THE McREL APPROACH TO IMPROVING SCHOOLING AND ITS OUTCOMES:

PRELIMINARY REPORT

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PREFACE

Schools are complex systems with complex problems. Those problems need complex solutions, which necessitates taking a systemic approach to change. But most school administrators do not have the luxury of investing considerable time, resources, and effort into change processes. One solution is to form partnerships with organizations or consultants who can help get the change process started until sufficient local capacity is built. The McREL Approach is one such solution.

The McREL Approach is a framework for providing assistance to schools to improve student achievement. It is a systemic approach that is based on a coherent, articulated theory of change and research on practices that are correlated with improved student achievement. Designed to support a data-driven, standards-based education system, the McREL Approach promotes continuous improvement and the development of professional learning communities characterized by collegiality and collaboration. The McREL Approach is built on the premise that people have the ability and will to learn what is necessary to improve student performance and that improvement efforts should build on the strengths of people and programs rather than focus solely on weaknesses.

As Turnbull (1996) notes, partnership efforts with local schools and districts may require a deviation from traditional approaches if they are to be successful. As a result, rather than the linear, intact delivery of a specific "program," the McREL Approach involves development of a customized plan that builds the capacity of school and district staff to sustain improvement efforts for the long term. The Approach includes seven stages, during which consultants serve in a variety of roles. In assisting clients, consultants draw on a research-based body of knowledge about student characteristics and school, teacher, and leadership practices related to student achievement. To support long-term sustainability, the Approach also addresses organizational development.

This report is intended to document the status of the development of the McREL Approach for McREL staff and contract sponsors. It provides a description of the McREL Approach — the content of the Approach as well as the theory of change and theory of action that are embedded in the Approach. To provide a context for the McREL Approach, a brief history of recent school reform efforts is provided in the first section. The next sections present information on various models of educational change and the stages and focus areas of the Approach. The last section provides a discussion of next steps in developing and documenting the McREL Approach.

THE NEED FOR THE McREL APPROACH:
A BRIEF HISTORY OF SCHOOL REFORM

The 1980s saw the emergence of systemic reform, an approach based on the idea that change should be focused on all of the elements of the education system and coordinated around a set of clear outcomes for students (Fuhrman & Massell, 1992). Systemic reform, or large-scale reform, is based on the recognition that the various "parts" or components of an education system are interrelated. Systemic reform addresses not only what is occurring in a particular school, but also a broad range of systemic issues, including education policy, teacher preparation, discipline policies, school governance, and resources.

Systemic reform was inspired, in part, by the report *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983), one of the first major studies to address the state of the nation's entire education system. The report's now well-known and dramatic opening painted a bleak picture of American education:

> Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. This report is concerned with only one of the many causes and dimensions of the problem, but it is the one that under girds American prosperity, security, and civility. We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people (p. 5).

The report recommended that educators establish more rigorous high school graduation requirements, adopt higher standards and expectations for students, spend more time teaching the "basics," improve teacher preparation and the teaching profession, and provide the leadership and fiscal support necessary to achieve these reforms.

In many people's minds, attempts to increase the rigor of schooling would have a limited effect on the education system without explicit standards for student performance. As Ravitch (1995) argued, creating standards would "improve achievement by clearly defining what is to be taught and what kind of performance is expected" (p. 25).

By the late 1980s, bipartisan consensus resulted in a set of education goals to guide the overall course of education reform. At the Education Summit of 1989, President George H. Bush and the nation's governors agreed on broad goals for education, which were later legislated in the Goals 2000: Educate America Act of 1994. These goals focused on eight areas: school readiness, school completion, student achievement and citizenship, teacher education and professional development, mathematics and science, adult literacy and lifelong learning, safe and drug-free schools, and parent participation.

Through the Goals 2000 legislation, standards and standards-based assessment began to drive state and district policy. Key features of the standards-based reform movement include identifying challenging academic standards for what all students should know and be able to do and aligning other aspects of the system, such as testing, accountability, teacher certification, and professional development, with the new standards. In some cases, site-based governance also has been a focus in order to let local educators choose their own instructional programs for helping students achieve standards (Massell, Kirst, & Hoppe, 1997).

