

Teaching and Teacher Development: A New Synthesis for a New Century

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What is there about teachers and schools that make them so open to critique and everyone's counsel? Why is it that strong ideological claims get attached to particular ways of organizing and teaching subject matter content? How can schools and teachers continue to grow and deepen their work in a society that is rapidly changing the rules? These questions have been at the center of the debate about educational change and improvement perhaps as long as schools have been around, especially in the last half of the 20th century. As we begin to shape a future for teachers and teaching in the new century, we need to take the time to assess our history. We can then come to understand the connections between the issues and concerns of the past and the demands and needs of the decades to come.

THE CHANGING CONTEXT OF TEACHING

The context of teaching has changed in the past two decades, and it promises to change even more dramatically in the coming century. Our democratic society is being transformed as we rapidly move toward an information society and a global economy. The changes are happening more quickly than schools seem able to accommodate. From cognitive theorists to business executives, people outside schools are pressing people inside to teach students how to frame and solve problems, to think critically, to develop a multicultural awareness, and to demonstrate mastery of basic skills. All these demands have strong implications for teaching. This section highlights some conditions that currently affect teaching and the challenges they raise for the next century.

NEW DEMOGRAPHICS, NEW TECHNOLOGIES

Emerging demographics contribute significantly to the press for change. In the last two decades, although prosperity has been increasing and the unemployment rate is the lowest in history, the number of poor families has risen dramatically. The gap between those who participate fully in society and those who do not has widened, creating what many view as a threat to democracy (Glickman, 1998). Although students with social, physical, or educational problems have always been a challenge to teachers, their increased numbers in recent years have made individual accommodations more difficult to deliver. Legislation, which guarantees more school services without the funding to support them, depletes local resources and forces schools and teachers to make tough decisions about whom they can serve and how well. While student populations are becoming more diverse ethnically and linguistically, the teaching population remains the same and continues to disproportionately represent the white middle class.

The technological revolution has also added to the challenges teachers face. Although many more teachers have access to computers, schools have been slow to use technology as a tool for enhanced student engagement and learning. The reasons are complex and have to do with the unequal distribution of technology in rich and poor districts, stockpiling of hardware without seriously involving teachers in its use,

and difficulties in organizing institutional and individual changes that might use the technologies on the market. At a time when demands on teachers for accountability are increasing, technology-rich schools have a clear advantage.

COMPETING STRATEGIES FOR SCHOOL REFORM

Many educators, who have come of age in the profession within the past 40 years, have developed a skeptical view of school reform. Weary of the agendas for change that regularly appear almost every 10 years, they tend to distrust innovations offered by researchers who purport to have found the "one best way" to solve an enduring problem. Teachers have found that generalizations guided by empiricism don't attend to issues faced in *my* classroom with *my* students. They tend to discount the belief that policies and practices rooted in research can be disseminated to schools and adopted whole.

This rational-linear, empirically driven perspective has dominated the educational landscape for almost a century. But an alternative, albeit minority, view about how to effect change in classrooms has also been around a long time. This position holds that contexts are critical and that organizational and personal change has to do with the meaning and enactment of changes in schools. In this approach, developing new ways of working and thinking, and creating new roles and relationships, are important. This work requires a fundamental rethinking of the organization and practice of teaching.

Teachers have been receivers of both sets of formulations: that there is knowledge created by research that needs to be implemented; and that there is knowledge that is created in the process of action and reflection on practice (Rorty, 1979; Schon, 1991; Cochran-Smith & Lytle, 1993). From a historical perspective, these two ways of thinking about knowledge and improvement have been coupled with America's continuous and contentious quest to provide excellence and equity in its schools (Lazerson, 1987). They represent growth differences in the research community; the way policymaking occurs at the district, state and federal levels; and the ways that the public learns about and expresses its opinions on schools and teachers (Bruner, 1985; Darling-Hammond, 1998; Cochran-Smith & Lytle, 1999). Neither approach has

led to far-reaching, deep-seated school reform. Part of education's task in the 21st century is to reconcile the two approaches, borrowing what is best and worthy from each, to move the school reform agenda forward.

