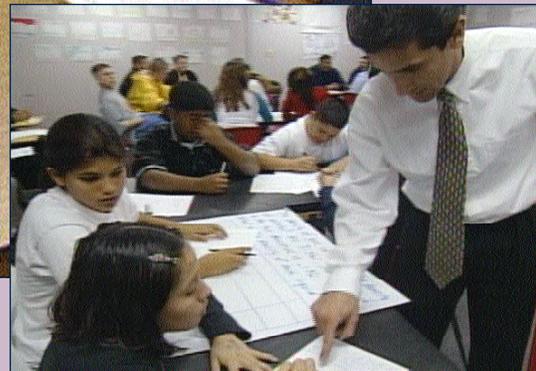
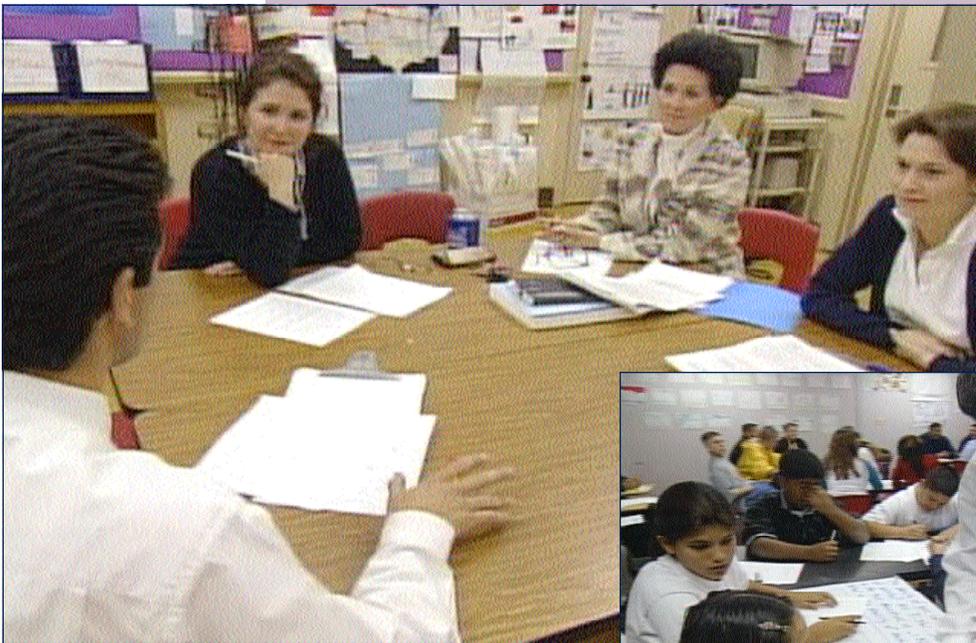


Professional Learning Communities



Professional Development Strategies
That Improve Instruction

The Annenberg Institute for School Reform (AISR) at Brown University engages in intensive work with urban school systems across the country that are pursuing systemwide efforts to improve educational experiences and opportunities, particularly for English Language Learners and students from low-income backgrounds. In our work, we support and encourage the use of professional learning communities (PLCs) as a central element for effective professional development as part of a comprehensive reform initiative.

In our experience, PLCs have the potential to enhance the professional culture within a school district in four key areas; they can:

- build the productive relationships that are required to collaborate, partner, reflect, and act to carry out a school-improvement program;
- engage educators at all levels in collective, consistent, and context-specific learning;
- address inequities in teaching and learning opportunities by supporting teachers who work with students requiring the most assistance; and
- promote efforts to improve results in terms of school and system culture, teacher practice, and student learning.

PLCs: A Research-Based Approach to Professional Development

Research findings have repeatedly confirmed that a significant factor in raising academic achievement is the improvement of instructional capacity in the classroom. Recent research shows that the kinds of professional development that improve instructional capacity display four critical characteristics (Senge 1990; Knapp 2003); they are:

- ongoing
- embedded within context-specific needs of a particular setting
- aligned with reform initiatives
- grounded in a collaborative, inquiry-based approach to learning

Effective professional development to improve classroom teaching also concentrates on high learning standards and on evidence of students' learning. It mirrors the kinds of teaching and learning expected in classrooms. It is driven fundamentally by the needs and interests of participants themselves, enabling adult learners to expand on content knowledge and practice that is directly connected with the work of their students in the classroom (Corcoran 1995; Darling-Hammond and McLaughlin 1995; Little 1988; Elmore 2002). Again, professional learning communities meet these criteria.

