Bibliographic Essay

Educational Reform Revisited

By Dawn Putney and Robert C. Morris

Twelve years ago Robert C. Morris wrote an essay for *Choice* that looked at school reform throughout the twentieth century. Titled "Cycles of Change: Issues of Educational Reform, Renewal, and Restructuring," the essay chronicled the changes in ideas about school reform from the late 1800s to the end of the twentieth century and looked at literature related to school reform. The present essay picks up where that former investigation left off; however, we have a somewhat different guiding purpose. Our main goal here is to make sense of school reform over the past decade by examining the literature related to reform efforts. To that end, we are examining the literature on seven issues related to school reform: Impediments to Education Reform, Today's Reform Movement / Restructuring as Opposed to Reforming, Leadership: What It Takes to Change Schools, The Importance of Culture, The Practical Knowledge of Teachers, Professional Development as School Reform, and Technology's Place in School Reform.

An unpleasant truth about the history of public education in the United States that was evident a decade ago has emerged once again. Historically, American education has involved discrimination bordering on oppression (see *The Conspiracy of Ignorance: The Failure of American Public Schools* by Martin L. Gross and *Law and School Reform: Six Strategies to Promoting Educational Equity*, edited by Jay P. Huebert). Although at first glance it may seem that access to education and educational achievement are improving across the United States, a closer look demonstrates conclusively how well the educational system has sorted and selected students throughout the twentieth century. As cited by Richard Rothstein in *Class and Schools: Using Social, Economic, and Educational Reform to Close the Black-White Achievement Gap*, by the 1920s less than 23 percent of students finished high school, in the 1940s about 50 percent, and by 1964 69 percent; college graduates numbered less than 5 percent of the cohort in the 1920s, and nearly 13 percent in 1964. In 1985 Diane Ravitch noted in *Left Back: A Century of Battles over School Reform* that over 70 percent of students finished high school, and about half of these went on to postsecondary education colleges, universities, community colleges, technical training, two-year junior colleges, and the like. Dominic Brewer et al. in *Education for a New Era: Design and Implementation of K-12 Education Reform in Qatar* reaffirmed Ravitch's earlier observation in 2007. The next section will discuss scholars who demonstrate that all socioeconomic groups in the United States have not shared these educational gains.

Dawn Putney is a professor in the Department of Educational Innovation in the College of Education at the University of West Georgia, with specializations in media and technology. She can be contacted at dputney@westga.edu. Robert C. Morris is a professor of curriculum studies in the Department of Leadership and Applied Instruction in the College of Education also at the University of West Georgia. He can be contacted at rmorris@westga.edu.

Impediments to Educational Reform

The fact that by the end of the twentieth century over 70 percent of students completed high school seems like an admirable achievement, and it is. However, scholars have taken a closer look at this figure. Daniel Chirot in *How Societies Change* and Gene Hall and Shirley Hord in *Implementing Change: Patterns, Principles, and Potholes* break down the percentages by socioeconomic class, noting that relatively little progress has been made in bringing bright children from the working class and from poor families into four-year colleges and universities. Lisa Gonsalves and John Leonard in *New Hope for Urban High Schools: Cultural Reform, Moral Leadership and Community Partnership* remind readers that even though many in the United States criticize other nations for tracking children into vocational and academic streams early on (usually by the sixth grade), the United States has accomplished the same thing in a much more subtle way by perpetrating a

system of education that does not assist and support teachers in reaching and teaching individual children. In *Performance Standards and Authentic Learning*, Alan Glatthorn argues that it is not fair to blame the teachers and administrators for this sad state of affairs. Tracking in schools is part of the social fabric of the United States, and it starts high up, especially within the "power elite," according to Helen Johnson and Arthur Salz in *What Is Authentic Educational Reform?: Pushing against the Compassionate Conservative Agenda*. In *What Works in Schools: Translating Research into Action*, Robert Marzano describes the corollary of perpetuating the "can-do" philosophy across class lines: if a child is not learning, it is purported to be his or her own fault. Joe Kincheloe in *Urban Education: A Comprehensive Guide for Educators, Parents, and Teachers* describes how those who are successful are the ones who label those who are not successful as lazy, ignorant, and un-American.

Larry Cuban argues in *Frogs into Princes: Writings on School Reform* that there cannot be justice and true reform in an educational system that is set up so that certain children will fall behind in their studies. In *What Schools Are For* John Goodlad argues that the bureaucracy of education was designed to sort those deemed educable from those who would not be given an equal opportunity to learn. Alfie Kohn in *The Schools Our Children Deserve: Moving beyond Traditional Classrooms and "Tougher Standards"* and Raymond Horn in *Understanding Educational Reform: A Reference Handbook* describe the types of decisions that are made on a daily basis in schools that screen out poor children, migrant workers' children, children of recent immigrants to this country, and children who for whatever reason just do not fit the mold of the "educable" student. Horn also notes that schools in the "wrong" neighborhoods are not given the teaching materials and building maintenance that they need. Furthermore, Kohn writes the assignment of better teachers is based on the location of schools. Robert Mager and Peter Pipe in *Analyzing Performance Problems, or You Really Oughta Wanna: How to Figure Out Why People Aren't Doing What They Should Be and What to Do About It* indicate that common knowledge and information sharing from the board of education, through the superintendent, to the principal, and on to the teachers, speaks to political and public relations, not to the educational issues. Later in *Excellence in Teaching and Learning: Bridging the Gaps in Theory, Practice, and Policy*, Adnan Salhi reiterates the idea that limited information sharing can result in the unequal distribution of the scarce resources in school systems.

Joseph Murphy in *Preparing School Leaders: Defining A Research and Action Agenda* and Paula Short and John Greer in *Leadership in Empowered Schools: Themes from Innovative Efforts* all describe how many principals are still appointed because of political patronage, not because they are competent. Moreover, some members of boards of education still believe they must make decisions to buttress the local political party in power, rather than to teach all children, according to Peggy Siegel and Sandra Byrne in *Using Quality to Redesign School Systems: The Cutting Edge of Common Sense* and Allison Zmuda, Robert Kuklis, and Everett Kline in *Transforming Schools: Creating a Culture of Continuous Improvement*.