THE PRESS FOR STANDARDS

Schools are feeling a tremendous press to improve student achievement levels and the quality of the teaching force. This pressure is not new; it has its roots in three reports that were issued in the years between 1983 and 1996. A small volume, *A Nation at Risk* (National Commission on Excellence in Education, 1983), rallied the country around the need for greater accountability for student learning. It was based on the proposition that American schools were not meeting desired outcomes in terms of student achievement, and that externally generated, empirically based knowledge would make things better. To increase student achievement on standardized measures, policymakers were encouraged to add to the curriculum in the areas of science, math, and technology; lengthen the time students spend in school; increase requirements for high school graduation; and develop and implement more rigorous assessments of student learning. In this document, we can see the seeds of the student accountability initiatives that are now taking hold at the local, state, and federal levels as evidenced by state assessments, high school exit examinations, and talk of developing a federal examination of student achievement.

A second report was issued just three years later. *A Nation Prepared: Teachers for the 21st Century* (Carnegie Corporation of New York, 1986) provided the impetus for another round of national discussions, this time about teachers and teaching. While giving a nod to higher standards for students, the report looked to teachers as the key to school reform. It made the claim that if teachers became engaged as leaders in curriculum, instruction, and assessment, they would successfully implement what was necessary for student success. Rather than rely on external knowledge as the starting point for improvement, the report placed its trust in teachers as the major transformative agents. In many cases, teacher-led efforts to restructure schools, and in some instances to create new ones, were implemented as a result of this report.

A decade later, a document issued by the National Commission on Teaching and America's Future (1996) reenforced and extended the focus on teaching. Entitled *What Matters Most: Teaching and America's Future*, it describes a systemic reform strategy that complemented the development of standards for students by proposing a system of standards and rewards for teaching. By connecting standards for teachers with standards for students, the commission provided a blueprint of what is required to take teaching into the 21st century. Included in the blueprint are higher requirements for teacher licensure and renewal; rigorous testing of teacher knowledge; an overhaul of preservice teacher preparation programs and the closing of programs that don't meet national standards; incentives and rewards for accomplished teaching; provisions for peer assistance to help teachers needing improvement, and for the dismissal of teachers who do not respond to assistance; enhanced professional development throughout a teaching career; and improved working and learning environments for teachers and students.

THE NEW SOCIAL REALITIES OF TEACHING

The growing pressure on teachers necessitates rethinking their job description and what the teaching role entails. The old norms of individualism, isolationism, and privatism (Lortie, 1975) no longer suffice; teachers need to develop new ways of doing business and of viewing themselves and their profession. We call these necessary changes "the new social realities of teaching" (Lieberman & Miller, 1999) because they represent major shifts in both perspective and practice. We have identified seven transitions that teachers need to make:

- *From individualism to professional community.* By forgoing individual work for joint work, teachers can build a strong school culture that values collegiality, openness, and trust over detachment and territoriality (Little, 1981; McLaughlin & Talbert, 1993; Rosenholtz, 1989). This new culture supports the experimentation, risk taking, and feedback that is necessary for reflecting and improving teaching practice.

- *From teaching at the center to learning at the center.* When teachers direct their attention away from the technology of teaching and toward the construction of learning, they approach their charge in a very

different way. They situate student work at the center of the educational enterprise, and they craft learning opportunities that respond to particular contexts. Such an approach leads to "authentic instruction" (Newmann & Wehlage, 1995) that ultimately connects in-school learning to life beyond school.

- *From technical work to inquiry.* The emphasis on student work leads to a broader formulation of the teaching task. Teachers can no longer think of themselves as mere technicians who can only be held responsible for the mastery of a prescribed set of skills and techniques. Rather, they see themselves as intellectuals engaged in the process of discovery and reflection. As researchers, meaning-makers, scholars, and inventors, they establish a firm professional identity as they model the lifelong learning they hope to infuse in their students.

- *From control to accountability.* As the notion of teacher work expands, so does the concept of accountability. Long identified with controlling student behavior, accountability has changed in definition to focus on the public responsibility for student performance. This new definition encourages teachers to establish expectations that include all students. Teachers acknowledge that they control the conditions for student learning in their individual classrooms and in the whole school. The realities of students' lives are not denied, but neither are they accepted as excuses for students not to achieve in school.

- *From managed work to leadership.* As teachers redefine and augment their roles, they become leaders in curriculum, instruction, and teaching. They simultaneously complement a principal's administrative leadership and contribute to a school's management and well-being. Teacher leadership is no longer appointed or anointed by the principal; it is considered a necessary part of being a teacher.

- *From classroom concerns to whole school concerns.* Teacher leadership is but one example of how the new realities of teaching expand the boundaries and perspectives of teaching. As teachers move from individuality to collaboration and from control to accountability, they make a transition from exclusive concerns about *my* classroom and *my* students to more inclusive concerns about *our* school and *our* students. Teachers become members of vibrant professional communities that challenge and support their continued development.

