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ABSTRACT

This document contains two articles that develop an argument for how schools must change to meet the demands of democracy; they also present a focused agenda for action. In the first article, "Reframing the School Reform Agenda: Developing Capacity for School Transformation," Linda Darling-Hammond describes how two different paradigms of teaching and learning are competing against each other for recognition and resources. Advocates of behaviorism and cultural transmission promote a view of learning that focuses on the mastery of facts and information and a view of teaching that reduces it to technical, managed work devoted to coverage of the curriculum. Educators on the other side of the debate, heirs to the tradition of John Dewey, view education as the construction of meaning and teaching as intellectual work aimed at uncovering knowledge. A strong case is made for adopting the constructivist model, proposing a vision of schools as communities of learners based on democratic discourse, supported by enabling policy, and grounded in learner-centered practice. In the second article, "Toward Democratic Practice in Schools: Key Understandings about Educational Change," Ann Lieberman, Diane Wood, and Beverly Falk present a brief history of educational change that connects the way people approach change with the way they view teaching and learning. Rather than advocating a single correct path to reform, the paper promotes the kind of "both/and" thinking advocated by Dewey and other progressives. It argues for an "organic view" of school reform that will support the development of learner-centered schools and lead to new understanding about how teachers and schools actually change. Teachers who work collegially are viewed as members of professional communities as the key element in successful educational change. The first and second articles contain 26 and 127 references, respectively. (LMI)

NCREST Reprint Series

# *Transforming School Reform: Policies and Practices for Democratic Schools*

**Linda Darling-Hammond**
**Ann Lieberman**
**Diane Wood**
**Beverly Falk**

## Foreword by Lynne Miller



National Center for Restructuring Education, Schools, and Teaching

Teachers College, Columbia University

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*Transforming School Reform:*

*Policies and Practices for Democratic Schools*

# *Transforming School Reform: Policies and Practices for Democratic Schools*

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May 1994

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# Foreword

School reform is certainly not new; yet there is an urgency to the present reform movement that warrants immediate attention and forceful action. What is at stake is not only the future of our public schools; what is at stake is the future of our fragile democracy. Schools must fulfil their promise of providing a high quality, free, and public education to everyone or face marginalization and possible extinction. If public education is compromised by efforts to privatize it, then the notion of a common school that builds a common democratic culture will be lost. The two articles included in this volume develop a clear argument for how schools need to change to meet the demands of democracy at the dawn of the 21st century; they also present a focused agenda for action.

Linda Darling-Hammond, in her article ***Reframing the School Reform Agenda: Developing Capacity for School Transformation***, argues that schools are on a collision course; two different paradigms of teaching and learning are competing against each other for recognition and resources. On the one side are the advocates of behaviorism and cultural transmission who have long dominated educational discourse in America. They promote a view of learning that focuses on the mastery of facts and information and a view of teaching that reduces it to technical, managed work devoted to the coverage of the curriculum. On the other side of the debate is a new generation of reformers, heir to the tradition of John Dewey and informed by recent research about learning and thinking. These educators view learning as the construction of meaning and teaching as intellectual work aimed at uncovering knowledge. Darling-Hammond makes a strong case for shifting from the behaviorist model to the constructivist one. She proposes a vision of schools as communities of learners based on democratic discourse, supported by enabling policy, and grounded in learner-centered practice.

Ann Lieberman, Diane Wood, and Beverly Falk offer a perspective that complements Darling-Hammond's. In their ambitious article, ***Toward Democratic Practice in Schools: Key Understandings about Educational Change***, the authors present a brief and precise history of educational change that connects the way people approach change to the way they view teaching and learning. Eschewing the tradition that seeks the "one best system," or the expert teacher, or the single path to school reform, Lieberman and her colleagues promote the kind of "both/and" thinking advocated by Dewey and other progressives in the first third of this century. They argue for an "organic view" of school reform that will support the development of learner-centered schools and lead to new understanding about how teachers and schools actually change. Through rich descriptions of practice, the authors make a strong case for listening to the voices of teachers, honoring their knowledge, and harnessing their energy. They view teachers who work collegially as members of professional communities as the key element in successful educational change.

Taken together, the two articles offer a powerful vision of how schools need to be redesigned for the 21st century. They demonstrate that the way to build democracy is to practice it. They make clear that investment in teacher growth, recognition of teacher knowledge, opportunity for open dialogue, and promulgation of facilitating policy are essential to developing and maintaining deep and enduring school reform.

*Lynne Miller*
*University of Southern Maine*

# *Reframing the School Reform Agenda:*

# *Developing Capacity for School Transformation*

Linda Darling-Hammond

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Over the last decade the rhetoric of school improvement has changed from a language of school reform to a language of school restructuring. Efforts to make our current education system perform more efficiently have shifted to initiatives that aim for fundamental redesign of schools, of approaches to teaching and learning, and of goals for schooling. Just as the last century's transformation from an agrarian society to an industrial one made the one-room schoolhouse obsolete, replacing it with today's large school bureaucracies, so this century's movement into a high-technology Information Age demands a new kind of education and new forms of school organization.

There is little room in today's society for those who cannot manage complexity, find and use resources, and continually learn new technologies, approaches, and occupations. In contrast to low-skilled work on assembly lines, which was designed from above and implemented with routine procedures from below, tomorrow's work sites will require employees to frame problems, design their own tasks, plan, construct, evaluate outcomes, and cooperate in finding novel solutions to problems (Drucker, 1986). Increasing social complexity also demands citizens who can understand and evaluate multidimensional problems and alternatives and who can manage ever more demanding social systems.

These changes signal a new mission for education: one that requires schools not merely to "deliver instructional services" but to ensure that all students learn at high levels. In turn, the teacher's job is no longer to "cover the curriculum" but to enable diverse learners to construct their own knowledge and develop their talents in effective and powerful ways.

This changed mission for education requires a new model for school reform, one in which policy makers shift their efforts from *designing controls* intended to direct the system to *developing the capacity* of schools and teachers to be responsible for student learning and responsive to student and community needs, interests, and concerns. Capacity-building requires different policy tools and different approaches to producing, sharing, and using knowledge than those traditionally used throughout this century.

## Competing Models of Policy Making

Over the last decade, hundreds of pieces of legislation have sought to improve schools by adding course requirements, increasing testing requirements, mandating new curriculum guidelines, and requiring new management processes for schools and districts. Similar reforms during the 1970s had tried to "teacher-proof" schooling by centralizing textbook adoptions, mandating curriculum guides for each grade level and subject area, and developing rules and tests governing how children should be tracked into programs and promoted from grade to grade.

These efforts are the most recent expressions of a model of school reform put into place at the turn of the 20th century -- a model grounded in the view of schools as bureaucracies run by carefully specified procedures that yield standard products (students). Based on a faith in rationalistic organizational behavior, in the power of rules to direct human

action, and in the ability of researchers to discover the common procedures that will produce desired outcomes, 20th-century school reform has assumed that changing the design specifications for schoolwork will change the nature of education that is delivered in classrooms -- and will do so in the ways desired by policy makers.

This models fits with a behavioristic view of learning as the management of stimulus and response, easily controlled from outside the classroom by identifying exactly what is to be learned and breaking it up into small, sequential bits. However, we now know that, far from being "blank slates" waiting to accumulate pieces of information, learners actively construct their own knowledge in very different ways depending on what they already know or understand to be true, what they have experienced, and how they perceive and interpret new information. Furthermore, they construct this knowledge in a much more holistic and experiential fashion than is assumed by the sequenced teaching packages, worksheets, texts, and basal readers typical of the old approach to teaching and learning (Resnick, 1987; Gardner, 1983; Curtis and Glaser, 1981).

To foster meaningful learning, teachers must construct experiences that allow students to confront powerful ideas whole. They must create bridges between the very different experiences of individual learners and the common curriculum goals. They must use a variety of approaches to build on the conceptions, cultures, interests, motivations, and learning modes of their students. They must understand how their students think as well as what they know.

This more complex approach to teaching requires that teachers combine deep knowledge of subject matter and a wide repertoire of teaching strategies with intimate knowledge of students' growth, experience, and development (Shulman, 1987; Berliner, 1986; Carter and Doyle, 1987; Doyle, 1978; Piaget, 1970). Furthermore, if schools are to be responsive to the different needs and talents of diverse learners, they must be organized to allow for variability rather than assuming uniformity. Teachers must diversify their practice so that they can engage each of their students in whatever ways are necessary to encourage their learning.

These tasks suggest a radically different approach to educational improvement. Rather than seek to make the current system of schooling perform more efficiently by standardizing practice, school reform efforts must focus on building the capacity of schools and teachers to undertake tasks they have never before been called upon to accomplish. Schools and teachers must work to ensure that *all* students learn to think critically, to invent, to produce, and to solve problems. Because this goal requires responding to students' nonstandardized needs, it far exceeds what teacher-proof curricula or administrator-proof management processes could ever accomplish.

Reforms that rely on the transformative power of individuals to rethink their practice and to redesign their institutions can be accomplished only by investing in individual and organizational learning, in the human capital of the educational enterprise -- the knowledge, skills, and dispositions of teachers and administrators, as well as parents and community members. The new reforms also demand attention to equity in the distribution of those educational resources that build school capacity, including well-qualified teachers supported

by adequate materials and decent conditions for teaching and learning. The dramatic inequalities that currently exist in American schools cannot be addressed by pretending that mandating and measuring are the same thing as improving schools.

The shift in our approach to school reform began during what has come to be known as the second wave of reform in the 1980s, which emphasized the need to improve education by decentralizing and professionalizing teaching, by investing in the knowledge and skills of educators rather than in prescriptions for uniform practice. In response, many states and districts have begun to experiment with decentralized decision-making structures, such as site-based management and shared decision making. If these innovations are to succeed, however, they require highly educated and well-prepared teachers who can make sound decisions about curriculum, teaching, and school policy.