Anna Valdez Perez et al. in *How to Turn a School Around: What Principals Can Do* and Jenny Smith in *Education and Public Health: Natural Partners in Learning for Life* argue that as long as discrimination prevents adequate educational investments for certain groups, there is no group that is safe from classroom discrimination. In *What Works in Schools: Translating Research Into Action*, Robert Marzano contends that most children will be discriminated against during their school years, if only because there are not enough educational resources, including good teachers, good curricula, good schools, and enough good systems of public education to go around. Jerry Patterson, in *Coming Clean About Organizational Change: Leadership in the Real World*, recommends adopting a policy that states that all children are educable, therefore, schools will be held accountable to an agreed-upon standard for the teaching of all children, so that education is available to all families, no matter their resources.

Allan Glatthorn in *Performance Standards and Authentic Learning* and Terrance Deal and Kent Peterson in *Shaping School Culture: The Heart of Leadership* make the case that excellence with equity, a superior educational program available to all children, must be the goal because excellence in education without equity will not solve the United States' problems. Richard Hersh and John Merrow, in *Declining by Degrees: Higher Education at Risk*, and Joe Kincheloe et al. in *Urban Education: A Comprehensive Guide for Educators, Parents, and Teachers*, also argue that middle-class parents are well served by a policy that addresses excellence with equity. They can count on better schools where discipline is no longer a problem, programs that address the problems of the twenty-first century, and teaching that is focused on individual needs and done by teachers who hold themselves responsible for their students' success. Jacqueline Brooks and Martin Brooks find in *In Search of Understanding: The Case for Constructivist Classrooms* that when this type of system is implemented through a change process like the effective schools process, educational choice that is equitable as well as excellent becomes available.

Discrimination in education, as described by Larry Coble in *Lessons Learned from Experience: A Practical Developmental Source Book for Educational Leaders*, is a costly policy, just as is decimation of employment and social relations. In *Urban Education in the United States: A Historical Reader*, John Rury argues that education is no longer thought of as an individual good, but is seen as a public good in the national interest. Rury contends that because it is a public good, investments are made by the federal, state, and local levels of government for educational services for all children for the sake of the country's well-being, as well as for the sake of all citizens' and children's well-being. Barbara Stanford in *Charting School Change: Improving the Odds for Successful School Reform*, Irving Buchen in *The Future of the American School System*, and Sandra Whitaker in *Advocacy for School Leaders: Becoming a Strong Voice for Education* argue that the national interest is served by having educated citizens who can compete, add workplace competency, and participate in a free society by sharing in informed decision making in political, social, and economic debates.

In *Real Change: From the World That Fails to the World That Works*, Newt Gingrich and Vince Haley are concerned that

discrimination and the withholding of teaching to certain groups mitigates the national investment in education. Scholars such as Anthony Jackson, Gayle Davis, Maud Abeel, and Anne Bordonaro in *Turning Points 2000: Educating Adolescents in the 21st Century* describe the costs that society pays in welfare burdens, crime, disease, and unproductive lives when education is withheld from some groups. In *Privatizing Education: Can the Marketplace Deliver Choice, Efficiency, Equality, and Social Cohesion?* Henry Levin also finds that the lack of adequate funding for educational programs at the federal, state, and local levels ultimately increases costs to society.

Today's Reform Movement and Restructuring as Reform

The publication of *A Nation at Risk: The Imperative for Educational Reform* in 1983 marked the beginning of the educational reform movement that was motivated by concerns over the national economy. In *School Policies* Jamuna Carroll notes that U.S. students have fallen behind those of other industrialized nations on test scores. Carroll's information was based on studies conducted since 2003 that demonstrated that U.S. students' scores are declining on standardized tests. These studies led to a variety of responses from policy makers and leaders in education. Linda Darling-Hammond and Deborah Ball in *Teaching for High Standards: What Policymakers Need to Know and Be Able to Do* describe the National Clearinghouse of Comprehensive School Reform, which was created by the Office of Educational Research and Improvement to help prepare students to meet high academic standards. Fenwick English and Gail Furman in *Research and Educational Leadership: Navigating the New National Research Council Guidelines* describe how the 1990s saw the development of the comprehensive school reform demonstration program, whose major aim was, and continues to be, to raise student achievement by helping public schools across the country implement successful school reform programs based on scientific research.

As a result of these kinds of efforts, Congress devised a nationwide plan to improve public school standards, the No Child Left Behind Act (NCLB) passed in 2001. This reform effort was officially signed into law on January 8, 2002, and marked a nationwide turning point for American public schools, in that the law requires that all students be proficient in mathematics and reading by 2014. It is a cumbersome law of almost 1,000 pages in length, but it is an honest attempt to restructure schools as opposed to reforming them.

In *Who's Teaching Your Children?: Why the Teacher Crisis Is Worse Than You Think and What Can Be Done about It*, Vivian Troen and Katherine Boles describe NCLB as the result of research findings of the late twentieth century that laid the groundwork for more recent reform efforts. Sandra Harris and Sandra Lowery in *Standards-Based Leadership: A Case Study Book for the Assistant Principalship* and Tony Wagner and Robert Kegan in *Change Leadership: A Practical Guide to Transforming Our Schools* note that NCLB leaves it up to each state to choose the tests and the scores that will be used to substantially document that all students have become proficient in math and reading by 2014. The variation among state proficiency rates is already generating controversy, and there is some agitation for developing a national curriculum and national standards.