- *From a weak knowledge base to a stronger, broader one.* New research

in human cognition and intelligence has helped considerably teachers' efforts to professionalize their work and to assume a greater role in decision making and leadership. Long criticized as having a weak knowledge base, teaching is now able to draw on a wealth of information and basic research that can guide practice. Though teaching will never lose its intuitive and speculative dimensions, it can now rely on a firm knowledge base that not only provides more tools for work but also earns the profession more credibility.

BROADENING CONCEPTIONS OF INTELLIGENCE

An important source of new knowledge is the research of cognitive psychologists and others who have been investigating the nature of intelligence. Since the publication of Howard Gardner's *Frames of Mind* (1983), debate about what intelligence is and how it is measured has been ongoing. Gardner posits that there is not one general intelligence (called "g" by psychologists), but rather a plurality of intelligences (Checkley, 1997). Gardner identifies eight distinct intelligences, with their own symbol systems and sets of core operations. The eight intelligences are (1) linguistic: the ability to use words effectively, to manipulate language and syntax, and to express meaning; (2) logical-mathematical: the ability to use numbers well and to reason effectively; (3) spatial: the ability to perceive the visual-spacial world accurately and to form mental images; (4) bodily kinesthetic: the ability to use one's body to express feelings and ideas, to solve problems, and to transform things; (5) musical: the ability to recognize, produce, and transform musical forms; (6) interpersonal: the ability to understand the moods, feelings, intentions, and motivations of other people; (7) intrapersonal: the ability to know oneself; to understand one's own moods, feelings, intentions, and motivations; and to act based on that knowledge; and (8) naturalist: the ability to discriminate among and value phenomena of the natural world. Gardner proposes that each person has all eight intelligences and, at the same time, is dominant in one or two; that the eight intelligences interact in complex ways; and that all people can develop all eight intelligences to adequate levels of competence.

Although schools have become adept at measuring linguistic and logical-mathematical intelligences, they have not yet developed the tools to assess the others adequately. David Perkins (1985), Gardner's colleague at Harvard, has conducted research that indicates that all intelligences can be learned. Such an assertion leads to reconsidering schools' function. In this view, a school's job is to help all children develop intelligences, and a school's energies need to be directed toward assessing the ways that each student is smart and can become smarter.

In a similar reframing of intelligence, Sternberg (1985) has developed a triarchic theory that speculates there are three fundamental kinds of intelligence: analytic, creative, and practical. He makes a case for balancing analytic or academic intelligence, which is valued in school, with an appreciation for the other two. Sternberg defines analytic intelligence as the ability to solve problems that have been clearly defined by other people who provide all the necessary information to reach a single and correct solution. Analytic problems are not embedded in ordinary experience and have little or no intrinsic interest.

In contrast, Sternberg views practical intelligence as the ability to solve poorly defined problems that require reformulation and the search for more information. Practical problems have a variety of solutions and are embedded in everyday experiences that are motivating. He considers this intelligence to be a "tacit intelligence" that is valued in the workplace and is tied to job performance.

Sternberg's conception of intelligence provides the basis for educational practices that develop what have been called "authentic" (Newmann & Wehlage, 1995) learning tasks, assessment strategies, and pedagogies. These tasks move beyond rote memorization and encourage complex thinking skills.

Finally, biological approaches that study the brain are adding to the knowledge base about the nature of intelligence and how to measure it. Using new forms of brain imaging, neuroscientists are developing hypotheses about how the brain organizes itself; how it interacts with the environment; how it learns, remembers, and forgets; and how it solves problems (Sylwester, 1995). Thus far, a connection between the anatomy and physiology of the brain and applications to the classroom is purely speculative. Although many are eager to make the translation to classroom practice, others caution that "the mind is not an isolated

thing like the brain inside its skull" (Egan, 1997), and that context-specific studies of learning and teaching may be more useful avenues of knowledge to pursue.

NEW KNOWLEDGE ABOUT LEARNING AND TEACHING

As indicated earlier, forces in the wider culture are calling for a new kind of citizen, worker, and thinker. Even though basic skills are still deemed necessary, they are no longer considered sufficient. Schools are being asked to produce students who can demonstrate *understanding* as well as knowledge and skill. Darling-Hammond (1997) describes these students as having the capacity to

Test and apply ideas . . . look at concepts from many points of view . . . develop proficient performances . . . evaluate and defend ideas with careful reasoning and evidence . . . inquire into a problem using a productive research strategy . . . produce a high-quality piece of work and understand the standards that indicate good performance . . . solve problems they have not encountered before (p. 96).