Indeed, all the solutions to the problems cited by education's critics are constrained by the availability of talented teachers, by the knowledge and capacities those teachers possess, and by the school conditions that define how that knowledge can be used. Raising graduation requirements in mathematics, science, and foreign language, for example, is of little use if we do not have an adequate number of qualified teachers prepared to teach those subjects. Exhortations to improve students' higher-order thinking will accomplish little without able teachers who know how to engender such thinking and who teach in an environment that supports rather than undermines such learning. Concerns about "at-risk" children -- those who drop out, tune out, and fall behind -- cannot be addressed without teachers who are prepared to understand and meet the needs of students who come to school with varying learning styles, from diverse family situations, and with differing beliefs about themselves and about what school means for them.

Though these arguments may sound persuasive, it is important to realize that American education has been down this path before. The criticisms of current education reformers -- that our schools provide most children with an education that is too rigid, too passive, and too rote-oriented to produce learners who can think critically, synthesize and transform, experiment and create -- are virtually identical to those of the Progressives at the turn of the century, in the 1930s, and again in the 1960s. Many current reforms were pursued in each of these eras: interdisciplinary curriculum, team teaching, cooperative learning, the use of projects, portfolios, and other "alternative assessments"; and a "thinking" curriculum aimed at developing higher-order performances and cognitive skills. Indeed, with the addition of a few computers, John Dewey's 1900 vision of the 20th-century ideal[1] is virtually identical to current scenarios for 21st-century schools (Dewey, 1968).

These efforts, aimed at more child-centered teaching and more universal, high-quality education, were killed by underinvestment in teacher knowledge and school capacity. Lawrence Cremin argues that "Progressive education...demanded infinitely skilled teachers, and it failed because such teachers could not be recruited in sufficient numbers" (1965, p. 56). Because of this failure, in each of its iterations Progressivism gave way to standardizing

[1] For example, see the Carnegie Task Force report, ***Teachers for the Twenty-First Century***. Washington, DC: Carnegie Forum on Education and the Economy, 1986.

influences: the efficiency movement of the 1920s, the teacher-proof curricula of the 1950s, and the "back to the basics" movement of the 1970s and 1980s. Disappointment with the outcomes of these attempts at rationalizing school procedures led in each instance to renewed criticisms of schools and attempts to restructure them. Current efforts at school reform are also likely to fail unless they are built on a foundation of teaching knowledge and are sustained by a commitment to structural rather than merely symbolic change.

At this moment, we have two very different theories of school reform working in parallel -- and sometimes at cross-purposes throughout the U.S. The first focuses on tightening the controls: more courses, more tests, more directive curricula, more standards enforced by more rewards and more sanctions. Some versions of recent national testing proposals follow this model, as do several states' versions of school reform legislation. These approaches essentially assume that the basic problem is a lack of focus, direction, and effort on the part of school people. In organizational management terms, this is the Theory X of school policy.

The second theory attends more to the capacities of teachers, and to the development of schools as inquiring, collaborative organizations, than to changes in mandated curricula or management systems. Policies built on this theory include efforts to strengthen teacher education, licensing, and certification processes; to create knowledge-building institutions such as professional development schools; to decentralize school decision making while supporting teacher learning; to rethink local assessment practices; and to create networks of teachers and schools. While this model of educational improvement emerges, however, the old one remains in force, and the education system is pulled in opposite directions.

## A Collision Course for School Change

There are many examples of these opposing forces. One is apparent in heavily regulated New York State, where a new "Compact for Learning" exhorts schools to set their own goals, to engage in school-based rethinking and redesign, to develop alternative assessments of student learning, to "teach for understanding" through interdisciplinary team teaching and cooperative learning, and to develop more personalized learning environments. Yet at the same time the curriculum is straitjacketed by Regents courses and testing requirements, which are not interdisciplinary or inquiry-based, and by directive syllabi that often maintain the view that teaching means transmitting information to be memorized within the context of traditional age-graded, single-discipline compartments. Practitioners are well aware that there is an unresolved tension between the policy framework that currently exists and the policy desires that are being voiced in the rhetoric of school-based reform. Until the new vision is more fully enacted, practitioners, parents, and students will live in a state of policy conflict.

Top-down directives are based on the presumption that teachers cannot be trusted to make sound decisions about curriculum and teaching. Clearly, school-led innovations will require knowledge building for at least two purposes: to enable more challenging forms of teaching and to disarm negative presumptions about teachers. Meanwhile, however, capacity-

building mechanisms -- such as staff development programs, teacher education investments, and supports for school change -- are funded much less well than activities designed to control the curriculum. Recently, New York State's mentor teacher program and its teacher centers, which had formed the bedrock of the state's professional development program, were eliminated in a round of budget cuts. The experience in many other states is similar: where ambitious and well-intentioned reforms are enacted while opportunities for people to learn new practices are being cut back.

Ironically, the understandings about human learning that have informed the development of new approaches to curriculum do not appear to have informed the process of policy implementation yet. Teachers are expected to change their beliefs, knowledge, and actions as a result of a change process that consists primarily of the issuance of a statement and the adoption of new regulations or curriculum packages. This approach to policy implementation clearly cannot achieve the goals of reform.

The responses of school practitioners to policies depend on a wide array of environmental factors: local resources, student needs, community expectations for schools, competing priorities and ideologies, and previously passed policies, many of which stand as direct or indirect obstacles to the pursuit of the intentions of new policies. Speaking of teachers' encounters with newly arrived "improvements," Penelope Peterson (1990) notes, "The pedagogical slate is never clean."

A massive geological dig would be required to unearth the tangled influences that created the many layers of policy that people in schools must now contend with. These influences make the serious implementation of new policies difficult, even impossible, without excavation and reform of what has gone before.

One example is the set of recently developed curriculum frameworks in California that aim to promote a more conceptual, constructivist approach to teaching and learning. Researchers who examined the implementation of the new mathematics framework discovered that it had collided with several existing policies. One was the state system of standardized testing, which values algorithmic knowledge and rote performances rather than those deeper understandings sought by the new framework. As one teacher explained:

> Teaching for understanding is what we are supposed to be doing....It's difficult to test, folks. That is the bottom line....They want me to teach in a way that they can't test. Except that I'm held accountable to the test. It's a Catch 22 (Wilson, 1990, p. 318).

Not only is the kind of teaching required to achieve the goals of the mathematics framework different from that required for the goals of the current standardized tests, but the type of teaching that allows students to puzzle and delve deeply, to experience and explore alternatives, may require tradeoffs -- at least in the short term -- between breadth and depth of content coverage. The same teacher reads and comments on a statement from the framework: "'Teaching for understanding...takes longer to learn.' Hey, if I were spending the time to really get these kids to learn it, I might be several pages back" (Wilson, 1990, p. 318).

This is the reality of classroom life in most schools, where the press of teaching is

"getting through" the curriculum, even if the students are being left behind (or left numb and unengaged) as the curriculum marches on, page by page and day by day. Contrast this approach with the mathematics curriculum framework in Japan, which, for a major portion of an entire year of the early middle grades, focuses on "deepening the understanding of integer." It assumes that the goal is to learn to think mathematically rather than to cover large numbers of problems, memorizing facts and algorithms along the way.

A second policy collision is occasioned by the earlier introduction in a number of California districts of certain "direct instruction" models for teaching and teacher evaluation. The Achievement for Basic Skills program is used in some schools, and Madeline Hunter's Instructional Theory into Practice model is used in others. Where such programs constitute heavy influences on teaching and evaluation, teachers feel that they constrain their abilities to use student-centered, inquiry-oriented strategies of instruction. Both of these models I've mentioned assume a teacher-directed classroom, structured by brisk presentations of lessons followed by guided practice and evaluation of mastery. The models' implicit view of teaching and learning is quite different from one that envisions a classroom in which exploration guides students to their own discovery and testing of concepts, and right answers are not the only goal of instruction.

Although teachers could sense the curricular conflict that had been produced by this layering of policies, neither the state nor the districts seemed particularly aware of the dilemma or prepared to help teachers deal with it. And where instructional policies are enacted at the state level, local districts do not have the authority to resolve the discrepancies between conflicting state mandates.

This can create a kind of Alice in Wonderland world in which people ultimately begin to nod blithely at the inevitability of incompatible events -- a world in which educators cease to try to make sense of their environment for themselves as professionals or for their students. They have to explain to students the procedures and policies that students encounter only in terms of what some faceless, external, and presumably non-rational "they" say we have to do.

When teachers are unable to help students make sense of the school environment, the students (and often their teachers as well) become alienated. Young people are very good at identifying things that do not "make sense" and rejecting them. They find other ways by which they will organize their time, their thinking, and their lives. Solving the problem of contradictory policies is a prerequisite for solving the problems of student engagement and learning in schools.

## Implications of the Competing Models

The two very different streams of policy that are creating such cognitive dissonance in teachers stem from radically different notions of how students learn and what is required for

effective teaching.[2] In one view, students are raw materials to be "processed" by schools according to specifications defined by schedules, programs, courses, and exit tests. Teachers administer the procedures to the students assigned to them using the tools they are given: textbooks, curriculum guidelines, lists of objectives, course syllabi. Correctly defining the procedures is the key to educational improvement. If the outcomes are not satisfactory, the solution is to provide more detailed prescriptions for practice and to monitor implementation more carefully.

There are no problems of practice in this view. There are only problems of implementation. As a consequence, we have created a superstructure of regulatory offices that prescribe a variety of practices and design a range of programs; they inspect and monitor, receive reports and audit them. In addition to reducing options for meeting students' needs, this approach drains resources out of classrooms into peripheral offices at the edges of the core teaching/learning enterprise: only half of education professionals are classroom teachers, and a much smaller share of our total resources makes its way to classrooms than is true in most other industrialized countries (Darling-Hammond, 1990). These countries invest more in supporting the work of "front-line workers" in schools than in trying to inspect, monitor, and control that work.

Because this view assumes that students are standardized and that educational treatments can be prescribed, it does not view teachers as needing expertise. Thus most major teaching decisions are handed down through policy and encapsulated in packaged teaching materials. It is better that teachers not be especially "empowered," because correct implementation depends on a certain degree of uniformity controlled from above. There is no rationale in this conception of teaching for substantial teacher preparation, induction, or professional development, aside from "inservicing" designed to ensure more exact implementation of prescribed teaching procedures. There is no need and little use for professional knowledge and judgment, or for collegial consultation and planning.