In *Transformative Assessment* James W. Popham and in *Who Benefits from Special Education?: Remediating (Fixing) Other People's Children* Ellen Brantlinger address some of the difficulties presented by the adequate yearly progress (AYP) required by NCLB. Every school was expected to make AYP along trajectory lines starting in 2001-02, reaching 100 percent proficiency by 2013-14. Again, the states are to have established these trajectory lines and hold to them. However, many states' trajectories require relatively little progress in the first five years and very steep progress in later years. Data reporting student progress must be disaggregated and every student category must make AYP if a school is to be credited. All students, including limited-English-proficient (LEP) students, educationally disadvantaged students (those in special education), and students in every major racial/ethnic category must meet the minimal criteria identified by individual states for AYP. There have been some changes in the demands for the proficiency of LEP and special education students, and it is possible that further changes will be required.

In *The Unintended Consequences of High-Stakes Testing*, Gail Jones, Brett Jones, and Tracy Hargrove describe the serious penalties for failing to make AYP: after two years of failure, schools must adopt an improvement plan and notify parents that they may transfer their children to nonfailing schools. After three years of failure, the improvement plan must be continued, and parents may obtain supplementary tutoring from private educational providers at the expense of the district. After four years of failure, serious changes must be made, for example, new curricula, changes in school personnel, and extension of the school day or year. After five years of failure, schools are subject to complete restructuring and may be managed by a private firm under contract with the state.

Alfie Kohn in *What Does It Mean to Be Well Educated:? And More Essays on Standards, Grading, and Other Follies* and Naftaly Glasman and Lynette Glasman in *The Expert School Leader: Accelerating Accountability* note that the determination of what is meant by fully qualified is left again to the individual states. At present, it usually means credentialed. School districts are required to inform parents if their children are taught by "unqualified" teachers. Perversely, the private tutors hired by a school district need not be "qualified."

Advocates of restructuring schools view school reform as a concept that focuses on continually higher student performance. One of the features that distinguishes restructuring from previous reform efforts is that restructuring is driven by a focus on student performance, which is ultimately based on the premise that all students can and must learn at continuing higher levels, according to Frederick Hess in *Common Sense School Reform*. Thomas Chenoweth and Robert Everhart in *Navigating Comprehensive School Change: A Guide for the Perplexed* present another key distinction between earlier reform efforts

and the more recent restructuring efforts in that restructuring is more of a long-term commitment to fundamental, systemic change. Restructuring is a significant departure from previous improvement efforts and embodies a greater challenge to the system.

Joseph Murphy and Karen Louis in *Reshaping the Principalship: Insights from Transformational Reform Efforts* and Douglas Reeves in *The Learning Leader: How to Focus School Improvement for Better Results* argue that earlier restructuring and reform efforts tried to change only one piece of U.S. education at a time, when in fact it is a system of many interlocking pieces. In *The Anguish of Leadership*, Jerry Patterson argues that those engaged in restructuring need to pose and answer the following questions: What do we want students to know and be able to do? What kinds of learning experiences produce these outcomes? What does it take to transform schools into places where this happens? Who is responsible for ensuring that the desired results are achieved, in order to tackle all the issues related to restructuring? Restructuring, as educational reform, requires a comprehensive rethinking of the goals of institutions and the roles of members of institutions.

Leadership: What It Takes to Change Schools

Despite being separated by almost forty years, Wilbert Moore's *Social Change*, Robert Owens and Carl Steinhoff's *Administering Change in Schools*, and Theodore Sizer's *Horace's School: Redesigning the American High School* all note how the success of restructuring hinges on the ability of people at all levels within a system to change the way they operate. Robert Slavin, Nancy Karweit, and Barbara Wasik in *Preventing Early School Failure: Research, Policy, and Practice* continue the discussion by indicating that if restructuring is viewed as something schools can do with only a token increase in authority and no other changes, most schools will not implement real restructuring; the few schools that create exciting learning environments will be constantly threatened by a new superintendent, school board member, or principal because support for change is not built into the system.

Phillip Schlechty in *Shaking Up the Schoolhouse: How to Support and Sustain Educational Innovation* argues that authority, flexibility, access to knowledge, and time to plan are the crucial requirements for restructuring. As early as 1967 Goodwin Watson stated in *Change in School Systems* that a sincere invitation to change implies a shared understanding of the urgent need to change and the goals for change. Lillian Weber in *Looking Back and Thinking Forward: Reexaminations of Teaching and Schooling* writes that the granting of authority implies a new conception of leadership, hierarchy, and power relationships. Flexibility results only from significant deregulation, not occasional exceptions to the rules. In *Critical Thinking and Learning: An Encyclopedia for Parents and Teachers*, Danny Weil and Joe Kincheloe state that useful knowledge must be readily available, as well as time to learn, time to plan implementation, and time to reflect. These time concessions must be built into the daily lives of educators in order for reform to work.

Evans Clinchy in *Creating New Schools: How Small Schools Are Changing American Education* also addresses the issue of change. Nothing is as upsetting to people as change, and nothing has greater potential to cause failures, loss of production, or decreasing quality. Yet nothing is as important to the survival of an organization as change. Jennifer Horchschild and Nathan Scovronick in *The American Dream and the Public Schools* claim that resistance to change comes from a fear of the unknown or expectation of loss, including how schools perceive the change and how well they are equipped to deal with the change they expect.

The editor of *Contributing to Educational Change: Perspectives on Research and Practice*, Phillip Jackson argues that leaders and managers continually make efforts to accomplish successful and significant change—it is inherent in their jobs. Some are very good at this effort (probably more than many realize), while others continually struggle and fail. Tamar Levin and Ruth Long in *Effective Instruction* describe good leaders as those who thrive in their roles and not those that get shuttled around from job to job, ultimately settling into a role in which they are frustrated and ineffective. In *Schools That Do Too Much: Wasting Time and Money in School, and What We Can Do about It*, Etta Kralovec describes the need for schools with educational programs focused on organizations, businesses, leadership, and management. Unfortunately, there still are not enough schools with programs that analyze organizations, identify critically important priorities (such as systemic problems or exciting visions for change), and then help develop successful and significant change processes that will address those priorities. William Purkey and John Novak in *Inviting School Success: A Self-Concept Approach to Teaching, Learning, and Democratic Practice* note that all organizations are in need of leaders who understand that successful change of an individual's knowledge and practices in classrooms and schools has to be accompanied by ongoing support and assistance for implementation.