Agreement is growing within the research community about the premises that underlie this kind of learning and the instructional practices that move students beyond recall, recognition, and reproduction and toward evaluation, analysis, synthesis, and production. Here are the premises:

- Student learning is based on the construction of knowledge. Students need to make sense of what they learn—in a sense, to re-invent it for themselves. Such work requires that they connect new learning to prior knowledge and see for themselves the link between what the curriculum is teaching and their own experiences and frames of reference.
- Students learn to make the connection through guided practice and interaction with others. Talking is a vehicle for learning; relationships enable students to move to deeper levels of understanding.
- Students learn according to their own developmental dispositions. Generalizations about what is developmentally appropriate at different ages and stages have been established, but students still have unique paths that must be acknowledged and attended to. By teaching to each student's "zone of proximal development" (Vygotsky, 1978), educators can help them move along a continuum and not remain stuck.

Applying these premises to *classrooms* requires a significant shift in practice. These shifts represent an “unrecognized consensus” (Zemelman, Daniels, & Hyde, 1998) about what needs to happen more and what needs to happen less in instruction (see Figure 3.1).

Such shifts do not mean that old practices are abandoned and replaced by new ones. Rather, the shifts require that teachers “add new alternatives to a wider repertoire of choices, allowing them to alternate among a rich array of activities, creating a richer and more complex balance” (Zemelman, Daniels, & Hyde, 1998, p. 213).

FIGURE 3.1
SHIFTS IN PRACTICE TO HELP STUDENTS DEMONSTRATE UNDERSTANDING

DESCRIPTION OF INSTRUCTIONAL PRACTICE	
Less	More
Whole class, teacher-directed.	Experiential, hands-on.
Worksheets, seatwork.	Active learning.
Transmission of information.	Demonstration, coaching, mentoring.
Coverage of curriculum.	Deep study of a few topics.
Textbooks and basal readers.	Real texts, primary sources.
Rote memorization of facts.	Higher-order thinking.
Tracking and leveling.	Heterogeneously grouped classes.
Reliance on standardized measures.	Reliance on teacher descriptions.

Source: Adapted from Zemelman, Daniels, & Hyde, 1998.

HOW TO GET THERE FROM HERE: NEW MODES OF TEACHER DEVELOPMENT

As stated earlier, the face of teaching has to change to meet the challenges that public expectations and new information demand. If schools commit to the attainment of high standards of knowledge, skills, and understanding for an increasingly diverse and needy population, then teachers will have to wed new technologies to an expanded

instructional repertoire. Education in the new century will require that teachers know more about their students, their subject matter, and the context of their work. The question is, How do we get there from here? Of course, there is no single answer to the question, no magic bullet that will prepare teachers for the 21st century. We believe, however, that educators have collected enough experience and wisdom over the past two decades to chart a course for change that places teacher preparation and ongoing professional development at the center of reform efforts for the next century.

The case for high-quality preservice education has been effectively made, given the urgency of filling over two million teacher vacancies within the next 10 years. Equally important, and much less acknowledged, is the need for high-quality professional development for experienced teachers. As expectations for students continue to increase, so will expectations for teachers. Even the best prepared and most accomplished of the profession will, over the course of their teaching careers, need the time and opportunity to update their professional knowledge, increase their teaching repertoire, and talk to each other about how to solve emergent problems.

The issue of professional development is rapidly becoming an object of concern for the research, practice, and policy communities. Recent scholarly work indicates that effective professional development has these basic premises:

- Teachers’ prior beliefs and experiences affect what they learn.
- Learning to teach to the new standards is hard and takes time.
- Content knowledge is key to learning how to teach subject matter so that students understand it.
- Knowledge of children, their ideas, and their ways of thinking is crucial to teaching for understanding.
- Opportunities for analysis and reflection are central to learning to teach (Darling-Hammond & Ball, n.d.).

Most educators admit that these premises are rarely, if ever, found in current professional development programs. Effective development programs of the future will break from the traditional mold because the new century requires new forms (Cochran-Smith & Lytle, 1993, 1999; Darling-Hammond & McLaughlin, 1995; Hargreaves, 1994; Lieberman,

1995a; Little, 1993). Skill development should be only a part of teachers' overall professional development:

The well-tested models of skill development, built on the staff development and implementation-of-innovations literature, will work reasonably well to introduce teachers to a repertoire of classroom practices. However, much of what we anticipate in the current reforms does not lend itself to skill training because it is not readily expressed in terms of specific, transferable skills and practices (Little, 1993, p. 5).