As a consequence of this view, "real teaching" in American schools consists of teaching large groups of students, often one after another in five or six batches of 30. Anything else that a teacher does is considered "released time." Time is rarely available for planning, for working with other colleagues on changes in the school organization, for meeting individually with students or parents, and for working on the development of curriculum or assessment measures -- activities that are not considered part of the teacher's main job.

In contrast, teachers in most countries work with large groups of students 15 to 20 hours per week and spend the other 20 to 30 hours per week working individually with students and parents, planning and consulting with other teachers, and developing curriculum and assessments. The conception of teaching in these countries assumes that collegial work is the basis for instructional decisions and actions rather than that individual assembly line workers process "products" passing by on a conveyor belt.

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[2] See Linda Darling-Hammond (1988). "Two Futures of Teaching," ***Educational Leadership*** ***46***(3): 4-10.

It is the logic of our assembly line approach to teaching that has allowed U.S. policy makers to avoid investing substantial resources in teacher preparation or teacher salaries. U.S. teacher preparation programs typically spend less per student than other schools or departments in most of our universities (Ebmeier, Twombly, and Teeter, 1990). U.S. teachers earn about 30% less than other college-educated workers with the same amount of experience. There is no need to invest in rigorous preparation of teachers if there is nothing of value to be learned. There is no reason to attend to the abilities of those recruited and retained in teaching if these are only marginally related to the outcomes of schooling. If we can fix teaching by developing better regulations, there is no need to produce better-educated teachers.

One of the most extreme versions of this viewpoint has been implemented in one of the nation's largest urban school districts, in which teachers are supplied with a K-12 standardized curriculum outlining the scope and sequence for instruction in each subject in each grade, complete with a pacing schedule showing how much time teachers should spend on each topic as well as lesson plans for each day of the school year. Grading standards are also prescribed, showing how much weight teachers should give to each type of assignment (the assignments are also specified) and how they should calculate grades. Promotion standards are determined by standardized tests, which are developed to match the curriculum. The assumption is that marching the students through these procedures is all that is necessary to ensure learning.

The second view of teaching and learning, the view that underpins the new paradigm for school reform, starts from the assumptions that students are not standardized and teaching is not routine. Consonant with recent research on teaching and learning, this view acknowledges that effective teaching techniques will vary for students with different learning styles, differently developed intelligences, or at different stages of cognitive and psychological development; for different subject areas; and for different instructional goals. Far from following standardized instructional packages, teachers must base their judgments on knowledge of learning theory and pedagogy, of child development and cognition, and of curriculum and assessment. They must then connect this knowledge to the understandings, dispositions, and conceptions that individual students bring with them to the classroom.

Thinking about teaching and learning along these lines suggests a very different approach to education reform. It also suggests a very different relationship between research and practice -- and between researchers and practitioners. Among the major sources of conflict in the history of educational research in this century are issues concerning the types of knowledge sought and the uses to which knowledge should be put. Is the goal to discover unvarying relationships between educational processes and outcomes and then to use that knowledge to create the "one best system " of educational practice and thus control curriculum and teaching (Tyack, 1974)? Or is knowledge to be used for illuminating the complexities of human learning for the purpose of enriching teachers' own thinking about their practice, and empowering them to see teaching and learning through many lenses?

In the first instance, researchers produce knowledge for policy makers and administrators who use it to create the right design specifications. They then "impart" knowledge, usually in memo form or on inservice training days, to teachers who are to absorb

it and use it in fairly straightforward ways. In the second instance, knowledge is produced with and for teachers.

John Dewey's quest for the sources of a "science of education" was motivated by the desire to enrich the teacher's capacity for understanding and intelligent decision making rather than to control the teacher's behavior. Dewey argued that those who thought scientific study would ultimately result in a "uniformity of procedure" misunderstood the problem:

> Command of scientific methods and systematized subject matter liberates individuals; it enables them to see new problems, devise new procedures, and in general, makes for diversification rather than for set uniformity....This knowledge and understanding render [the teacher's] practice more intelligent, more flexible, and better adapted to deal effectively with concrete phenomena of practice....Seeing more relations he sees more possibilities, more opportunities. His ability to judge being enriched, he has a wider range of alternatives to select from in dealing with individual situations (1929, pp. 12, 20-21).

Contrary to the efforts of many recent reforms to translate research findings into uniform and unvarying rules for practice, Dewey argued that "no conclusion of scientific research can be converted into an immediate rule of educational art." Educational practice, according to Dewey, is always highly complex and contains "many other conditions and factors than are included in the scientific finding. The significance of one factor for educational practice can be determined only as it is balanced with many other factors" (1929, 12, 20-21).

This is essentially the same conclusion Lee Cronbach and others reached when they investigated the relationships between specific teaching treatments and student outcomes, even after adjusting for "aptitudes" or characteristics of students. Cronbach discovered that interaction effects that may be identified from research on teaching are not confined to easily translatable two- or even three-way interactions, thus limiting the prospects of achieving generalizable rules for practice:

> An ATI [aptitude-treatment interaction] result can be taken as a general conclusion only if it is not in turn moderated by further variables....Once we attend to interactions, we enter a hall of mirrors that extends to infinity (1975, p. 119).

Cronbach concluded that the search for empirical generalizations "in a world in which most effects are interactive" should give way to "response-sensitive" research, which takes exceptions seriously and makes continual adjustments on the basis of individual, context-specific responses.

This is precisely what teachers must do every day. They must adapt and respond on the basis of individual needs and interactions to a complex, ever-changing set of circumstances -- taking into account the real knowledge and experiences of learners, including their cultures, their communities, and the conditions in which they live. Yet this is what many current school reform policies seek to prevent teachers from doing.

In addition to highly prescriptive curriculum and testing policies, such as those described above, the prescriptive policies for teacher evaluation that exist in many states actually impede teachers from teaching responsively and effectively. One such policy, adopted in several states, requires that teachers be rated as "ineffective" for engaging in practices that take into account the needs and interests of their students (Darling-Hammond with Sclan, 1992). Despite research that suggests the importance of linking classroom work to students' personal experiences, the Florida Performance Measurement System (FPMS) codes as "ineffective" any teacher questions that "call for personal opinion or that are answered from personal experience." The coding manual notes that "these questions may sometimes serve useful or even necessary purposes; however, they should be tallied here [in the ineffective column] since they do not move the class work along academically" (Florida State Department of Education, 1989, p. 5b).

Even though the research underlying the development of the FPMS was assembled in a very thoughtful and carefully reasoned research summary, the instrument itself frequently contravenes these findings. Rather than try to put the research knowledge into the hands of teachers for use in making complex judgments, the policy sought to summarize it in a few simple and unvarying rules for practice to be used in the administrative control of teaching.

The FPMS, which has been borrowed by a number of other states, is littered with statements suggesting that beginning teachers should be prepared to be insensitive to the students they teach and ignorant of a broader knowledge base on teaching. Robert Floden and Hans Klinzing's conclusion is on the mark:

> Training teachers to follow a fixed set of prescriptions discourages teachers from adapting their instruction to the particular subjects and students they are teaching. Hence, the instructional effectiveness of teachers given such training is unlikely to be at a high level (1990).

## A 21st-Century Model of School Reform

If we are to move to a new model of school reform, we must reframe the reform agenda by reducing prescriptions for practice while investing in new forms of professional development, policy development, and political development.

### Professional Development

Supporting the type of practitioner knowledge that can inform teachers' judgments in complex situations is critical. Such knowledge can be sustained through continued investment in and strengthening of preservice teacher education as well as through investment in ongoing professional development. One of the most puzzling funding decisions by legislatures, government agencies, and foundations is the frequent conclusion that limited resources should be spent exclusively on inservice teacher education -- sprinkling tiny droplets of resources among 110,000 individual schools -- rather than on concentrated efforts to improve schools of education, only 500 of which prepare 80% of teachers in this country.

The issue of teacher preparation is particularly important today, because there will be 2.5 million classroom vacancies to be filled over the next decade -- and nearly the same number in the following decade. It would be shortsighted not to seize this opportunity to improve teacher education programs so that all of them can prepare reflective practitioners, able to teach students knowledgeably and responsively. Efforts to restructure teacher education by redesigning curriculum and establishing professional development schools are already underway in Holmes Group institutions and many others. If accreditation and licensing standards are strengthened and a commitment is made to invest in program development, all institutions that educate teachers should be enabled to prepare teachers for learner-centered schools.

The new emphases in teacher education will be enhanced by research and development efforts that generate and disseminate knowledge that is useful to teachers and constructed with teachers. Continued research that digs deeply into the textures of teaching and the nuances of teachers' thinking will augment our understanding of subject-matter pedagogy; of curriculum building; of teacher learning; of student learning; of links between intelligence, performance, assessment, and classroom practice; and of successful teacher education. Such research can also help create more meaningful and sensitive assessments of teachers' knowledge for licensing, certification, and evaluation systems.

At the same time, policy makers and practitioners need to find ways to support collegial discourse and inquiry in schools. Teachers should have opportunities to engage in peer coaching, team planning and teaching, and collaborative research that enables teachers to construct new means for inquiring into their practice. Participation in professional communities through school and teacher networks also deepens teachers' understanding.

Ann Lieberman and Milbrey McLaughlin note that teacher networks -- such as the Foxfire Teacher Networks, the Urban Mathematics Collaboratives, the North Dakota Study Group -- can transform practice and create professional communities by inspiring teachers to solve problems, take risks, assume ownership of their teaching, and exercise leadership in their schools. Lieberman and McLaughlin comment:

> *The context in which educational change is pursued is everything.* Many policies are based on assumptions about contexts for reform that do not take into account the alternative that networks offer. Instead of targeting individuals and attempting to provide them with new skills or perspectives, networks concentrate on *building communities of teacher learners.* It is thus critical that policy makers and others approach teacher networks not from the standpoint of management and control, but from that of the norms and agreements of communal relations (1992, p. 677).