Research demonstrates that the development of a strong professional community among educators is a key ingredient in improving schools (Fullan 1999; Langer 2000; Little and McLaughlin 1993; Louis, Kruse, and Marks 1996; Newmann and Associates 1996). Louis et al. (1995, p. 17) identify effective professional learning communities as being firmly embedded in the school and using schoolwide reform goals as the basis for teachers' commitment and interaction. These professional learning communities provide opportunities for adults across a school system to learn and think together about how to improve their practice in ways that lead to improved student achievement. This kind of collaboration is rarely found in more traditional types of professional development or in common staff meeting time.

PLC participants must collaborate effectively, working as a team and taking collective responsibility for the group's outcomes. PLCs need a shared mission and vision, as well as shared norms and values to undergird the work and inform the goals to

What Do PLCs Look Like?

Professional learning communities comprise groups of educators, administrators, community members, and other stakeholders who collectively examine and improve their own professional practice. Typically, individual groups are small and meet regularly over a significant period of time.

PLCs can be school-based, district-based, cross-district, or national; the membership in a particular PLC is determined by its focus. For example, a grade-level team of teachers may form a PLC to focus on improving their ability to coordinate their students' curriculum; a multigrade group of teachers may collaborate on ways to ensure a coherent learning pathway for their students; a group of math teachers may work together to adopt and implement a new mathematics program in ways that best benefit their students; teachers and administrators may meet as a PLC to learn and support innovative teaching strategies; principals or superintendents may concentrate on more effective ways to

handle the particular challenges of their roles; a school system may meet regularly with core district representatives to improve operational effectiveness and to build capacity to support school and district efforts to improve schools; groups may form across districts, often as part of a national school reform initiative, to focus on common issues in their work.

Whatever the membership in individual groups, the work of professional learning communities is data-informed, standards-driven, and focused on instruction, equity, and results. As in study or support groups, the work of PLCs expands the knowledge of participants and encourages innovation and excellence. But PLCs go beyond the scope of study or support groups: they require that group members reflect honestly and openly together about their own practice, intentionally seeking ways to do their work better and continually building their capacity to do so. PLCs share key features and are bolstered by cultural and struc-

tural conditions in place in a school or district. PLCs strive for continual growth and learning, which speaks to the changing nature of schools and districts. They encourage the evolution of teaching and learning in individuals, in a collective of dedicated learners, and throughout an entire system.

Several kinds of activities promote a commitment to the collective and individual learning and openness to continuous improvement that are hallmarks of PLCs. They include engaging in collaborative problem solving around specific issues or dilemmas, identifying needs, and articulating a focus for the work; building knowledge by studying and discussing current issues and practices in quality teaching and learning, thus exploring ways to develop a culture of ongoing professional learning in a school or district; and observing, analyzing, and providing feedback and ideas about school data and teacher and student work.

be achieved. They must engage in reflective dialogue and ongoing critical inquiry, maintain a sharp focus on student learning and results, and be open about their work and willing to present it in a public fashion. A strong accountability system should be in place to ensure that expectations for student performance are being met (adapted from Eaker et al. 2002 and from Hord 1997).

Effective PLCs

Lessons from Research

Considerable research has been published on the subject of professional development through professional learning communities. The findings point out a number of useful lessons about what makes some PLCs successful in leveraging school improvement, while others have little or no effect.

❖ **Strong PLCs provide advantages to schools and districts.**

Creating strong professional learning communities holds several potential advantages for schools and districts. Among the positive outcomes reported in the research are: increased efficacy, both collectively and individually (Louis 1992); collective responsibility for student learning (Little 1990; Lee, Smith and Croninger 1995); reduction in teacher isolation (Lieberman 1995); substantial learning about good teaching and increased content knowledge (McLaughlin and Talbert 1993); higher morale, greater job satisfaction, greater retention rates, and enthusiasm (Lee, Smith and Croninger 1995; Hall and Hord 2001).

