitt.edu/index.php/content/view/homepage>

The Learning Policy Center (LPC) at the University of Pittsburgh was established to advance ideas related to policy and learning. LPC offers policy briefs in conjunction with a blog in which participants can share their experiences and perspectives on the topics. One of the briefs is, *Getting the Most out of Professional Learning Communities and Coaching: Promoting Interactions that Support Instructional Improvement*.

### ***National Staff Development Council***

<http://www.nsd.org/standards/learningcommunities.cfm>

The National Staff Development Council (NSDC) is a nonprofit association focused on

improving schools through effective staff development. NSDC has a set of standards for professional development, one of which focuses on PLCs. Descriptions of the standard and resources are provided. Also, NSDC offers an online library of resources on topical areas, including PLCs.

***SEDL (formerly the Southwest Educational Development) Laboratory***

<http://www.sedl.org>

SEDL is a private, nonprofit education research, development, and dissemination corporation based in Austin, Texas. Improving teaching and learning has been at the heart of SEDL's work for more than 40 years. The SEDL website contains a number of resources on PLCs, including:

- *Leading Professional Learning Communities: Voices from Research and Practice* [<http://www.sedl.org/pubs/catalog/items/change67.html>]
- *Professional Learning Communities-Communities of Continuous Inquiry and Improvement* [<http://www.sedl.org/pubs/catalog/items/cha34.html>]
- *Professional Learning Communities-An Ongoing Exploration* [<http://www.sedl.org/pubs/catalog/items/cha45.html>]
- *Multiple Mirrors: Reflections on the Creation of Professional Learning Communities* [<http://www.sedl.org/pubs/catalog/items/cha97.html>]
- Schools as Learning Communities. *Issues About Change*, 4(1) [<http://www.sedl.org/pubs/catalog/items/sch11.html>]
- Professional Learning Communities: What Are They and Why Are They Important? *Issues About Change*, 6(1) [<http://www.sedl.org/pubs/catalog/items/cha35.html>]
- Creating a Professional Learning Community: Cottonwood Creek School. *Issues About Change*, 6(2) [<http://www.sedl.org/pubs/catalog/items/cha36.html>]
- Assessing a School Staff as a Community of Professional Learners. *Issues About Change*, 7(1) [<http://www.sedl.org/pubs/catalog/items/cha37.html>]
- Principals and Teachers: Continuous Learners. *Issues About Change*, 7(2) [<http://www.sedl.org/pubs/catalog/items/cha40.html>]
- Launching Professional Learning Communities: Beginning Actions. *Issues About Change*, 8(1) [<http://www.sedl.org/pubs/catalog/items/cha39.html>]
- Co-Developers: Partners in a Study of Professional Learning Communities. *Issues About Change*, 8(2) [<http://www.sedl.org/pubs/catalog/items/cha44.html>]

***SERVE Center***

<http://www.serve.org>

The SERVE Center at the University of North Carolina-Greensboro is a university-based research, development, dissemination, evaluation, and technical assistance center. Its mission is to support and promote teaching and learning excellence in the prekindergarten through Grade 12 education community. The SERVE Center operates the Regional Educational Laboratory-Southeast. Under the topical area of teacher quality (<http://www.serve.org/Teacher-Quality.aspx>), SERVE offers a number of resources on PLCs-which they refer to as Professional Learning Teams-including:

- FAQs about PLCs



- Sample chapter of *A Facilitator's Guide to Professional Learning Teams: Creating on-the-Job Opportunities for Teachers to Continually Learn and Grow*, which provides field tested tools and procedures for establishing and maintaining PLCs in schools
- PLC tools and resources that support the facilitator's guide described above
- PLC process that engages school faculties in sustained, onsite professional development directed at improving teacher quality and student achievement

### ***Teacher Leaders Network***

<http://www.teacherleaders.org>

The Teacher Leaders Network (TLN) is a project of the Center for Teaching Quality in North Carolina. TLN is a network of active communities of highly accomplished teacher leaders from across the nation, dedicated to student success and the transformation of teaching into a profession. TLN members have referenced and created the Resources Library in which teachers post articles they have found to be relevant on a particular topic. One of the topical areas is PLCs.