This collective perspective has to permeate the entire process of organizational development in order to create schools that can focus on learners.

## Policy Development

State licensing and evaluation standards that embody conceptions of the type of

teacher knowledge needed for adaptive and reflective practice are key to building the foundation of a new model of school reform. In addition to redesigned preprofessional programs, internship opportunities in restructured schools are crucial for new teachers; ideally, they should occur in professional development schools. Minnesota is the first state to require -- and to begin to fund -- such opportunities. A number of other states are considering doing so.

Policies that will build capacity in schools must include the equalization of school funding, so that adequate investments will be made in the capacity of *all* schools to offer a thinking curriculum and to employ well-qualified and well-supported teachers. Without such investments, current rhetoric about "world-class standards" and new kinds of assessment will perpetrate yet another cruel hoax on children in schools that haven't the remotest chance of offering "world class" education with the resources they command.

Policies can also promote organizational development by supporting dialogue and shared decision making, along with opportunities for professional development and reflection. Policies should encourage and allow schools to structure shared planning time for teachers to engage in dialogue about practice and for collective inquiry into what is working well and how students can be better served. States and districts should also fund time for teacher development outside the boundaries of the traditional school year. For example, South Carolina funds an additional 10 days per year for teachers to engage in planning and professional development.

## Political Development

By "political development" I mean the ways in which groups of people develop shared goals and understandings -- a broad consensus about the kind of education they want for children. Schools today largely function by submerging talk about those things that are likely to be most controversial -- and thus are likely to be most important. Debates about the most fundamental concerns of teaching and learning are typically squashed -- or tacitly agreed to be out of line -- in faculty meetings, parent/teacher organization meetings, and other gatherings of members of the school community.

Schools have tried to implement bureaucratic rules and procedures by burying the dialogue that would allow real problems to emerge. A fragile agreement to maintain the silence allows us to keep on going without struggling to determine what we want from our students and what that requires from our schools. Consequently, we have failed to form true communities in most of our educational institutions.

The foundation of genuine accountability -- one of the most frequently used words in the school reform lexicon -- is the capacity of individual schools: 1) to organize themselves to prevent students from falling through the cracks; 2) to create means for continual collegial inquiry (in which hard questions are posed regarding what needs to change in order for individuals and groups of students to succeed); and 3) to use authority responsibly to make the changes necessary. No testing program can produce this kind of accountability. It will occur only if we find ways to empower, encourage, and allow schools to build an inquiry

ethic, a community of discourse in the school, that is focused on students and their needs rather than on the implementation of rules and procedures.

This kind of accountability also requires a substantial amount of local control over school procedures and over the assessment of outcomes. One of the things we are learning in our work at NCREST (the National Center for Restructuring Education, Schools, and Teaching) is that local school engagement in developing alternative forms of student assessment turns out to be a powerful tool for organizational development.[3] There are ripple effects throughout the entire school organization when teachers begin to ask questions such as these: What do we want students to be able to do? How will we know if they can do those things? What can we develop as a means for evaluating their knowledge and abilities in an authentic way? How do we develop shared views of what constitutes competence? How will we help students get there? Ultimately, these questions drive transformative changes in curriculum, in collegial discourse, and in the ways in which the organization focuses on students.

For this reason the question of who controls assessment is one of the major dimensions of the current debate about assessment reform. Even the most challenging and thought-provoking performance-based assessments will fail to transform schools if they are externally mandated and delivered. If some significant portion of the assessment process does not support teachers, students, and parents in their efforts to define themselves as a learning community, then the possibilities for organizational change and improvement will once again be wrested away from schools. The engine for school change -- the catalyst for a community's political and educational development -- will have been removed once again from the local school arena, where it must reside if it is to be effective.

***The Eight-Year Study***, conducted by the Progressive Education Association in the 1930s, illustrates the significance of this kind of community building. During those years, a group of 30 experimental schools put in place nearly all of the various reforms we are once again talking about. Three hundred colleges and universities agreed to accept students from these schools based on teacher recommendations and student products rather than on test scores and Carnegie units. From its evaluation of nearly 1,500 matched pairs of students from experimental and nonexperimental schools, the study demonstrated that, on virtually any dimension of student development and performance -- from academic honors to civic and social responsibility, according to the judgments of professors, teachers, or others -- the students from experimental schools outperformed those from traditional schools.

Most important, the study found that the most successful schools were characterized not by the particular innovation they had adopted but by their willingness to search and struggle in pursuit of valid objectives, new strategies, and new forms of assessment (Chamberlin *et al.*, 1942, p. 182). It was the *process* of collective struggle that produced the vitality, the shared vision, and the conviction that allowed these schools to redesign education

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[3] See Linda Darling-Hammond and Jacqueline Ancess, "Authentic Assessment and School Development," in Dennie Wolf and Joan Boykoff Baron (eds.) ***National Society for the Study of Education, 1993 Yearbook.*** forthcoming.

in fundamentally different ways. If the processes and outcomes of education are already defined by those outside of the schools, there is nothing left to talk about. Thus the removal of local responsibility for thinking things through deprives schools and communities of the opportunity to engage in the kind of empowering and enlivening dialogue that motivates change.

Therefore, we need policies that allow and encourage schools to engage in the kind of democratic dialogue that fosters the development of a polity, a community with shared purpose. As Dewey suggested:

> There is more than a verbal tie between the words common, community, and communication. [People] live in a community by virtue of the things which they have in common; and communication is the way in which they come to possess things in common. What they must have in common in order to form a community or society are aims, beliefs, aspirations, knowledge -- a common understanding -- like-mindedness as the sociologists say. Such things cannot be passed physically from one to another, like bricks; they cannot be shared as persons would share a pie by dividing it into physical piece....Consensus requires communication.
>
> Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative....One shares in what another has thought and felt and insofar, meagerly or amply, has his own attitude modified....It may fairly be said, therefore, that any social arrangement that remains vitally social, or vitally shared, is educative to those who participate in it (1916, pp. 4-5).

The new model for school reform must seek to develop communities of learning grounded in communities of democratic discourse. It is only in this way that communities can come to want for all of their children what they would want for their most advantaged -- an education for empowerment and an education for freedom.

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# *Toward Democratic Practice in Schools:*

# *Key Understandings about Educational Change*

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# Introduction

This paper is about school reform and the process of change, a historical and contemporary view of schools and attempts to change them. The focus is particularly on teachers and teaching, schools and school cultures, and how change processes are likely to affect them, as well as what approaches to change will facilitate real, lasting, and meaningful reform. (Cohn and Kottkamp, 1993; Fullan 1991; Goodlad, 1984; Lieberman and Miller; 1992; Sarason, 1990; Wise, 1988).

Although we are in the midst of a major reform era, it is ironic that American schools are still struggling with contemporary versions of what appear to be some of the same old educational problems: how to teach individuals and groups; how to set high standards without standardizing all students and all classrooms; how to attend to students' special needs and interests without forfeiting excellence; how to teach subject-matter content while making it engaging for today's students; how to honor individual merit and, at the same time, recognize the problems caused by entrenched social injustices; how to deal with the tension between facts and discovery; and how to make schools, not repositories for social ills, but sites for individual and societal improvement.

Unfortunately, many of the struggles for solutions to these problems have culminated in "one-right-way" answers, leading to conceptions of "one best system" for educating all people in all places (Tyack, 1974). We argue in this paper that such thinking is ultimately futile. In its place, we offer a conception of democratic practice in schools, communities of learning grounded in their own specific contexts and the realities of contemporary society. These schools inquire into and try out approaches to teaching and learning that are aimed at promoting optimal learning for *all* students.

# A Hopeful Sign: Emerging Understandings About Change

Despite, or perhaps because of, the seemingly intractable problems in contemporary schooling, there are hopeful signs that democratic practice in schools is increasingly finding acceptance. There *are* schools that create learner-centered curricula, taking into account the specific needs and interests of students that connect them to the content of the curriculum; that build structures for teachers to participate in collaborative problem solving and decision making around the work of students; that work hard to attend to equity issues; that concern themselves with continuous assessment and accountability issues; that build partnerships with parents and community members; and that attempt to respond sensitively to students' social as well as academic needs. Many ideas are being tried, such as expanded functions of leadership, collegial decision making, collaborative goal setting, senior projects, interdisciplinary studies, student portfolios, and others. As the calls for reforming schools

grow, many schools, districts, communities, and states are responding.[4]

But we have been there before. Although the rhetoric of reform is strong, so too is the allegiance to the status quo. Most schools, governed by centralized authority and elaborate bureaucracies, structure learning around teacher-centered pedagogy, depend on "batch processing" of students, solely emphasize individual learning, tend to isolate teachers in classrooms, and adhere to rote learning of facts instead of learning content through problem solving, thinking, and experiencing (Goodlad, 1984; Lortie, 1975; McLaughlin and Talbert, 1993; Resnick, 1987; Sarason, 1990; Tyack, 1974).

It is valuable, therefore, to make use of the considerable insights and learnings about schools and change processes gained in the past decades -- from the failures as well as the successes of reform efforts. In this paper we will try to synthesize these understandings by organizing them into four distinct yet connected parts. First, we provide a historical perspective by looking at earlier models of educational change, tracing approaches that cluster under two opposing world views, often in conflict with one another. Second, we discuss new social, political, cultural, and economic conditions that have led to new knowledge and interpretive frames that are themselves pressing schools toward change. These conditions, and the responses to them, suggest broader ways of understanding schools and change processes, and point to the kinds of directions that schools might take. Third, we describe an organic view of school reform leading to learner-centered schools, with examples of how such schools are taking shape. And last, we examine key understandings about educational change that are drawn from our historical and contemporary review of school reform.

## Part I: A Historical View of School Change

Perhaps a central insight for students of educational change is that individual schools have histories (Altenbaugh, 1992; Bolin and Panaritis, 1992; Tyack, 1974). Assuming that reforms have never been tried, or introducing old ideas as if they were new, not only builds resistance and cynicism (Sergiovanni, 1993), but ignores shared experiences (good and bad) that have become the traditions on which school cultures are built (Sergiovanni, 1993; Sikes, 1992). Furthermore, the history of institutions shapes the particular character of those institutions, as well as the people who work in them (Lortie, 1975).