❖ **PLCs promote positive cultural change.**

Many teachers and administrators find the opportunity to meet with colleagues and openly reflect on practice to be a welcome change from the isolation and focus on individual effort that characterize the traditional professional context of education. These cultural changes, to which PLCs contribute, result in positive indicators for academic improvement, including decreases in dropout rates and absenteeism, increased learning with a focus on equity (specifically in smaller high schools), academic gains in major subjects, and smaller achievement gaps (Lee, Smith and Croninger 1995; Smith, Lee and Newmann 2001; Newmann and Associates 1996). A sense of relational trust – linking the notions of respect, competence, personal regard, and integrity with academic achievement – also strengthens the community and makes shared decision-making possible (Gordon 2002).

❖ **Leadership enhances and is enhanced by PLCs.**

Leaders play a key role in fostering the success of PLCs. Newmann and his associates (1996) found that in schools with strong PLCs, leaders paid attention to key facets of both school culture and structure – such as supportive and shared leadership and a strong focus on improvement – and ensured that cultural con-

ditions supported professional community. They set the tone for improvement by modeling active learning, investing time in the process, showing respect for the ideas of others, and empowering teachers as leaders (Zepeda 1999; Lambert 1998). And they can actively support a culture of inquiry and the use of ideas, particularly in bringing ideas in from outside the school (Louis, Kruse et al. 1995). It is critical that leadership be supportive and shared, with leaders maintaining the organization's vision, keeping a focus on improvement, and inviting input into decision making (adapted from Eaker et al. 2002 and from Hord 1997).

PLCs can help to build collective, scale-level leadership capacity. According to Lambert (1998), increased leadership capacity means that the principal is one leader but that “he or she does not fill all or even most of the leadership roles...” (pp. 91–92).

❖ **Adult learning theory strengthens PLCs.**

Understanding what motivates adults to grow and learn enhances professional development and helps the school or district become a community of learners (Zepeda 1999). The PLC approach is grounded in adult learning theory and evidences several characteristics important to adult learners. For example, as autonomous and self-directed adults, professional educators need to be involved in the planning and evaluation of their instruction, and they often reject prescriptions by others for their learning. In addition, adults have accumulated a foundation of experiences, knowledge, skills, interests, and competence; they are most interested in learning subjects that have immediate relevance to their jobs or personal lives. Like learners of all ages, adults need to see the results of their efforts and to get feedback about progress toward their goals (Lieb 1991; Dalellew and Martinez 1988; Zemke and Zemke 1995).

❖ **Interconnectedness enhances PLCs.**

Current research (as well as our own experience in schools and districts) suggests that the effects of PLCs are optimized when they exist not in isolation but as part of overlapping, interconnected communities of practice (Resnick and Hall 2001; Mitchell et al. 2001). Members of such “overlapping” communities are both formally and informally bound together by what they do, by what they have learned through their mutual engagement in the work, and through the work they have produced (Wenger 1998). Recent research also suggests that “depth” plays an important role in schools’ and districts’ capacity to sustain change. Overlapping PLCs can help schools and districts develop the capacity necessary for them to assume authority and knowledge for improved teaching and learning (Coburn 2003). Overlapping PLCs are unified by common goals but focus their work on affecting change from a variety of vantage points within the system. In this way, knowledge is created, shared, organized, revised, and

passed on within and among these communities. As a result, districts are better positioned to construct organizational expertise and to develop strategies that ensure that their individual work is connected to the larger goals and purposes of the organization (Wenger 1998).

❖ **Key structural conditions must be in place.**

Several structural conditions are necessary to build a frame that allows PLCs to operate effectively. These include regular and substantial time to meet and talk, close physical proximity among members, and a regular space to hold group meetings (Louis, Kruse et al. 1995). In addition, PLCs are bolstered by policies that support school-based decision making and self-directed professional development planning.

Lessons and Implications from the Institute's Work

The Institute's expertise in working to create and support professional learning communities has evolved through our involvement, first, with the National School Reform faculty and, subsequently, with the eighteen Annenberg Challenges sites and most recently with several national reform initiatives, including the Carnegie Corporation's Schools for a New Society and our own School Communities that Work task force.

Our initial efforts focused on working with individual schools to help them develop the skills, norms, and structures necessary to create and support professional learning communities. This school-by-school strategy was based on the fundamental belief that "school people, working together, can and must make lasting improvements in their own schools by helping each other turn theories into practice and standards into student learning" (AISR 1998).

This approach met with varying degrees of success. While we saw a number of positive results among practitioners engaged in collaborative work in new and exciting ways, we noticed several trends across sites that gradually led us to modify our approach. Many of our concerns were consistent with those surfacing in the current reform literature about the ability of professional learning communities as a singular/voluntary approach to impact large-scale, systemic change (Coburn 2003).