PROMISING TRENDS

This section explores trends in teacher learning and professional development that hold the greatest promise for maintaining a teaching force equipped for the task of educating the next generation of Americans.

PROFESSIONAL COMMUNITIES

A growing body of literature and experience has documented the importance of teachers' growth and development when they work together in communities teaching each other, learning together, and focusing on the successes and challenges of educating their students (Little, 1996; McLaughlin & Talbert, 1993; Shaps, Watson, & Lewis, 1996). This idea of belonging to a community changes the way we think about teacher learning. Its importance lies in the fact that it changes the relationship of teachers to their peers, breaking the isolation that most teachers have found so devastating. In supportive communities, teachers reinforce each other in a climate that encourages observing students, sharing teaching strategies, trying out new ways of teaching, getting feedback, and redesigning curriculum and methods of instruction. Teachers' professional communities serve as important mediators for teachers' interpretations and analyses of student learning. In communities where reform, restructuring, and school transformation are the vision, teachers learn to make public their challenges as well as their successes. Teachers receive support, learn from one another, and gain confidence for changing their practice to better meet their student's needs (Newmann & Wehlage, 1995; Lieberman, 1995a).

USING BOTH INSIDE AND OUTSIDE KNOWLEDGE

Teachers' growth and development come about in many ways. Teachers learn from outside knowledge (e.g., research, reform ideas, conferences, workshops, speakers, books, and consultants); they also learn from each other, from looking at student work, from helping shape assessment tools, and from examining their own practice (Ayers, 1993; Cochran-Smith & Lytle, 1993; Lieberman, 1995b; Schon, 1995). Schon (1995) phrases it well:

Perhaps there is an epistemology of practice that takes fuller account of the competence practitioners display in situations of uncertainty, complexity, uniqueness, and conflict. Perhaps there is a way of looking at problem setting and intuitive artistry that presents these activities as describable (p. 29).

This kind of knowledge is passed on to teachers in primarily informal ways and has become part of teaching lore. Educators have yet to build a body of knowledge that could be accepted as a scholarship of teaching (Shulman, 1986). Yet, a number of efforts are looking carefully at how teachers produce knowledge by documenting their own practice. This form of professional development is becoming more important; it is one way that teachers not only look at their own practice and gather evidence of its effect, but also build "teacher knowledge" to be put alongside "researcher knowledge" (Cochran-Smith & Lytle, 1999; Richert, 1996; Zeichner, 1998).

A notable example of the recognition of inside knowledge is the success of the National Writing Project. In this professional development effort, teachers themselves not only write and receive feedback from their colleagues, but they also teach each other lessons they have learned with their own students. This type of local knowledge sharing is receiving more attention as professional development becomes the linchpin for improving teachers' practice. This kind of professional development—recognizing that teachers' knowledge may be as important as research knowledge—changes the way we think about what counts for professional development as well as how we think of the organizational arrangements that support it.

NETWORKS, COALITIONS, AND PARTNERSHIPS

Perhaps as interesting as the debate on what (and how) teachers learn and how they implement new knowledge is the discussion on reform networks, coalitions, partnerships, and their role in teacher learning. For many years, educators have assumed that a fixed process produces and disseminates research knowledge for teachers. Such a view has been consonant with how professional development has been organized as well. Teachers, it is assumed, will use research knowledge to better their practice. But this view ignores what we now know about the realities of teachers' worklives. Teachers are fundamentally affected by "multiple, embedded contexts," including their grade level; subject matter; department; school; principal; district policies; community; and, most importantly, their students' academic abilities, needs, interests, and backgrounds (McLaughlin, 1998, p. 74). State-level efforts to create standards and assessments as well as rewards and sanctions add yet another context.

Rather than a linear, deficit approach, staff development is expanding to include networks, coalitions, and partnerships that provide a new model of teacher involvement and learning—one that not only encourages teacher knowledge, but also is far more sensitive to the contexts that help shape teacher practice. We are learning that professional development that increases teacher knowledge is more likely to occur when such development provides teachers with opportunities to be members of a community; respects local knowledge (i.e., problems and practices that attend to the particulars of a context); and uses inside and outside knowledge as sources for teacher learning.

These reform networks and partnerships have been organized nationally, regionally, and locally. Although they differ in purpose, they share common characteristics:

- Authentic problems of practice are central to professional development. Research and reform ideas are often catalysts for helping teachers invent strategies that fit their particular local situations. Teachers' knowledge is developed through inquiry into their own practice, providing opportunities for teachers to make their assumptions, intuitions, and prejudices public and accessible for reflection and change.