Learner-centered schools have a historic tradition, one rooted in ideas of the late nineteenth century, gaining momentum in the early twentieth century and on into the 1930s (Cremin, 1964). These ideas, associated with Progressive education, contrast with a more traditional view of education. While early Progressive educators, such as Colonel Parker and John Dewey, argued for centering curriculum around the real experiences, interests, and needs of learners, as well as contemporary social problems, other reformers, such as William T. Harris, argued that students should be taught the great books and the traditional academic

[4] See, for example, New York State's *Compact for Learning* and the report of the New York State Curriculum and Assessment Council, 1993. Albany: New York State Department of Education.

disciplines -- forms of knowledge that they considered the nation's cultural heritage. Progressives insisted on a vision of education that synthesized the traditional dualisms of conception and action and experience and knowledge. Traditional educators, on the other hand, conceived of education as a formal process for training the mind so that it might master the best of the past, while appreciating and upholding cultural traditions. Progressive educators urged education of the whole child, which meant that all aspects of children's development -- intellectual, social, physical, and artistic -- had to be considered in relation to school work. Moreover, school, intentionally interdisciplinary and problem-oriented, had to be rooted in the experience of the present, as well as oriented toward the future. In contrast, traditional educators focused on children's intellects and discipline, emphasizing the importance of education as a preparation for students' futures as adults.

Progressive educators saw education as a process of growth that must continually adapt to individual students, to learning communities, and to society -- all of which were in states of continual change. Traditionalists argued for efficient methods to give time-tested knowledge to students (Goodlad, 1984; Tanner and Tanner, 1980). Thus, the discussion of *what* knowledge is taught has had a direct bearing on the discussion of *how* it is taught. These opposing world views -- also referred to as "teacher-centered" and "child-centered" -- have spawned conflicting and frequently contradictory reform efforts over time, and this same debate continues today.

Americans, tending to use their schools as scapegoats for tough social problems, see them also as the primary vehicles for immediate social change. This crisis view of schooling has aided in the fragmenting of numerous reform efforts, causing judgments to be made about their success or failure without allowing sufficient time for deep reforms to take hold. This view has also helped to conceal the fact that these reforms reflect strong values that have the potential to alter school roles, relationships, and structures profoundly, and, therefore, require more time, knowledge, and support (Little, 1993).

## Caught in the Middle: Muckraking and Opposing Visions for Reform

Muckraking reports that expose schools' weaknesses, and sometimes point the way to reform, play a prominent role in American education. From the Lancaster factory model based on visions of efficiency to Rice's 1892 expose of the dreary realities of drill and repetition, from the return to scientific management of the National Education Association's Committee on Economy of Time in Education to the Progressive 1930s Eight Year Study, muckraking criticism has led to prescriptions for reform that have been represented by both world views (Cremin, 1964). In some cases the rhetoric of the Progressives, dealing with school goals and philosophy, educating the whole child, and educating for democratic citizenship, has taken its place alongside and within structures and procedures shaped by the principles of scientific management and the ideals of traditional education (Koopman, Miel, and Misner, 1943; Tanner and Tanner, 1980). Although on the surface seemingly inexplicable and contradictory, they represent shifting power relationships over time, along with differing views of what the public wants and the schools' adaptations to these views.

## Early Understandings of the Change Process

Derived from themes of scientific management, early efforts at reforming schools represented top-down, linear approaches to change (Darling-Hammond and Wise, 1981; Elmore, 1991). Change was seen as an undeviating journey, on a straight road toward a clearly defined goal. Finding the "right" answers and mandating them was seen as the proper process. Teachers were viewed as technicians who simply had to be trained to adopt and accept the "right ideas." Judgment of the success of an innovation was based on the teacher's fidelity to the idea, rather than whether it was really incorporated successfully into classroom practice.

Bennis, Benne, and Chin (1961) challenged some of these ideas. They argued that change is constant and inevitable but can be controlled through rational analysis and scientific planning. They also realized, however, that no amount of analysis and planning can be effective without attending to the social processes, including the interpersonal relationships between and among people, and the amount of individual learning that takes place as a part of any change effort. Wedding the theory and practice of social change to ideas about people's relationships to one another was a critical development in the understanding of the process of change (Miles, 1993).

Building on these ideas, Havelock (1971) attempted to create a blueprint for the dissemination and use of knowledge by institutions and systems attempting change. (His concern was primarily how research-based knowledge could be spread.) He, like Bennis, Benne, and Chin, introduced the notion that "linkages" must be made between the areas of research, professional development, and practice. Linking agents -- people who could move easily between the research and practice communities -- became important in both research and development. Interorganizational relationships, attempting to provide bridges between research and practice, became objects for study in education for the first time (Havelock, 1971).

During the 1970s, Rutter and his colleagues (1979) studied secondary schools in England, finding strong relationships between school processes and student attainment. Responding to the Coleman Report's finding (1966) that schools made little difference in students' lives, Rutter et al. countered with their finding of the importance of a school's "ethos" to student learning and engagement: The school's social organization mattered significantly for students. They found that in urban schools students did better when they observed positive adult modeling, recognized school values in everyday practice, received regular feedback on their work, undertook social responsibilities, and experienced shared activities with both teachers and peers. This study dramatically called attention to the importance of schools as social institutions and their potential power in shaping the roles and relationships among students, teachers, and principals. This evidence contrary to the Coleman findings turned the direction of reform toward local schools. But it was soon to be eclipsed by yet another crisis.

When ***A Nation at Risk*** (National Commission on Excellence in Education, 1983) became widely publicized, there was a widespread call for schools to get back on track, to

return to "basics," to reinstitute the perceived higher standards of a bygone era. School reform, it was claimed, needed to be based on "excellence," as determined by standardized solutions and standardized tests. Generic "best-way" methods were again being sought, despite increasing evidence that teachers needed more -- not less -- autonomy with students whose academic and social needs could not be met by standardized solutions (Cohn and Kottkamp, 1993; Darling-Hammond, 1993; Fullan and Hargreaves; 1991, 1992; Tyack, 1974).

## The Search for the "Best Teacher"

For many years, studies of teachers had been based on the search for discrete teaching behaviors and specific curricula that appeared to produce requisite high test scores (Denham and Lieberman, 1980). Good teaching became defined as teaching that efficiently transmits skills and knowledge measured by standardized test scores. Improving schools became a matter of training teachers in these "best" practices, carefully supervising their work to ensure faithful adoption, and assessing teacher performance and school accountability through test scores (Bolin and Panaritis, 1992; Darling-Hammond, 1992). Competency-based education, teacher-proof curricula, and management-by-objectives are only three examples of the kind of top-down reforms that characterize this period (Shor, 1987; Shulman, 1987).

The "effective schools movement" made an attempt to attend to school culture by incorporating Rutter et al.'s (1979) conception of the importance of the school's social arrangements. "Best" teachers needed an environment that supported school improvement. Generic characteristics of effective schools included the principal as a strong instructional leader, careful alignment of curriculum with the school's goals, regular feedback to students and teachers, and ongoing opportunities for faculty evaluation and development (Griffin, 1990; Steller, 1989). All of these together were a formula for school improvement. Although some schools did indeed improve, many schools did not find the formula appropriate to their needs. It was at once too simple and too complex.

## Teachers and School Cultures

Teaching had often been described as being for people not as "bright" as other professionals, or for women who were just interested in a job subordinate to marriage, or for "unmarriageable women and unsaleable men" (Waller, 1932). But it was not until Lortie's classic study in 1975 that the *contexts* of teaching, the tenuous connection between teaching and learning, and the isolation of teachers from other adults were clearly and poignantly explained. By finding out how teachers felt about the rewards of teaching (the excitement when students "get it"), about the connection between their own teaching and student learning (its "endemic uncertainties"), and their lack of connection to other adults, he began to unlock and give conceptual richness to the social realities of teaching and the problems of change. We were made aware that one of the most important things teachers were supposed to do for their students -- create the conditions for their growth and learning -- was being denied to them in their own schools (Lieberman, 1992).

In addition to Lortie's work, the Rand Change Agent Study of federally funded school improvement projects fundamentally changed how many educators viewed school

improvement efforts (Berman and McLaughlin, 1978). This national study linked process issues -- such as teacher commitment, rewards for staff involvement, and opportunities and support for teacher learning -- with outcomes, outcomes that showed changed teacher practices, student growth, and project continuance. Using additional research a decade later, researchers defined a perspective on change demonstrating that while policies could enable outcomes, important factors such as will, motivation, and commitment were locally defined and largely beyond the reach of policy (McLaughlin, 1987, pp. 171-178).

Sarason's work (1982), published at about the same time as that of Lortie and Berman and McLaughlin, provided further explanation of the contradictions between the continuous press for reform in our society and the powerful norms that tied a school culture together. These norms, both "behavioral and programmatic," included, for example, regular patterns of teacher behavior during lunch hours and faculty meetings (behavioral), and schools programmed and organized into grade levels and discrete subject areas dictating particular sequences at particular times (programmatic). Sarason was saying that schools have cultures and that cultural change is far more complex than simply delivering new curricula or pedagogical techniques to schools and including them in teachers' practices -- even though they might seem to be better. The regularities of school culture were at the heart of what authentic change was all about; and that involved not only subject matter, pedagogical techniques, and new technologies, but people, their values and aspirations, their understandings, and their commitments (Lieberman, 1992).

These insights into the contexts of teaching, coupled with the emerging conceptions of change as a social process, produced new approaches to changing schools and entirely different responses to ***A Nation at Risk*** (Bennis et al., 1961; Havelock, 1971; Miles, 1993; Rutter et al., 1979; Sarason, 1982). Claiming that schools never really veered from the track of teaching basic skills and traditional subject matter, these "second-wave" reformers argued that it was time to rethink, reframe, and reconceptualize school change (Cuban, 1990). This approach was reinforced by the Carnegie forum on Education and the Economy's, ***A Nation Prepared*** (1986), a report that called for "restructuring schools" with teachers at the center of the reform effort.