For the reasons outlined below, we now work with clusters of schools or, preferably, entire districts to implement PLCs as part of an overall reform support strategy. The collective resources and support of a wider network help to overcome some of the following stumbling blocks to effective PLCs.

❖ **Focusing on process diverts attention from instructional content and approaches.**

The use of structural processes and protocols helped facilitate group efforts and develop norms and habits necessary to engage in collaborative conversations. However, in many instances, this led to a strong focus on process with lesser emphasis on and attention given to engaging in content-based, instructionally

focused discourse. Conversations frequently centered around resolving school-based, administrative issues, such as scheduling, and less often on constructing and enacting a shared understanding of research-based instructional practices.

❖ **Reluctance to make work public limits more rigorous feedback.**

PLC groups engaged in a variety of activities, including sharing/examining examples of student and teacher work, giving and receiving feedback, and offering suggestions on how to improve their practice. Nonetheless, attempts to “make their work public” most often transpired as a friendly collegial exchange. Individuals remained hesitant to make their work available for deeper levels of scrutiny leading to specific recommendations for changes in the design and delivery of their classroom instructional practice.

❖ **Deep-seated issues of trust and equity are often not addressed.**

Participating in regular meetings created opportunities for interaction and served to decrease the sense of inherent isolation and to increase feelings of collegiality among groups, yet deeper issues of trust and equity were often unaddressed. In addition, groups functioned primarily as entities unto themselves and rarely engaged in conversations about how and what they were learning and doing could be used to inform each others’ practice and to improve learning conditions and achievement levels for students within schools and across districts.

❖ **Leadership capacity often remains underdeveloped.**

Although a cadre of coaches emerged as catalysts for collaborative work in the schools and increased their proficiency to facilitate group work, leadership capacity at other levels of the system remained underdeveloped in most sites. In particular, district-level leaders were aware that PLCs were emerging but lacked a clear understanding of how they could engage in the work or provide the system-level supports necessary to sustain learning communities.

❖ **Effects of changes in practice and improved student learning are often poorly documented.**

Many groups failed to collect, analyze, and present evidence, beyond self-reported anecdotes, to show that working in these groups was, in fact, leading to changes in instructional practices that resulted in improved student outcomes. Most groups also failed to use data to examine and address deeper issues of equity, including how practice and instruction is differentiated based on student needs (e.g., ELL, Special Education), what disaggregated data reveals about performance for different student groups, and how multiple measures can be used to assess student learning.

❖ **Structural changes alone do not ensure change in practice.**

While supportive structural conditions (time, space, autonomy, etc.) are important and necessary, they are insufficient in and of themselves to foster effective PLCs.

If PLCs are to help change culture, improve practice, and develop leadership, they must identify clear and essential areas of focus for their work, along with strategies for measuring the impact of their efforts. For example, members of a district-based PLC might focus on monitoring the implementation of a curriculum framework, but this work would be enhanced by examining the necessary changes in their own practice that would align and coordinate existing tools and resources to support that framework.

The Institute's Current Approach to PLCs

The concerns outlined above led us to shift our efforts to work with clusters of schools and entire districts to build an infrastructure that supports systemwide reform initiatives and approaches that can effect large-scale change. Our role is to enhance the capacity of education practitioners and stakeholders to engage in collaborative work aimed at improving instructional programs and practices and increasing student learning across an entire district or school community.

This shift entails an expanded notion of “community,” one that includes all adults who work directly or indirectly with students, including teachers, school and district administrators, central office staff, superintendents, business and community partners, parents, university faculty, and school board members. This shift also gives rise to viewing professional learning communities in light of what current research terms professional “communities of practice” (Wenger 1998). The approach presumes that organizations and groups within and across organizations will “develop and share their capacity to create and use knowledge for the purpose of producing a ‘shared practice’ as members engage in a collective process of learning” (Wenger 1998).

Focus Areas for Supporting Communities of Practice

In our current work, we concentrate on the following key areas.

❖ **Creating “overlapping” communities of practice**

While discrete professional learning communities may acquire high levels of knowledge and experience on their own, increasing interactions with other groups within and across the system enhances opportunities for learning beyond traditional boundaries and encourages learning as a social system. Consequently, we work with sites to form cross-functional teams that share and use what they learn to inform each other’s work and that consider the impact of their practice on the larger system.