In *Coming Clean about Organizational Change: Leadership in the Real World*, Jerry Patterson presents organizational change in terms of three concentric circles, and other authors have elaborated on these concentric circles. In the center of the circle is systemic change. Systemic change deals with the norms, values, and relationships throughout the organization and exemplifies long-term meaningful change. One of the strategies of systemic change is involving all parts of the school organization. Through such involvement, the participants gain power in a series of steps, the purposes of the leader and the staff become fused, the leader exercises pull, and the staff members are motivated to try out their ideas. Patterson also notes that systemic change happens only when the people inside the school or unit critically examine their fundamental organizational beliefs and change their practices to fit their revised beliefs. Program change is the result of intentional systemic change at the school or unit level. Also, it seldom takes hold across an entire school when only pockets of teachers are committed to change. Patterson further notes that program change can be conducted without a major shift in norms, values, or power relationships throughout

a school or district. Kevin Jones and Tony Charlton in *Overcoming Learning and Behaviour Difficulties: Partnership with Pupils* describe program change as the second level, rather than circle, of change. This level affects the norms and values of segments of the organization without having a major impact on the organization as a whole.

In *Improving Student Learning One Teacher at a Time*, Jane Pollock and Sharon Ford presents a third level of change, based on events happening or occurring that represent an outer layer of Patterson's concentric circle. This level of change has no lasting impact on the norms, values, or power relationships in any part of the system. It is simply an event or occurrence in the life of the school or district with little connection to the history or the future of the organization. Interestingly, many attempts at systemic change result from event change. A prime example is the situation of school leaders, determined to show that their schools are not standing still, grabbing the hottest topics in education journals and trying to implement one without adequately providing staff development to the faculty and without explaining why the change is occurring. Pollock and Ford also note that in order for change to occur the institution must have effective leadership and organizational resilience. They believe that leadership is the critical component of an effective school. Principals ultimately have a direct influence on teachers and the effectiveness of the teaching-learning relationship. Professional leadership requires identifying a clear sense of the purpose for the school. It entails the distribution of authority and responsibility across the school by providing teachers with genuine opportunities to participate directly in decisions about curriculum, professional learning priorities, school and resource management, and other policy decisions. James Spillane and John Diamond, the editors of *Distributed Leaderships in Practice*, note professional leadership requires keeping abreast of what is happening in classrooms, including what is being taught, pedagogical approaches, and student progress.

School leaders have to understand that change is a process, not an event; therefore, change requires time, energy, and the resources to support it as it unfolds, according to Phillip Vairo, Sheldon Marcus, and Max Weiner in *Hot-Button Issues for Teachers: What Every Educator Needs to Know about Leadership, Testing, Textbooks, Vouchers, and More*. Moreover, change is accomplished first by individuals and then by institutions. There is, of course, individual/organizational interaction in the process of change. It is difficult, for instance, for individuals in a school to become collegial if the organization does not change scheduling and other structures to allow this to happen. Change is a highly personal experience, and individuals change at different rates and in different ways. Change entails growth in both feelings about and skills in using new programs; thus, individuals change in these two important ways over the course of a change experience. Interventions can be designed to support the individual's implementation of the innovation. Therefore, the change facilitator should take into account the feelings and skills of individuals when planning actions to support the change process. Furthermore, the change facilitator needs to adapt to the differing needs of individuals and to their changing needs over time. Finally, leaders must consider the systemic nature of the organization when making interventions, since activities targeted for one area of the system may well have unanticipated effects in another.

James Henderson and Richard Hawthorne in *Transformative Curriculum Leadership*, Pamela Joseph et al. in *Cultures of Curriculum*, and Sharon Rallis and Ellen Goldring in *Principals of Dynamic Schools: Taking Charge of Change* all claim that resiliency, the ability to recover from or adapt to change, is critical to effective change. When applied to organizations, resiliency refers to the capacity of an organization and its individual members to absorb change without draining individual and organizational energy. The concept of resilience has recently been used in discussions of organizational efforts to address crises and disasters. These discussions revolve around the need for organizations to develop the ability to bounce back and self-right following a crisis. Therefore, it becomes imperative that leaders build an organization that has resiliency by utilizing strengths, recognizing the layered effect of crisis, addressing psychological needs of employees, improving communication, and allowing activities in which employees take pride in the organization. Bruce Jones, editor of *Educational Leadership: Policy Dimensions in the 21st Century*, points out that the building of resilience in organizations entails a shift from a reactive to a proactive approach for crisis management and disaster recovery. In this context, creating an organization that has resiliency means that the organization is better able to avoid substantial disruptions in its daily operation when a change occurs.

Paula Short and John Greer in *Leadership in Empowered Schools: Themes from Innovative Efforts* point to the fact that in order to be successful in the process of change, every school leader should possess the following: vision, a belief that schools are for learning, an appreciation of human resources, the ability to communicate and listen effectively, the ability to be proactive, and the willingness to take risks. These same characteristics, as argued by Linda Skrla et al. in *The Emerging Principalship*, are indicative of educational leaders who have attained successful performance in the two dimensions considered necessary for effective leadership: initiating structure, which is primarily concerned with organizational tasks; and consideration structure, which is the concern for individuals and interpersonal relationships. Robert Slavin and Nancy Madden note in *Success for All: Research and Reform in Elementary Education* that the guiding principle of student learning is central to a school's periodic refocus on its vision and mission. Charles Joiner Jr. in *Leadership for Change* describes valuing

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human resources, and communicating and listening as the most significant factors for change. Joiner argues that being a proactive leader and a risk-taker are essential to initiating change, and that leaders of educational change respond best to the human, as well as the task, aspects of their schools and districts as they work to integrate the human elements with hard business tasks.