This thinking spawned an approach to change and a research-and-development agenda that inquired into the realities of schools as the participants saw them and developed strategies for change based on this knowledge (Elmore, 1991; Fullan, 1993; Hargreaves, in press; McLaughlin, 1991; Sikes, 1992). These researchers argued that without teachers' commitment to and ownership of new methods and content, which involved providing support for time and opportunities to learn, little could be accomplished. For them, the process of change required conditions that facilitated these ideas, which they saw as central to school reform (Fullan and Hargreaves, 1991).

Increasingly, qualitative studies linked the regularities of schooling -- the ways people routinely behaved and the particulars of programs -- to the problems and processes of school change (Fullan, 1991; Fullan and Hargreaves, 1992; Goodlad, 1984 and 1990; Kerschner and Koppich, 1993; Lieberman, 1988; Lieberman and Miller, 1992; Louis and Miles, 1990; McLaughlin and Talbert, 1993; Miles, Saxl, and Lieberman, 1988; Oakes, 1985; Sarason, 1982, 1990; Wasley, 1991). Researchers began to better understand what makes schools

resistant to needed reform and how social inequities become entrenched in school structures, cultures, roles, and relationships. Reformers, learning from decades of unsuccessful school reforms, reminded us that reform mandates that ignore the specific and varied contexts of schools and that utilize fragmented and piecemeal approaches to change will ultimately fail: To change one part in a fundamental way, all parts need to be changed (Cuban, 1990; Cushman, 1992; Lieberman, 1990; McLaughlin, 1987). Faithful compliance to technical change was to be supplanted by "adaptive planning" and "implementation," a synthesis of ideas, people, and programs (Clark and Meloy, 1990; Fullan, 1991; McLaughlin, 1991).

## Learning from History

These ideas were not totally new. In ***Democracy and Education***, Dewey emphasized the inextricable relationship between positive change and social processes (1916). For him, the sharing of common interests characterized the ideal social arrangement. Social groups must continually move toward developing further interests -- both collective and individual. Schools as social institutions need to provide structures for exchanging ideas and defining a collective vision, and be open to renegotiating and redefining that vision according to the needs of the community.

Having seen the misapplication of some of his own ideas, Dewey pointed to the dangers of allowing a vision to become dogmatic. In their attempts to defend Progressive ideas against more traditional views, he saw some of his followers adopt a form of "either/or" thinking: "Mankind likes to think in terms of extreme opposites. It is given to formulating its beliefs in terms of 'either/ors' between which it recognizes no intermediate possibilities" (1938, p. 17). Thus, education to Progressives becomes solely "development from within," while to traditionalists it becomes a process of "formation from without" (1938, p. 17). To Dewey, it was *both*. It was transmitting past knowledge and making sense of present experience, preparing for the future and living life meaningfully in the present, receiving and acting and thinking and doing, mastering past knowledge and constructing new knowledge, developing the individual and the learning community, viewing forms of knowledge as timeless and changing, honoring student freedom and adult authority. Educators would have to face the continuing challenge of negotiating the balance between these tensions.

Indeed, if such tensions are to be resolved, educators must stop looking for the "one best way" to operate schools. School communities must have the freedom and structures to articulate their own educational goals and to tailor curricula and instructional approaches to their own contexts and students within the framework of a democratic society (Elmore and McLaughlin, 1988).

The interrelationship of all facets of schooling, "the nested contexts" (state, district, school, classroom), and the social realities of teaching, imply the need for support of all levels of the policy structure (Fullan and Hargreaves, 1991; Lieberman and Miller, 1992; McLaughlin and Talbert, 1993; Sarason, 1990). Indeed, any significant change in a school must be authentically owned by individual communities, supported by district and state policies, and, to last, must grow organically with the participants who live in the culture (Fullan, 1992; Lieberman, Darling-Hammond, and Zuckerman, 1991; McLaughlin, 1990).

# Part II: The Changing Social Context: New and Varied Frames for Understanding

Since Dewey's 1938 call for "both/and" thinking to replace "either/or" conceptions of education, the either/or swings in educational reform have continued unabated (Passow, 1986). However, social conditions, having changed dramatically in the last three decades, have created the need for a new synthesis, for new frames of understanding, and new methodological and conceptual tools to help interpret and redefine the relationships between society, schools, and the processes of change. Cohn and Kottkamp (1993) describe the situation thus:

> demographic changes within the country, and immigration; . . . women working outside the home and nontraditional occupations; changes in family structure and a rise in the divorce rate; . . . saturation by the media; scientific and technological advances; . . . use of illegal drugs; and shifting values involving sexual behavior . . . and childrearing. Such changes had far-reaching effects on almost every facet of our society, including schools and teachers. (p. 12)

## The New Conditions for Schools

Schools, as in earlier eras, have absorbed increasingly heterogeneous student populations with widely divergent attitudes, belief systems, experiences, and world views (Estrada and McLaren, 1993). But this time, however, society is not in the process of expansion, but is in the process of making major adaptations to a changed global economy (Hargreaves, in press). Concurrently, schools are trying to cope with the breakdown of family life, increased drug and alcohol use, violence outside and inside the school, and the competing demands on students' time and attention from pervasive media attractions.

Widely held conceptions of morality and common sense have lost their legitimacy. In the midst of worldwide economic, social, and political change, the school curriculum built on a factory model seems barely relevant. Teachers, traditionally motivated by idealistic notions of helping students to reach their potential, find teaching less fulfilling and rewarding than they did 20 years ago (Cohn and Kottkamp, 1993; Goodlad, 1984; Lieberman and Miller, 1990). Increasingly, teachers claim, they are asked to forgo personal relationships with their students for the sake of a more disinterested focus on efficient teaching of basic skills (Goodlad, 1984; Noddings, 1986; Sizer, 1984). New ways of approaching schooling that provide for greater participation of teachers in the restructuring of schools are sorely needed to recruit and hold on to inspired and qualified teachers (Darling-Hammond, 1990; Devaney and Sykes, 1988; Rosenholtz, 1990).

## Old and New Conceptions of Knowledge

In the age of the Enlightenment, it was generally accepted that a single objective reality existed that could be discovered through the application of pure reason. Since scientific thinking was considered to embody the highest form of human reason, and since it was assumed that social progress was dependent on applying scientific knowledge to human

problems, the model for social science came to be based solely on the model of the physical sciences. At the same time, however, an obscure professor of rhetoric at the University of Naples, Giambattista Vico, proposed a conception of acquiring knowledge of human society separate and distinct from other forms and methods: "This is a sort of knowing which participants in an activity claim -- the knowledge of actors as against the audience -- the 'inside story' as opposed to the 'outside' vantage point: Knowledge by direct acquaintance or by sympathetic insight into those of others" (Berlin, 1950). This approach did not meet with great approval in the Age of Enlightenment, nor has it since. The dominant drive to make laws for the social sciences as rigorous and universal as those for the physical sciences continues to this day. But there is a growing body of work in the social sciences, and in education in particular, that supports Vico's views.

What is knowledge? And whose knowledge counts as legitimate? What do we really mean by collaboration and colleagueship? Who should drive the agenda for change -- us? Them? How can we talk about universal truths when there are such enormous differences in schools? What do we do with schools that for complex reasons of history, culture, and context do not or cannot change? Do we tell them what to do? And does that do any good? How do we listen to the competing voices of teachers, principals, parents, and the community? Whose reality do we act on? Can we explain what we are seeing or doing without embedding it in its own specific context? (McLaughlin and Talbert, 1993; Mishler, 1979).

Knowledge, then, cannot be a matter of simply describing a world out there, waiting to be discovered. Knowledge emerges from acting and doing in the world, a very Deweyan thesis. To know is also to experience in context, to interpret from a particular frame of reference, and to create meaning from one's experience (Minnich, 1990).

Implications for schools and school reform become clearer. If knowledge is constructed and dependent on context and perspective, then multiple perspectives and multiple contexts are needed to participate in and contribute to the construction of knowledge about schools and school reform. Research and changed practice must come not only from academic scholars, but from school-based educators who live the daily realities of school life (Cochran-Smith and Lytle, 1990; Cohen and Barnes, 1993). When schoolpeople decide to change, they need to build their vision for change together, including all perspectives: district, administrator, teacher, student, parents, and community (Newmann, 1993). While these participants are working to change their schools and classrooms, the efforts themselves become a form of learning that not only enhances a change effort, but results in the shaping of a community of knowledge that can have lasting significance (Grimmet and Crehan, 1992). The very idea of expertise, formerly the purview of policy makers and university scholars, expands to include understandings from teachers' reflections and interpretations of their work with students (Cochran-Smith and Lytle, 1990; Hickcox and Musella, 1992; McLaughlin and Marsh, 1990; Schlechty, 1990; Schon, 1983).

Knowledge, when seen in this way, has implications not only for how students learn, but for how teachers teach. Teachers come to teaching having had experiences that determine what they value and how they teach (Feiman-Nemser and Featherstone, 1992). These beliefs are deeply embedded in teachers' attitudes about the control of knowledge and behavior in the

classroom, and about whose knowledge is of most importance (Fletcher, 1991). To build a shared set of values requires building a culture that sees itself as a community moving in the same direction and honoring knowledge from a variety of sources (parents, students, experts, teachers). Seen in this way, knowledge building for teachers becomes as much a matter of community building around shared ideas and reflection on actual practice as it does the seeking of knowledge from others (Lieberman and Miller, 1990; Little, 1993; McLaughlin and Talbert, 1993; Schon, 1983).