These professional communities of practice “overlap” in that they are representative of a broad range of constituents including teacher leaders, school and district administrators, central office staff, parents, business and community partners, and students. Like traditional PLCs, they share a mission, vision, and values

focused on improved practice and student outcomes. For example, while school-level professional communities engage teachers in implementing the goals of a new literacy framework, a group of principals meets to discuss effective strategies for observing practice and giving feedback to teachers on their use of the framework. At the same time, area administrators are meeting regularly to reflect on the impact of innovation on changing roles and responsibilities in providing support to schools, and a cross-role team including parents and community members insures coordination and alignment of central office resources to provide support. These diverse areas of focus are united by the common goal of building individual and collective capacity with a focus on improving teaching and learning.

Such overlapping PLCs require reciprocal support and involvement at all levels of the educational system. In overlapping PLCs, everyone looks at outcomes, both promising and disappointing, to understand what they don't know and to ask how they can improve their own practice and help students achieve. These groups engage in dialogue, inquiry, and reflection for the purpose of collectively constructing new meaning and knowledge that result in action. In moving beyond the individual, collective learning allows an organization to become more adaptable through the depth of knowledge of its personnel as well as through a culture dedicated to continuous improvement. This collective approach to learning may also facilitate the orientation of individuals new to the system while extending the learning of more experienced practitioners and supporting them during various stages of their careers.

❖ **Ensuring content-based, outcomes-focused experiences**

In order to expand the repertoire needed to improve instructional practice in ways that will potentially improve student outcomes, group learning experiences must move beyond process-based structures and integrate or focus on instructional content, beginning with literacy and mathematics. Central to the work of these types of professional communities of practice are ongoing opportunities for learners to increase subject-matter knowledge; acquire strategies for instruction and assessment; examine current research and/or district policies to support instruction; observe, analyze, and coach peers; and provide ideas and feedback to each other. In this way, individuals and groups are better able to learn through and build on the collective experience and tacit knowledge of their peers and leverage existing practices to develop knowledge that is “owned” in practice (Wenger, 1998).

❖ **Building internal capacity for leadership**

Whereas leadership has been traditionally viewed as individuals in formal positions with primary responsibility for managing daily operations and processes at separate sites, leadership from a broader “systems” view necessitates that groups

of individuals at all levels of the system share the tasks, functions, responsibilities, and accountability of leadership. In the context of professional communities of practice, this means building the capacity of school, district, and community leaders to learn together and construct meaning and knowledge needed to support collaboration around improved instructional practices. This requires honing skills in communication, group-process facilitation, inquiry, conflict mediation, and dialogue (Lambert 1998).

To promote such leadership development, we work with sites to co-design a variety of learning opportunities that keep teaching and learning at the center of the dialogue. We frequently begin by assisting sites to refocus their existing meetings so that more time is used for learning and planning for action and less on dissemination and sharing of information. Taking contextual issues into consideration, such as decentralization or current efforts to restructure high schools into small learning communities, we work with them to design a variety of research-based leadership programs and learning experiences (i.e., network meetings, summer institutes, planning retreats, and leadership academies) that will meet the specific needs of leaders in each site. These sessions include, for example, content designed to improve the practice of both novice and experienced leaders such as visiting classrooms to observe effective literacy practices, sharing supervision and evaluation strategies for providing feedback on instruction, and engaging parents and community in dialogue about data on student and teacher performance.

❖ **Documenting evidence of improved practice**

The current national focus on standards and accountability calls for schools and districts to show evidence of the impact of innovations and structures on student achievement. In response, schools and districts are beginning to develop strategies for documenting how working in professional communities of practice is, in fact, leading educators and other adults to make improvements in their individual and collective practice.

We recommend that schools and districts begin with a process to identify and assess current programs and practices they are using to increase student achievement and to identify the measurable outcomes that they expect to see as a result of implementing them. We work with them to develop a process to identify, collect, and analyze specific examples of what changes in practice people made and the resulting impact on culture, norms, and outcomes.

The goal of our work at this stage is to urge sites to routinely use data-informed approaches to make decisions about instructional programs. We also encourage them to develop shared practice and implement strategies that show evidence that professional communities of practice are working to improve learning experiences and outcomes for adults and students in their sites.