Although leadership is an important part of school reform, the importance of culture cannot be overlooked. Culture affects the implementation of reform and often successful reform has an impact on culture, changing it. In this next section, we look at the literature on culture and different kinds of cultures and then move on to the relationship between culture and reform.

The Importance of Culture

Tony Wagner and Robert Kegan in *Change Leadership: A Practical Guide to Transforming Our Schools* note that the invisible mind frame that defines the culture system consists of assumptions, expectations, and behaviors that are shared in a unified culture. Culture determines how members behave, what they expect, how they relate to one another, and how they communicate. Richard DuFour and Robert Eaker in *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement* also describe culture as the beliefs, values, and habits that constitute the norms of the organization. Structures and cultures are not the same thing. Structures are more tangible and easier to define, while cultures may be rooted in belief systems with origins long forgotten.

Ivor Goodson in *The Making of Curriculum: Collected Essays*, Russell Gersten and Robert Jimenez in *Promoting Learning for Culturally and Linguistically Diverse Students*, and Lee Roy Beach in *Leadership and the Art of Change: A Practical Guide to Organizational Transformation* all describe the impact of unified culture on the process of change. These authors note that people naturally form groups, and that organizations create groups within their structures. Within these groups, activities and ideas emerge and are embraced or rejected, depending on the nature of the developing or existing culture. Culture is embedded within and embraces every structure in an organization, and these unified cultures are defined by who the people within the group are, what they do, and how they do it. The members of the unified culture share the same beliefs, and they see things the same way. While this may seem admirable, the unified culture can become extremely rigid. Even when beliefs or practices are no longer appropriate, the unified culture may continue to behave in the same way simply because that is the way they have always done things.

Eugene Howard, Bruce Howell, and Edward Brainard in *Handbook for Conducting School Climate Improvement Projects* discuss the "fragmented culture" as the opposite of the unified culture. The fragmented culture has subcultures; each does things its own way. A fragmented culture is—though not always—a sign of a troubled organization. Lacking a solid core of beliefs and values, the fragmented culture has no solid foundation. Lee Roy Beach in *Leadership and the Art of Change: A Practical Guide to Organizational Transformation* asserts that culture and structure are closely interwoven. Structure represents the core of how things are accomplished within the organization. Earlier, H. Svi Shapiro and David Purpel in *Critical Social Issues in American Education: Transformation in a Postmodern World* noted that the degrees of resistance to changes in structure are reflective of the degrees of resistance to the vision and plan that necessitate the structural changes.

Robert Marzano, Timothy Waters, and Brian McNulty identify twenty-one different responsibilities for school leaders in *School Leadership That Works: From Research to Results*; they cite culture as the second most influential factor for leaders to consider when directing change within an organization. Culture is a natural byproduct of people working together, and its influence can be negative or positive. Every school, every organization has an identifiable culture, and an effective culture is a primary tool with which a leader fosters change. In *Moral Questions in the Classroom: How to Get Kids to Think Deeply about Real Life and Their School Work*, Katherine Simon notes that within a school, the principal models the prevalent understanding of the school's culture by demonstrating behaviors that promote cohesion and a sense of well-being; the principal also develops among the school's staff an understanding of purpose and shared vision of what the school can become. Creating an environment of cooperation and a shared sense of purpose requires action on the part of the principal and a continuous process for monitoring actual operations. Marzano, Waters, and McNulty also note the importance of demonstrating and fostering cohesion, the feeling that "we're all in this together," as well as creating time for discussions about and changes. These authors advocate supporting teachers by continually matching vision to action, identifying common ground for understanding, and allowing time to generate ideas for innovations that advance the vision and shared purpose.

In *Leadership and the Art of Change: A Practical Guide to Organizational Transformation*, Lee Roy Beach cites six prime responsibilities for leaders who want to foster change and move an organization into a better future: assessing the organization, understanding the culture and its effect on progress, creating a vision, designing a plan, maintaining momentum during implementation of the plan, and following through. Beach cautions that there is nothing cut and dried about leadership, that nothing replaces "creativity, ingenuity, intelligence, motivation, and a good sense of humor."

Furthermore, Beach reaffirms much of the change literature by agreeing that communication, document updating, and reward alignment are the tasks that promote long-lasting changes in an organization's culture. Beach writes that the first task is assessing the culture and continuing to assess it as changes are implemented. He also warns against expecting too much too soon; familiarity with change takes time as the culture slowly evolves. As a realist, he writes that not everyone in an organization accepts change and embraces the evolutionary process. In *The New Basics: Education and the Future of Work in the Telematic Age*, David Thornburg presents evidence that, for the most part, people who are unwilling to accept the cultural changes that are taking place eventually leave the organization.

The Practical Knowledge of Teachers

Reform involves a change of culture, leadership skills and patterns, roles and relationships, and goals and practices, but reform also involves revaluing knowledge that is already in the educational system. In the next two sections, we examine the literature on the practical knowledge of teachers, its importance, and its relationship to reform, particularly through professional development.

In *Classroom Practice: Teacher Images in Action*, Jean Clandinin presents "practical knowledge" as the multidimensional character of teachers' knowledge that includes an epistemology of practice. Practical knowledge cannot be viewed as a set of fixed concepts that is applied, but as something that is subject to change based on experience.

In *Teacher Thinking: A Study of Practical Knowledge*, Freema Elbaz finds that teachers do, in fact, possess a body of knowledge unique to their work, but this knowledge usually is not accorded status or credibility. She notes that experience leads to practical knowledge that includes knowledge about students, social structures, subject matter, instruction, classroom management, and strategies incorporated by teachers in relation to their personal values and beliefs based on current contexts. Practical knowledge is not disorganized and chaotic; it has content, form, and structure.