Similarly, student learning occurs when students can make sense of curricular content, connecting it to their own experiences and knowledge, and seeing its relevance to their present and future lives (Belenky, Clinchy, Goldberger, and Tarule, 1986; Resnick, 1987). There are new and different problems facing our society that are calling for students to become "independent thinkers and enterprising problem solvers" (Cohen and Barnes, 1993, p. 12). The demands of new technology and an increasingly global economy are pressing schools to create ways for students to understand problems conceptually, rather than simply absorbing factual content. Information is to be joined with problem solving and other creative ways of thinking, framing problems and generating solutions (Cohen, McLaughlin, and Talbert, 1993; Hargreaves, in press; Shulman, 1987). This kind of teaching, encouraging student understanding and conceptual thinking, is part of the new synthesis of curriculum and pedagogy. This also necessitates rethinking and reorganizing teacher learning. In contrast to older views of professional development that depended solely on workshops or course work, professional development for teachers is now being organized to involve teachers in their own learning through teacher research, participation in school/university partnerships and subject matter networks, and so forth (Lieberman and McLaughlin, 1992; Little, 1993).

## Change, Invention, and New Knowledge

Almost 30 years ago, Robert Schaefer called for schools to become "centers of inquiry" (1967), so that they could be sites for knowledge building for teachers and students. Change efforts that are now coming to use new knowledge invented and created by teachers *and* reformers in the contexts of real schools, are finding that this process places demands on the structure and organization of schools to become collaborative learning communities (Consortium on Chicago School Research, 1993; Kearnes, 1993). Schools as "centers of inquiry" are not romantic visions of a mythical future anymore, but realistic processes for building knowledge in a community struggling for answers to new questions (Schaefer, 1967).

## Listening to New Voices

American schools are attempting to educate an increasingly diverse population of students who are bringing new languages, attitudes, belief systems, and cultural traditions to their classrooms. Moreover, it has become imperative that schools respond to the claims of women, racial and ethnic minorities, the handicapped, and the poor of all backgrounds; that the curricula reflect their experiences and contributions to society; and that instructional approaches become more hospitable to diverse ways of experiencing and thinking about the world (Belenky et al., 1986; McLaughlin and Talbert, 1993; Oakes, 1985; Ogbu,1990).

Unfortunately, American schools have often failed in the past to adequately educate substantial numbers of poor and minority students (Goodlad, 1984, 1990; Tyack, 1974). Currently, as the diversity of school populations has grown, the challenge to create inclusive forms of schooling has become the cause of much conflict and confusion. Dewey's previously referred to "both/and" thinking may help provide some direction here for negotiating an appropriate balance in schools. Schools can find ways to help students recognize their common culture as Americans, while still honoring their diversity (Banks, 1975). As Dewey also pointed out, democracies depend on education -- but only an education that itself incorporates democratic processes can truly serve a democracy (1916).

A major voice missing from the educational reform dialogue over the years has been that of teachers. It is only in the recent past that the experience and knowledge of those who work directly with students has been seen to have value. While there are a number of reasons for this omission, the history of teaching as "woman's work," under social conditions that maintained a restricted role for women, is certainly a major one. Women, socialized and rewarded for being obedient, conservative, and nurturing, filled the teaching ranks while men dominated the administrative positions (Altenborough,1992; Grumet, 1988; Lortie, 1975).

Many curricular reforms of the past were intended to be "teacher-proof" -- an indication of the low esteem in which teachers were held. University researchers and reformers worked with subject matter or psychological performance disconnected from the context of the social realities of real classrooms (Lieberman and Miller, in press). This not only led to a decontextualized view of teaching and learning, but left out the critical perspective of teachers' explanations of the dynamics as well as the dilemmas faced in classroom life (Lampert, 1985).

In recent years, researchers, as well as policy makers, have come to realize that the connection between teaching and learning is a critical one, and that no meaningful change will take place unless teachers are intimately involved in both technical and experiential learning in the context of their own classrooms, supported by school norms of inquiry and change. Changing schools involves people: individually and organizationally, structurally and culturally, personally and collectively (Cooper, 1988; Fullan, 1991; Little and McLaughlin, 1993; McLaughlin and Marsh, 1990; Richardson, 1990).

## Changing Teacher Organizations

Teacher organizations, having long fought for basic economic issues, are becoming increasingly involved in school reform. The search for the meaning of "professional unionism," involving unions in shifting from win/lose stances to working collaboratively with management and the policy community, involves radical change that will affect every part of a teacher's life. (It should come as no surprise then that, at this time, these kinds of comprehensive changes are occurring in only a few places in the country.) These changes are *structural*: committees and teams of all kinds involving teachers in making decisions that have heretofore been solely made by management; *process-oriented*: teachers learning to take authority and responsibility for areas as disparate as budgets, peer review, and conflict management, as well as for new approaches to teaching and instruction; and *they are personal*

*and interpersonal*: blurring the lines of previously clearly defined positions of management and labor (Kerschner and Koppich, 1993). This potentially powerful change in direction for unionized teachers, if it gains momentum and spreads beyond a few sites, will make possible a significant addition to the voices supporting major school reform.

## New Frames for Understanding School Change

Some scholars, having initiated projects based on broad and comprehensive conceptions for change, are encouraging new voices, as well as finding new ways of organizing work and understanding practice. Sometimes moving from theory and conception to action, sometimes from practice to conception or theory, sometimes creating strategies or documenting the conceptualization of strategies, they are illuminating both the possibilities and the limitations of the movements for school reform.

Researchers such as Comer, Fine, Gardner, and Sizer, to name a few, are working in schools, testing their ideas about how children learn most successfully. (Comer, 1990; Fine, in press; Gardner, 1983, 1993; Sizer, 1984). For example, James Comer, coming from a strong background in child development, has based his School Development Program on a rethinking of how teachers and parents can work together to improve children's learning. His longitudinal research in New Haven has produced important understandings about how parents can and must be involved with their children's education, both in and out of school. Working toward structures that encourage and allow for better connections between teachers and parents at home as well as at school, Comer suggests why attention paid solely to students' cognitive development is insufficient to engage them in the learning process. He finds four "pathways" that are critical to young children's intellectual and cognitive development. These include stimulation and growth through social interaction, psychological and emotional experiences, speech and language opportunities, and moral guidance. These pathways help form a framework within which to build the school as a community, a community in which students learn to interact and communicate with others. Comer's work, posing a critical frame for the rethinking of school culture, focuses on strong ties with parents and community, and with school structures that support these ties.

Howard Gardner's research on "multiple intelligences" led him to another way of framing a changing role for schools (Gardner, 1983, 1993). Educators have historically thought of education in terms of quantitative logic and linguistic and spatial ability. Gardner has added kinesthetic, musical, and inter and intrapersonal knowledge. This different approach to studying intelligence suggests ways of thinking about schoolwork and how students are involved that are far more encompassing than we have had. The Key School in Indianapolis, in the process of incorporating these intelligences into its practices, is changing the way teachers organize their thinking about the curriculum and freeing them to structure the school day to implement in practice these new perceptions of student learning.

Ted Sizer's work, based on a national study of high schools, found that teachers in schools across the country were busily involved in "covering the curriculum," even as they were losing students' interest, engagement, and commitment to learning. Observing teachers'

work lives, he found that their adaptations were in large part due to heavy teaching loads, which in turn left little time for creative teaching or getting to know and interact with students, which in turn led to frustration and lack of engagement. To change these conditions, Sizer began the Coalition of Essential Schools, made up of member schools from all over the country whose leaders were interested in fundamentally reshaping their high schools. The Coalition, based on a set of principles that involve changing how schoolpeople think about their purposes, the roles of teachers, and the way students and teachers work together, has grown to include over 200 schools nationwide. Sizer defined a broad set of values and ideas, encouraging the schools to interpret and refine them. For example, one of the principles, *less is more*, involves teachers in struggling for solutions to a perennial tension in classrooms -- the tension between breadth and depth of coverage of subject matter in the curriculum. Rather than trying to solve this problem by themselves, as they do in most schools, in Coalition schools, teachers in departments and teams work together to think through how they will organize the curriculum, planning together how to both deepen and broaden student experience. Working on ideas of this magnitude makes public the tensions in teachers' lives that have long been private, making school change a public, comprehensive endeavor (Wasley, in press).

Michelle Fine has helped to lead and has written about another effort seeking to radically transform large, comprehensive, urban high schools. In the city of Philadelphia, small schools, known as charters, are being created that function independently within large comprehensive high schools. In collaboration with the Pew Foundation, the board of education, and the Philadelphia Teachers Union, the Philadelphia Schools Collaborative has sought to involve educators and parents in restructuring governance, structures, instruction, assessment practices, parent and community relationships, and students' transitions from high school to work or postsecondary education. Charters are made up of small communities of no more than 300 to 400 students and approximately 10 to 12 teachers whose schools are based on a particular theme: Health and Physical Education, Academic F cus on Language, Literature and Theater, and so forth. To date, there are 92 charters, with more on the way.

Each of these examples, representing a different approach to framing the problem of fundamentally changing schools, indicates the breadth and depth of the concern about schooling. It is important that these models for school change are seen as part of a larger reform movement, so that they can complement each other rather than work in isolation.

## Learner-Centered Schools -- Concept and Practice

The move toward learner-centered schools brings together many of the Deweyan ideas of the past with the new frames for school reform of the present. Learner-centered conceptions of schools and schooling are at once both a framework and a strategy for change that address many of the issues raised by these reformers. Such a framework involves the nature of what the school community wants of its schools; a view of schoolwork that sees students acquiring basic skills, not solely through rote learning but by participating actively in solving real problems; organizing the school for continuous teacher learning and professional development in the context of the school's goals for students; a governance structure that involves teachers, parents, and administrators in providing the kind of supports teachers need

to work with students; an assessment system that ensures that teachers, parents, and students know and understand how they are developing over time. Each of these elements alone can make some difference in schools but, as we are learning, each is inextricably linked to and impacts on the others.

## Learner-Centered Contexts

Learner-centered classrooms need an atmosphere that encourages firsthand learning: classroom practices that include varied kinds of learning activities, challenging questions, interesting materials, active involvement of students, and a reduction of competition so students can appreciate their own strengths and weaknesses and cooperate to help each other learn. This kind of environment lessens the distance between learning in school and learning in life. It responds to a common critique of the teaching in many schools -- that it is "second-hand learning," that it focuses on "inert ideas," and that it is not about life "as it is known in the midst of living it" (Whitehead, 1959, pp. 3-7). Learner-centered schooling responds to this critique by allowing opportunities for personal involvement in the learning process as well as by providing real life experiences in the learning context. This kind of learning is as appropriate for kindergarten as it is for seniors in high school.