Strategies and Tools

Implementing systemwide initiatives that focus on restructuring high schools into smaller, more personalized learning communities offers both the challenge and opportunity for sites to focus on integrating the structural changes along with changes in instruction. A key lesson learned through our experiences in providing this type of technical assistance is that there is no shortcut to sites taking the time to engage in a cycle of inquiry that includes assessing, analyzing, and developing plans that lead to specific action.

While the majority of the tools and strategies we use in our work emerge from and are co-constructed with the sites to address context-specific issues, we have found several resources to be particularly useful in this work. As groups progress through various stages, we are able to share a variety of tools and strategies with them, adapted to specific contextual issues, to facilitate their development.

❖ **Providing technical assistance**

In the process of becoming communities of practice, sites often look to us for guidance in finding solutions to the challenges they are facing. In the quest to identify and implement content-based, outcomes-focused approaches to improving teaching and learning, schools and districts may discover that they lack a clearly defined instructional core in key content areas like literacy or math or that they lack clearly articulated expectations and standards for high-quality teaching and learning that can guide instructional practices and serve as a solid basis for supervision and evaluation processes.

Our relationships with universities, reform support organizations, local education funds, school districts, and foundations contribute significantly to our ability to provide specific technical assistance and to support reform efforts in a variety of contexts. For example, our experience working with partnerships between local reform support organizations such as Houston A+ and large urban school districts in several states informs our ability to support strategic planning in other sites.

❖ **Connecting learning networks**

One strategy for ensuring that whole school reform takes root is working closely with governing groups representing various school, district, community and business organizations that have agreed to serve as partners in supporting the reform. We can help these groups engage in a variety of activities to increase their overall capacity to support and monitor the implementation efforts.

Further, we are in a position to identify and call on a diverse range of organizations with expertise in particular areas of work to inform and advance our thinking and the thinking of the sites with which we work. Examples range from the Bay Area Coalition for Equitable Schools' work on developing local educa-

tion support systems and small schools to the National Council of La Raza's efforts to connect community and schooling to the education of English Language Learners. The insights gained through our networks and partners develop our organizational capacity to build knowledge, plan action, and collaborate effectively with the districts with whom we work.

❖ **Using tools to inform the work**

In the course of our work we have created and adapted a number of tools that are useful in advancing the work of PLCs. These include:

- **Rubrics** describing key indicators and levels of enactment (e.g., beginning, emerging, sustaining, etc.) to identify/assess/analyze progress.
- **Frameworks** for content and group process.
- The **Central Office Review for Results and Equity (CORRE)**, which helps district leaders evaluate the capacity of the central office to support schools in improving instruction.
- The **Generally Accepted Principles of Teaching and Learning (GAPTL)**, a framework of widely accepted ideas about student learning and their implications for good instruction and for redesigned school districts.
- **Video packages**, which include guides for facilitators, on topics such as peer observation, looking at student work, and leadership development.
- **Web-Based Resources** such as the Institute's Web site – a portal to local and national efforts by researchers and practitioners to implement and inform educational reform.

In promoting and supporting the development of strong and systemic professional learning communities, the Annenberg Institute is acting on its own collective core beliefs about effective schooling. These include primarily a commitment to learning, relationships, equity and results. In our internal work, we model the processes and practices that we encourage schools and districts to enact both as we co-construct that work and implement it in the field. As we work within and across sites around the country, we too seek to build shared knowledge and ownership of effective practice and to examine our structures, policies, and practices for real and potential pitfalls to effectively meeting our – and their – ultimate goal of making every school work for every student.

Works Cited

- Annenberg Institute for School Reform. (1998). *Critical Friends Groups in Action: Facilitator's Guide*. Providence, RI: Brown University.
- Coburn, C. (Aug/Sept 2003). "Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change." *Educational Researcher* 32(6), pp. 3–12.
- Corcoran, T. (1995). *Transforming Professional Development for Teachers: A Guide for State Policymakers*. Washington, DC: National Governor's Association.