Jean Clandinin and Michael Connelly in "Teacher as Curriculum Maker" from the *Handbook of Research on Curriculum* state that this practical knowledge represents what teachers do in their classrooms. They also place emphasis on the complexities of interactive teaching and reflection. They believe that practice cannot be understood when one begins with theory, and that research should be conducted by studying teachers and the classrooms in which they teach.

Robert Westbrook, in *John Dewey and American Democracy*, and Ellen Lagemann, in *An Elusive Science: The Troubling History of Education Research*, note that the idea of teachers possessing practical knowledge can be traced back to John Dewey and that Dewey identified positive actions with judgments verified by experiences. Dewey's research focused on the relationship between theory and practice. Phillip Jackson, the editor of *Contributing to Educational Change: Perspectives on Research and Practice* and a former director of the Lab School of the University of Chicago, writes that Dewey's vision requires a new conception of teaching in which content knowledge and knowledge about learning and experience are vital parts.

Teachers typically plan instruction that follows their own understandings and theories about what students should learn, how they learn, and how the classroom can best be structured and organized for learning to occur and for classroom discipline, according to Gail McCutcheon in "Deliberation to Develop School Curricula" from *Understanding Democratic Curriculum Leadership*. Veteran teachers possess years of experience in the classroom that provide them with reflective insights, because they have expertise in the practical work of teaching. David McNamara explains in *Classroom Pedagogy and Primary Practice* that these same teachers possess knowledge of curriculum, techniques, and students. Accordingly, teachers should no longer simply be the doubtful beneficiaries of the knowledge and expertise of those who do not have classroom experience. In *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*, Parker Palmer states that good teaching is much more than technique; good teaching takes place when teachers merge themselves, content, and students into the context of real life. Cathy Block, Linda Gambrell, and Michael Pressley in *Improving Comprehension Instruction: Rethinking Research, Theory, and Classroom Practice* also note that veteran teachers' perceptions of their own professional development and how it has positively affected their classrooms, their beliefs, their attitudes, and their thoughts about teaching prove to be immensely valuable to the occupation.

David Schön, in *The Reflective Practitioner: How Professionals Think in Action*, and later Marge Scherer, in *A Better Beginning: Supporting and Mentoring New Teachers*, contend that a teacher has his/her own system for appreciating the increased understanding that gives their own teaching coherence. They termed such a system to be "reflective" in and on action. Teachers need to reflect on their knowledge. Reflection on actions is of great use to future and practicing educators. Researchers in this context then focus on teacher effectiveness by looking at professional growth activities and understanding how the practical knowledge accumulated becomes that person's base for academic enhancement and expertise, which ultimately will improve student learning.

Marc Tucker and Judy Codding in *Standards for Our Schools: How to Set Them, Measure Them, and Reach Them* provide a model of teaching that focuses on classroom practice and define teaching as a pedagogic activity in which the teacher is required to think carefully about how to best communicate subject matter to allow students to comprehend it. They believe that the teacher has a repertoire of pedagogical expertise that works best within the constraints of the classroom setting.

In *The Paideia Classroom: Teaching for Understanding*, Terry Roberts and Laura Billings practically apply Mortimer Adler's ideas of practice and reflection. Reflection is used to foster, enrich, and expand the student's knowledge. Reflection for them is meant to answer such questions as these: What can be done to expand and to enrich academic knowledge and learning? How do educators connect knowledge? Does a greater possession of practical knowledge increase teacher effectiveness within the classroom, or the teacher's satisfaction with teaching as a career?

In *Classroom Pedagogy and Primary Practice* David McNamara describes research in this area and defines the teacher's practical expertise as "vernacular pedagogy," whereby individual teachers, when working within the constraints of their own classrooms, work out their own pedagogical strategies to encourage student learning. The teacher's main responsibility (the heart of a teacher's work) is, as others have identified, to foster student learning. McNamara also notes that pedagogical practice involves more than technical expertise and that teachers need to be committed to teaching based on their own values and morals. McNamara further contends that knowledge acquired directly

from practice must be incorporated into formal educational knowledge to aid in informed teaching. The practitioner, he believes, should be recognized as an expert in classroom practice, with the classroom teacher being the most vital element of the educational system. Finally, McNamara believes that recognition should be given to those teachers who have expertise and authority in teaching. Through their professional practices and contributions to the body of professional knowledge, the knowledge base for teaching is developed and enhanced.

David Allen in *Assessing Student Learning: From Grading to Understanding* and Linda Darling-Hammond and John Bransford in *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do* discuss the classroom experience of veteran teachers. These authors have worked with school curriculum and interacted with students. They note that as teachers reflect and make decisions, they use their practical knowledge of teaching; however, when these same teachers make decisions about their teaching as well as changes to be implemented, they move into the realm of professional development.

Professional Development as School Reform

This section focuses on how professional development programs are used to effectively reform schools and to more appropriately meet the educational needs of the students of the new millennium; what can be done to increase teachers' practical knowledge; how schools can foster an environment of lifelong learning in the lives of the educators within a school system; and how schools can be transformed and improved through professional development.

In "Teacher Leadership in Professional Development" from *Teachers as Leaders*, Peter Burke contends that professional development is not an event, but a process. The intent of professional development has to do with improving educational practices and developing an organized approach to the career-long learning of educators. The process involves identifying and prioritizing the needs of educators, designing and implementing learning experiences to meet needs, evaluating the experiences, and then beginning the cycle again. The process of professional development must go beyond the knowledge level of simply providing information, thereby changing or improving attitudes, skills, and practices within the school. Career-long learning is essential for keeping pace with the complexity of change. James Stronge argues in *Qualities of Effective Teachers* that professional development is an important ingredient for effective teaching. He contends that teaching is a career in continuous turmoil. The more teachers and school districts remain aware of current trends, the easier it is to make adjustments while remaining focused on student needs and state and federal mandates.