Organizing the curriculum around themes or questions that need research, field trips, library work, interviewing people, observing firsthand and gathering information, has become one way of implementing a learner-centered curriculum. Central Park East High School, for example, organizes a year's curriculum around a question such as What is justice? All members of the humanities team plan together to facilitate learning activities around this theme. This provides not only a rich set of possibilities for students, but the means for teachers to increase their own knowledge by continuously working together -- teaching and learning from each another (Meier, 1987).

## Breadth and Depth

Another element that is part of learner-centered teaching is the encouragement of in-depth thinking: reflecting on and weighing issues and ideas, examining them from many different perspectives and through a multiplicity of lenses. This kind of teaching is generative. It does not try to make things simple but recognizes the value of a student's sometimes tortuous struggle to make sense of and assimilate complex ideas (Duckworth, 1991). It is about adopting the view that less is more (Sizer, 1984) and about "uncovering" rather than "covering the curriculum" (Hawkins, 1978).

Teaching that promotes this kind of learning cannot be handed out in a package or dispensed with a simple formula. It develops through conversation and dialogue between teachers and students, students and students, and teachers and teachers. This is a view of curriculum and teaching that develops as teachers work together, sharing what they do with subject-matter content, trying out new methods, or helping to better understand various ways of working with students (Snyder, Lieberman, Macdonald, and Goodwin, 1992). Thus, the curriculum, in its breadth and depth, provides the substance that is the source of teacher learning as well as student engagement.

## Developing and Utilizing Authentic Assessments

Changing ideas about the teaching/learning process both allow for and necessitate changing the methods of assessment of students' educational growth and development. Assessment in schools has often been limited to evaluation through the use of standardized tests, which has been connected to restrictive practices such as holding back and retaining students, special education placements, tracking, and other policies limiting the range of learning experiences available to all students. Indeed, assessment practices, having been couched in a language of judgment and placed in a normative framework, have encouraged schools to place limits on students' opportunities for growth and learning.

By contrast, assessment correlated to learner-centered schooling is a means of informing teachers about student growth and development. It is integral to curriculum and instruction because it is rooted in the natural and ongoing context of the classroom and relies on students' demonstrated performance on real tasks, not contrived ones. It recognizes diversity in styles and rates of learning. It looks for strengths: what students can do rather than what they cannot do. It is collaborative, involving students and their families in sharing information and planning for the future.

A number of assessment initiatives are coming from and helping to shape learner-centered practices in a variety of contexts. Teacher observations, collecting samples of student work into portfolios, recording parents' and students' views of how they learn -- all of these are helping to create a new view of assessment and a renewed focus on students' learning.

For example, *The Primary Language Record* (PLR), an instrument for early literacy assessment, has served as a lever for change for both teacher and schoolwide development. Through the introduction of this framework for the observation and documentation of student growth, teachers come to look at their students differently: to frame student growth in a developmental perspective; to see strengths where before they only saw deficits; to appreciate diversity of languages, cultures, learning styles, and learning rates; to respect and learn from the knowledge that families have about their children.

This changed perspective has an impact on the way that teachers structure the environment and conduct teaching and learning in their classrooms. Teachers using the PLR generally provide more opportunities for active learning, for conversations between and among students and teachers, for multiple ways of experiencing and learning, as well as for multiple ways of demonstrating and mastering knowledge. These changes also have an impact on the relationships between teachers and staff in the school. A professional culture thus develops, stimulated by collaboration around shared knowledge, pedagogical issues that subsequently arise, and the increased focus on problems of teaching and learning. This example of authentic assessment helps us to see the connections between building community around shared work, a changed view of student work, and teacher learning in the context of classroom and school life (Falk and Darling-Hammond, 1993).

## Teacher Learning and Professional Development

In this period of intense reform, earlier notions of teachers, as technicians or as passive recipients of experts' ideas, are slowly giving way to a more robust and rounded view of how teachers learn (Lieberman and Miller, 1990; Little, 1990). As teachers begin to transform their curriculum and assessment practices, their teaching role undergoes transformation as well: As they observe and document student growth, they seek to learn more about human development and learning theories; as they plan classroom activities with students around themes or questions, they learn how to structure problem-solving activities and how to diagnose students' needs for basic skills in ways that are more consistent with how students learn; as teachers have opportunities to document what students do and how they go about doing it, they become researchers of their own practice. These changes then become the means for creating a learning community among peers, a place where student learning is legitimately seen as a problem for teacher learning and discussion, and where teacher inquiry is a significant part of being a teacher (Little, 1992; Lytle and Cochran-Smith, 1992). Some of the ways these opportunities have been provided in various settings include arranging for joint preparation periods across grades or disciplines, financial reimbursement for professional development meetings during lunch or after-school hours, exposure to current research and professional conferences, visits to other classes, and expanded opportunities for teachers to learn about new practices both within and outside their own schools.

In some high schools, where community service opportunities for students are being arranged as part of their high school experience, students go to community service a half day a week. This time away from school not only benefits the students and the community, but it is also used for teacher planning time. Thus teacher learning and professional development become central to the teaching/learning process and part of the building of learner-centered schools; knowledge is seen as legitimate whether it is learned from theory or constructed in the process of transforming practice in the classroom.[5]

## School Structures, Organization, and Leadership

It follows that changes in teaching, learning, and assessment practices, and changes in the professional culture of schools, necessitate changes in school structure, organization, and governance. One such structural change is the creation of small schools that are formed from or exist within larger ones, or that are altogether new. Fifty new small high schools are now being created in New York City, in addition to the several hundred others mentioned before that are part of the Philadelphia Schools Collaborative and/or the Coalition of Essential Schools.

For students and teachers in small schools the possibilities are far greater that there will be a focus on people and ideas, rather than on trying to deal with the complexities of the hierarchy (Meier, 1989). Some schools, having reorganized their programs and staffing arrangements to lessen the fragmentation of students' and teachers' work, find that this helps them to provide a more interdisciplinary, in-depth view of knowledge and learning. One of

[5] These practices can be seen at Central Park East Secondary School and Urban Academy in New York City.

the forms this has taken, in both elementary and secondary schools, is providing longer blocks of time to work with students. Some schools have altered the way students are grouped, adopting multiage groups that make it possible for students to find a wider range of peers, make use of peer tutoring, and provide for naturally occurring differences in students' developmental ages.

As part of the changes in school organization, many schools have increased opportunities for teachers to participate in the process of school governance and decision making. Site-based management/shared decision making, expanded leadership roles for teachers, and participatory structures that allow school staff to have greater involvement in the life of the community have resulted in a richer learning environment for all -- despite the difficulties such changes involve (Lieberman et al., 1991; Lieberman, Falk, and Alexander, in press).

Many schools have helped to create close partnerships with parents, in which their commitments, goals, and strategies for children can be shared (Comer, 1990). Such partnerships help to connect parents to schools in ways that serve multiple purposes. As parents are involved, for example, in understanding new modes of assessing student work, important connections are created between school and home. Not only do parents become more involved in and supportive of their children's schoolwork, they are more likely to become supporters of and participants in the changes that are entailed by learner-centered schools.

## Key Understandings about Educational Change: Building Learner-Centered School Communities

Looking back on the history of reform in American education, one is struck by the power of either-or thinking that has kept us from developing a more comprehensive approach to school reform. Heaping up contradictory reforms, one after another, has drawn our attention away from analyzing the complexities of school culture and seeking the knowledge -- and building the structures -- needed to change it. The perceived needs of our national life, however, as well as the perceived failures of previous piecemeal reforms, offer important incentives to build a new commitment to school reform that is at once comprehensive, necessary, and practical.

As schoolpeople struggle to create learning environments that are responsive and responsible to the needs of all students, they develop new understandings about the teaching/learning process and, in so doing, create new forms and structures. As learning-centered principles are applied, not only to students but to all participants in the school community, a collaborative process of learning and growth takes place that builds collective knowledge and a sense of community.

The process of building learner-centered communities is, however, a complex one and fraught with its own problems and conflicts. Those engaged in such efforts are called on to maintain a delicate balance between the needs of individuals and the interests of the group,

trying to reflect the differing perspectives of people from diverse backgrounds and experiences. They must try to view problems not as inevitable failures, but as challenges stemming from the change process itself, that can be met and overcome. When new voices that heretofore have not been heard are given the opportunity to participate in the shaping of schools, we can expect tensions to arise -- as the community struggles to provide ways to think critically and creatively, while simultaneously maintaining respect for systematically accumulated knowledge. Although these tensions will not be resolved by formula or prescription, since each community must respond to internal conflict in its own way, the dissemination of knowledge gleaned from individual and collective experiences will help communities to understand and deal with their own problems as they arise.

In using new frames to think about and organize learner-centered communities, differences and conflicts will surface over ways of thinking about the purposes of schools. Some of these will inevitably form around the capacities of teachers to enact learner-centered practices, building school structures to support learner-centered teaching, seeking public understandings and support for changes in educational practice, resolving the school and community's differing conceptions of leadership, and living the process, as well as being knowledgeable about the content of change.

## Policies that Support Change

Schools and communities cannot promote these kinds of changes on any large scale by themselves. They need the support of policies enacted at the district, state, and federal levels (McLaughlin and Talbert, 1993). While it is true that "policy cannot mandate what matters most" -- that is, commitment, motivation, and will to change (McLaughlin, 1987, p.172) -- schools and communities can be supported and encouraged, rather than neglected and discouraged. Policies that create standards without standardization and encourage individual communities to adapt to their local conditions can help (Darling-Hammond, 1993). Instead of putting its resources into monitoring and inspecting, the state can broker, facilitate, and organize resources to support the commitments of local communities. In this way, policies can support democratic practices in schools and communities that are grounded in their own specific contexts and the realities of contemporary society.

In a changing world that requires workers with developed problem-solving skills and higher-order thinking processes, and citizens who share democratic values and practice, the move toward democratic practice in schools can help define the territory and the commitment to larger goals for American education.

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