- Daleliew, T., and Martinez, Y. (1988). "Andragogy and Development: A Search for the Meaning of Staff Development." *Journal of Staff Development* 9(3), 28–31.
- Darling-Hammond, L., and McLaughlin, M. (1995). "Policies That Support Professional Development in an Era of Reform." *Phi Delta Kappan* 76(8), 597–604.
- Eaker, R., DuFour, R., and Burnette, R. (2002). *Getting Started: Reculturing Schools to Become Professional Learning Communities*. Bloomington, IN: National Educational Service.
- Elmore, R. (2002). *Bridging the Gap Between Standards and Achievement: The Imperative for Professional Development in Education*. New York: Albert Shanker Institute.
- Fullan, M. (1999). *Change Forces: The Sequel*. London: Falmer Press.
- Gordon, D. (July/Aug 2002). "Fuel for Reform: The Importance of Trust in Changing Schools." *Harvard Education Letter* 18(4).
- Hall, G., and Hord, S. (2001). *Implementing Change: Patterns, Principles, and Pitfalls*. Boston, MA: Allyn and Bacon.
- Hord, S. (1997). *Professional Learning Communities: Communities of Continuous Inquiry and Practice*. Austin, TX: Southwest Educational Development Laboratory.
- Knapp, M. S., McCaffrey, T., and Swanson, J. (April 2003). "District Support for Professional Learning: What Research Says and Has Yet to Establish." Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, April 21–25, 2003.
- Lambert, L. (1998). *Building Leadership Capacity in Schools*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Langer, J. A. (2000). "Excellence in English in Middle and High School: How Teachers' Professional Lives Support Student Achievement." *American Educational Research Journal* 37, 397–439.
- Lee, V. E., Smith, J. B., and Croninger, R. G. (1995, Fall). "Another Look at High School Restructuring." *Issues in Restructuring Schools*. Madison, WI: Center on Organization and Restructuring of Schools, School of Education, University of Wisconsin–Madison.
- Lieb, S. (1991). "Principles of Adult Learning." *VISION* (Fall).
- Lieberman, A. (Ed.) (1995). *The Work of Restructuring Schools: Building From the Ground Up*. New York: Teachers College Press.
- Little, J. W. (1990). "The Persistence of Privacy: Autonomy and Initiative in Teachers' Professional Relations." *Teachers College Record* 91, 509–536.

- Little, J. W. (1988). "Seductive Images and Organizational Realities in Professional Development." In A. Lieberman (Ed.), *Rethinking School Improvement*. New York: Teachers College Press.
- Little, J. W. & McLaughlin, M. W. (Eds.) (1993). *Teachers' Work: Individuals, Colleagues, and Contexts*. New York: Teachers College Press.
- Louis, K. S. (1992). "Comparative Perspectives on Dissemination and Knowledge Use Policies: Supporting School Improvement." *Knowledge* 13, 287-304.
- Louis, K. S., Kruse, S. D., and Associates. (1995). *Professionalism and Community: Perspectives on Reforming Urban Schools*. Thousand Oaks, CA: Corwin Press.
- Louis, K. S., Kruse, S. D., and Marks, H. M. (1996). "Schoolwide Professional Development." In F. Newmann and Associates, *Authentic Achievement: Restructuring Schools for Intellectual Quality*, 170-203. San Francisco: Jossey-Bass.
- McLaughlin, M. W., and Talbert, J. E. (1993). *Contexts That Matter for Teaching and Learning*. Stanford: Center for Research on the Context of Secondary School Teaching, Stanford University.
- Mitchell, J., Wood, S., and Young, S. (2001). *Communities of Practice: Reshaping Professional Practice and Improving Organisational Productivity in the Vocational Education and Training (VET) Sector*. Melbourne, Australia: Australian National Training Authority.
- Newmann, F. M. and Associates. (1996). *Authentic Achievement: Restructuring Schools for Intellectual Quality*. San Francisco: Jossey-Bass.
- Resnick, L. B., and Hall, M. W. (June 2001). "Learning Organizations for Sustainable Education Reform." *Daedalus*.
- Senge, P. (1990). *The Fifth Discipline*. New York: Doubleday.
- Smith, J. B., Lee, V. E., and Newmann, F. M. (2001). *Improving Chicago's Schools: Instruction and Achievement in Chicago Elementary Schools*. Consortium on Chicago School Research.
- Wenger, E. (June 1998). "Communities of Practice: Learning as a Social System." *Systems Thinker*.
- Zemke, R., and Zemke, S. (1995). "Adult Learning: What Do We Know For Sure?" *Training* 32(6), 31-40.
- Zepeda, S. J. (1999). *Staff Development: Practices That Promote Leadership in Learning Communities*. Larchmont, NY: Eye on Education.



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