In *Teacher Leadership in Professional Development*, Peter Burke likewise formulates a change process that consists of five phases: readiness, planning, implementation, evaluation, and re-visioning. Burke includes four steps in his planning process: agreeing on beliefs, defining a mission, specifying desired outcomes, and developing policies. He contends that these four steps are necessary in professional development. Robert Marzano, Jana Marzano, and Debra Pickering in *Classroom Management That Works: Research-Based Strategies for Every Teacher* maintain that professional development also includes acquisition, practice, feedback, follow-up, and maintenance, thus ensuring that new skills or knowledge will be adequately transferred into the classroom.

Lawrence Ingvarson in *Teaching Standards: Foundations for Professional Development Reform* and Laura Hamilton and Brian Stecher in *Measuring Instructional Responses to Standards-Based Accountability* all try to make sense of the constant chaos in the field of education. They call for standard-guided models of professional development that consist of four key components; others have elaborated on the last three components as well. The first component is professionalism, which defines teaching standards and provides direction for professional development throughout one's teaching career. In *A Legacy of Learning: Your Stake in Standards and New Kinds of Public Schools*, David Kearns and James Harvey elaborate on the second component of professional development—the infrastructure for professional learning. This enables teachers to gain the knowledge and skills needed to achieve appropriately defined teaching standards. In *From the Capitol to the Classroom: Standards-Based Reform in the States*, editor Susan Fuhrman looks at a third component of professional development: a staged or guided career structure with pay systems that provide incentives and recognition for teachers who attain the teaching standards. Williamson Evers and Robert Walberg endorse a fourth and final component of professional development that focuses on the credibility of the system of professional certification in *Testing Student Learning, Evaluating Teaching Effectiveness*, one based on a valid assessment of teaching performance. Overall this model of professional development, with its four components, takes into consideration the adult and teacher development research through the career-stages structure, as well as recognizing the differing levels of adult and teacher development. Gayle Gregory and Lin Kuzmich in *Data Driven Differentiation in the Standards-Based Classroom* agree in principle, through their work with this four-component model and its effect on classroom instruction. The use of incentives and recognition, which were given to encourage educators to continue their journeys into broader and deeper understandings of the field of teaching, is discussed in their volume.

Susan Loucks-Horsley and Suzanne Stiegelbauer in "Using Knowledge of Change to Guide Staff Development" from *Staff Development for Education in the '90s* and Andy Hargreaves in *Changing Teachers, Changing Times: Teachers' Work and Culture in the Postmodern Age* continue the discussion originally presented by Gene Hall, Richard Wallace, and William Dossett in *A Developmental Conceptualization of the Adoption Process within Educational Institutions* who propose principles for professional development and the potential to foster school reform efforts. These early 1970s principles were based on the recognition that change was a process, not an event. They held that the individual was the key player in the change

process, and that change was a highly personal as well as a developmental experience. Based on these factors, they contended that a well-designed professional development program arose from diagnostic/prescriptive thinking. Staff developers needed to have a systematic view of change and be constantly willing to adapt their behavior and techniques as the change progressed. Change was considered highly personal, and educational reform depended on the teachers.

In "Pervasive Problems and Issues in Teacher Education" from *The Education of Teachers*, Kenneth Howey and Nancy Zimpher note that if the process of becoming a teacher spans an entire career, it would be appropriate to look at the various stages of becoming a teacher from the beginning teacher through preservice and entry-level preparation, and on to continuing professional development or lifelong learning. In *Teacher Learning: New Policies, New Practices*, editors Milbrey McLaughlin and Ida Oberman write that in addition to individual stages of preparation, policies and practices should be evaluated in light of their compatibility with what they term the two cornerstones of the reform agenda: a learner-centered view of teaching and a career-long conception of teachers' learning. McLaughlin and Oberman contend that teacher development needs to begin with preservice teaching, and that veteran teachers need to continue to learn also. Because of the need for professional development to span a teaching career, Linda Darling-Hammond and Milbrey McLaughlin suggest, in "Policies That Support Professional Development in the Era of Reform" in *Teacher Learning*, that because of the need for professional development to span a teaching career, programs should be experiential; grounded in inquiry, reflection and experimentation; collaborative; connected to the teacher's work with students; sustained, ongoing, and intensive; and connected to other aspects of school reform. If teachers were involved in professional development programs in the subject area that they loved and were teaching, they would be more motivated to learn and experiment with new techniques and theories.

Ronald Brandt in *Education in a New Era* also recognizes the need for career-long professional development. He identifies seven transitions that teachers need to make: from individualism to professional community, from having teaching at the center to having learning at the center, from technical work to lifelong inquiry, from control to accountability, from managed work to leadership, from classroom concerns to whole school concerns, and from a weak knowledge base to a stronger, broader one. Brandt states that experienced teachers need and deserve high-quality professional development. He believes that even the best-prepared and most accomplished teachers would, throughout their careers, need the time and opportunity to enhance their professional knowledge, increase their variety of teaching strategies, and share approaches to problem solving.

Linda Darling-Hammond and Deborah Loewenberg Ball in *Teaching for High Standards: What Policymakers Need to Know and Be Able to Do* find that effective career-long professional development recognizes five basic premises: teachers' prior beliefs and experiences affect what they learned; learning to teach to the new standards is hard and takes time; content knowledge is the key to learning how to teach for understanding; knowledge of children is critical for teaching for understanding; and opportunities for reflection are essential to successful teaching. Ronald Brandt agrees with Darling-Hammond and Ball and concludes that teacher preparation and ongoing professional development would become the center of the reform efforts in this millennium, which they have. These programs, if appropriately managed, could be the key to school reform. Aiming professional developmen toward one's career supports the premise of promoting growth and development through active learning, experiences, and reflection. With the varying career stages teachers, professional development must l redesigned to impact the veteran teacher.