- Structures and mechanisms for teacher learning are collaborative. A variety of roles for teachers are provided, including participant, learner, leader, liaison, developer, teacher, researcher, and scholar.
- Professional communities—school-university partnerships, networks, and coalitions—are organized around such concerns as subject matter lines, school reform issues, problems of pedagogy, and standards.
- Inside and outside a school system, these learning communities are evolutionary and flexible, rather than permanent and rigid.
- These collaborative arrangements—whether national, regional, or local—are characterized by a tight-loose structure: Values are tightly held, while the work is flexibly organized.
- Supportive communities find ways to provide time for sharing, evaluating, choosing among alternative ideas, reading, studying, taking action, reflecting, changing, and improving.
- Collaborative rather than bureaucratic structures involve teachers, administrators, and university educators as equals in the decision-making process.

A PROFESSIONAL CONTINUUM FOR TEACHER DEVELOPMENT

Preparation of new teachers cannot be isolated from the ongoing professional development of experienced teachers. Until recently, pre-service education has been de-coupled from ongoing professional development. A continuum that cuts across the teacher career needs to be developed. As suggested by the National Commission on Teaching and America's Future (1996), such a continuum begins with the recruitment of students into a teacher education program, segues into solid preprofessional grounding in a validated setting, and results in initial certification as a teacher. After initial licensure, new teachers continue to develop in a supportive teacher induction program that involves early career mentoring and evaluation for the first two years in the classroom. Following the induction period, teachers have available a wide array of professional development activities that occur in and out of classrooms and incorporate the principles and practices of effective teacher learning. Along the way, teachers have opportunities to exhibit their knowledge and skills to an audience outside their classroom,

ceive feedback, and remain connected to professional communities. To address their personal and professional needs, some teachers elect to pursue advanced degrees, while others choose to qualify for advanced certification through the National Board for Professional Teaching Standards. Teachers also have the opportunity to become engaged in educating preservice teachers.

This last opportunity connects the preparation of new teachers with the continuing learning of experienced teachers. Teacher education becomes a vibrant partnership among universities, colleges, and local schools, providing for the "rub between theory and practice" that is essential in educating professionals. Like teaching hospitals, schools become sites for extended internships and residencies that are jointly overseen by practicing professionals in the field and institutions of higher education. A professional continuum joins inside and outside knowledge, establishes professional communities, and solidifies networks and partnerships. Such an approach guarantees a superior clinical preparation for people entering the field as well as significant opportunities for inquiry, reflection, and professional learning for experienced educators.

A NEW SYNTHESIS

Changing contexts place enormous demands on teachers and teaching as the 21st century approaches. Too often in the past, practicing educators as well as policymakers have responded to public exhortations to change with an *either/or* mentality. They have supported reform strategies that are *either* rational-linear *or* developmentally responsive; they have trusted in a knowledge base that is *either* external *or* internal; they have pressed for standards that are designed *either* for students *or* for teachers; they have depended on practices that are *either* teacher-directed *or* student-centered. If this kind of dichotomous thinking continues, we can imagine two possible scenarios.

One scenario is a continuation of the current push toward greater centralization and control from the top. Driven by an urgency to make social change, federal and state interventions will make demands and press for reform through mandates to the bottom. We can envision increased emphasis on standards and testing and tightened curricular

controls. An assumption that people can be shamed into changing may well dominate, and we will see an adherence to principles on one side of the *either/or* division.

The second scenario is a bottom-up effort led by reform groups, networks, collaborations, and partnerships who abandon the current wave of centralized approaches. These ventures, however, will have a hard time becoming institutionalized. Adhering to the other side of the *either/or* dichotomy, they will receive scant support from public policy, and change will be uneven, scattered, and idiosyncratic.

We suggest a third view based on our work in educational theory and practice over the past three decades. This perspective tries to make sense of the past dualities and combines them into a new synthesis for the future. It joins the centralization of standards and assessments with the localism of means and methods. It recognizes accountability not only at the level of policy but also at the level of practice. It supports a broader variety of focused learning opportunities for teachers and principals both in and out of school, and it legitimizes structural and organizational supports that promote best practices without mandating what is and is not politically correct. Such an approach requires that serious money be put into the professional development of teachers and that adequate time be allocated for school-embedded learning. It also calls for a willingness to assume an attitude of both/and rather than *either/or* as we approach the new century.

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