In *Mentoring and Supervision for Teacher Development*, Alan Reiman and Lois Thies-Sprinthall propose that a developmental phase for growth could be achieved through a well-designed professional development program. They believe five interacting conditions are required as stages of growth in an effective framework for professional development programs. The five condition: that they contend must exist in a well-desig professional development program are role taking, reflection, balance, continuity, and support and challenge. Role taking places a teacher into a more complex, helping role such as being a mentor or lead teacher. Hei teachers would ultimately generate new thoughts and behaviors in order to accompl their new role. The second condition, guid reflection, helps teachers gain meaningful insights from their role-taking experiences. The third condition, balance, between actio and reflection, is required to promote effect interplay. Appropriate balance and interpla allows for the last two conditions, continuit and support and challenge. Research conducted by Norman Sprinthall and Lois Thies-Sprinthall and reported in "The Need for Theoretical Frameworks in Educating Teachers: A Cognitive Developmental Perspective" from *The Education of Teachers* reinforces the importance of role taking wit adequate reflection. Likewise, the follow-up research conducted by Alan Reiman and Lois Thies-Sprinthall in *Mentoring and Supervision for Teacher Development* describe a need for adequate balance between action and reflection, which ultimately promotes effective interplay. Finally, interplay aids in the clarification and reflection on new and challenging educational issues. The Reiman and Thies-Sprinthall research also supports the importance of continuity over a period of time as the most important condition fo

Aiming professional development toward one's career supports the premise of promoting growth and development through active learning, experiences, and reflection.

professional growth. A sound professional development program ultimately reflects change and growth.

Alan Reiman, Norman Sprinthall, and Lois Theis-Sprinthall in "The Conceptual and Ethical Development of Teachers" from *Human Development across the Life Span* and Nancy Zimpher in "Right-sizing Teacher Education: The Policy Initiative" from *Teachers for the New Millennium* identify elements of an effective teacher development program across the teacher's career span. They conclude that an effective professional development program must be content sensitive, purposeful and articulated, participatory and collaborative, knowledge based, ongoing, developmental, and reflective. Barbara McEwan Landau and Debra Stollenwerk in *The Art of Classroom Management: Effective Practices for Building Equitable Learning Communities* also identify several professional development conditions that lead to successful school improvement: a commitment to staff development; practical efforts to involve the staff, students, and community in school policy and decision making; use of transformational leadership positions; effective coordination strategies; proper attention to benefits of inquiry and reflection; and a commitment to collaboration and planning. Professional development programs should have activities and topics for teachers at all phases of their careers. The program should be one where the teacher is actively participating in research in the subject area being taught. The teacher would then have opportunities to collaborate and to reflect on practices with other teachers in the same area, constantly learning and developing throughout his/her teaching career.

Technology's Place in School Reform

As we close our review of the literature on school reform, we want to briefly consider works on the impact of technology on reform. Even though classroom equipment has moved through a series of transitions over the past decade—from chalkboards to overhead projectors, from white boards to active boards—the digital divide is still an issue.

David Bolt and Ray Crawford in *Digital Divide: Computers and Our Children's Future* emphasize that access to technology has never been enough: continuous maintenance, upgrades, and, most importantly, staff development for teachers must also be provided. In *Toward Digital Equity: Bridging the Divide in Education*, Gwen Solomon, Nancy Allen, and Paul Resta note that if technology is to be considered a viable strategy for providing full access to quality education, school leaders must recognize the need for staff development that will empower teachers to be change agents in their classrooms. In *The Digital Classroom: How Technology Is Changing the Way We Teach and Learn*, David Gordon states that technology in and of itself cannot change schools. Caring, capable teachers well prepared for the high-tech classroom have the potential to reform classroom practices and student learning. However, Anne Hird in *Learning from Cyber-Savvy Students: How Internet-Age Kids Impact Classroom Teaching* describes the reality of students being more technologically savvy than their teachers. Without appropriate staff development, that pattern will continue long into the future.

Jane Margolis et al. note in *Stuck in the Shallow End: Education, Race, and Computing* that as the first decade of the twenty-first century comes to a close, educators still have much work to do if they are to broaden participation in technology. Physical access to computers is not enough; students must have intellectual access to technology and opportunities that foster critical thinking. Andrea diSessa in *Changing Minds* describes a future in which computers take the place of textbooks. Today computers, along with Internet access, have certainly become more available in many school settings, but they have not replaced textbooks.

Technology can become an important component of school reform, but only if it is included in the reform discussion from the very beginning. Leadership support for technology and ongoing staff development that focuses on teachers' gaining technological skills and on the effective integration of technology into the curriculum are critical if teachers are going to be able to make equitable, quality education available to all students.

Final Comments

Restructuring has become the driving concept of school reform. It is essentially a systematic focus on student performance, and is based on the premise that all students can and must learn at higher levels. It is a long-term commitment to fundamental change. There is hope, however, because the success of restructuring continues to hinge on the ability of people at all levels of the educational system\ to change. The challenge is greater than any the educational system has ever faced, but the rewards are also far greater. For readers interested in the recent literature on school reform, the books discussed in this essay are an essential starting point for understanding the current impetus for school reform, which includes restructuring.

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Corrections

Due to an in-house editing mistake, incorrect and erroneous text appeared in the review of *The Essential Petrarch*, ed., tr., and introd. by Peter Hainsworth, which originally appeared in the August 2011 issue (48-6782). *Choice* apologizes and has restored the correct text to the review online (available at www.cro2.org), and will publish it in the December 2011 print issue.

The review of *Life of Earth* (CH, Aug'11, 48-6883) contained an incorrect statement. We indicated that the author expressed concerns about "... the considerable damage that humans and innumerable other species" have caused to the Earth. The statement should have been: "The author expresses concerns about Earth's future and the considerable damage that humans have caused to it and to innumerable other species...." *Choice* regrets the error.