In the late 1990s, the focus of school improvement efforts was on comprehensive school reform (CSR), or whole school reform. In 1998, more than 3,000 schools across the nation were using CSR approaches (Education Commission of the States, 1998). Today, more than 5,200 are doing so (Southwest Educational Development Laboratory, 2004). The growth in the number of CSR schools can be attributed in large part to a bipartisan congressional initiative begun in 1997, the Comprehensive School Reform Demonstration (CSRD) program, known today as the Comprehensive School Reform Program. The purpose of the CSRD program was to provide financial incentives for schools to adopt comprehensive school reform programs based on reliable research and effective practices with the goal of helping all children meet challenging content and performance goals. Under the program, states receive funds from the federal government, which they distribute in the form of competitive grants to local districts. These funds are passed from districts to schools, which use them in conjunction with other federal, state, and local funds to adopt CSR programs. According to the legislation (U.S. Department of Education, 1998), CSR programs should meet all nine of the following criteria:

1. *Effective, research-based methods and strategies.* A CSR program uses innovative strategies and proven methods for student learning, teaching, and school management, based on reliable research and effective practices that have been replicated successfully in schools with diverse characteristics.

2. *Comprehensive design with aligned components.* The program has a comprehensive design for effective school functioning, including instruction, assessment, classroom management, professional development, parental involvement, and school management. The program should address needs identified through a school needs assessment and align the school's curriculum, technology, and professional development into a schoolwide reform plan designed to enable all students — including those from low-income families, with limited English proficiency, or with disabilities — to meet challenging state content and performance standards.

3. *Professional development.* The program provides high-quality and continuous teacher and staff professional development and training.

4. *Measurable goals and benchmarks.* The program has measurable goals for student performance that are tied to the state's challenging content and student performance standards and benchmarks for meeting the goals.

5. *Support within the school.* School faculty, administrators, and staff support the program.

6. *Parental and community involvement.* The program provides for the meaningful involvement of parents and the local community in planning and implementing school improvement activities.

7. *External technical support and assistance.* The program uses high-quality external support and assistance from a CSR entity (which may be a university) with experience or expertise in schoolwide reform and improvement.

8. *Evaluation strategies.* The program includes a plan for the evaluation of both the implementation of school reforms and the student results achieved.

9. *Coordination of resources.* The program identifies how other resources (federal, state, local, and private) available to the school will be used to coordinate services to support and sustain school reform.

In 2001, President George W. Bush signed the No Child Left Behind Act (NCLB) into law, which added two more criteria to this list (U.S. Department of Education, 2004a).

10. *Support*. The program provides support for teachers, principals, administrators and other school staff;

11. *Evidence of improvement*. The program has been found, through scientifically based research, to significantly improve the academic achievement of students participating in the program compared to students in schools who have not participated in the program or the program has been found to have strong evidence that it will significantly improve the academic achievement of participating children (p. 1).

In addition to changing the CSR requirements, NCLB institutes stronger accountability for closing the achievement gap and increasing achievement for all students. It also provides more flexibility for states in how they use federal funds, emphasizes the use of scientifically research-based programs and practices, and provides options for parents whose children attend schools that are chronically low performing. These options include access to supplemental educational services, such as tutoring and after-school programs, and transfer to a school that is performing better. The Act also addresses teacher quality, requiring that all teachers of core area subjects be "highly qualified" by the end of the 2005–2006 school year.

The seeds for the McREL Approach were planted in the 1990s as McREL worked with district and school staffs to help them implement standards-based education and fulfill its promise — high achievement for all students. The McREL Approach differs from other comprehensive school reform efforts because it incorporates what McREL has learned from a series of three meta-analyses: (1) effects of schooling on student achievement, (2) effects of instructional strategies on student achievement, and (3) effects of principal leadership on student achievement. As a result, the McREL Approach reflects McREL's accumulated knowledge about the important tasks that schools must undertake if they are to reach the goal of all students being proficient by 2014. These tasks are particularly daunting for chronically low-performing schools. The McREL Approach is designed to help such schools not only meet the short-term challenges of NCLB but to develop the capacity to respond to future challenges. This is accomplished by promoting distributed leadership, developing a professional learning community, and applying specific strategies for managing the differential impacts of change on members of the school community. The combination of McREL's knowledge and expertise and emphasis on the above make the McREL Approach different from others' previous and current attempts to improve low-performing schools. The sections that follow provide background information and details about the McREL Approach — the models of change that informed its development, the stages of the Approach, the content that forms its core, and the theory of change and theory of action that are embedded in the Approach.

MODELS OF CHANGE

How does change happen in K–12 education settings? This has been a topic of interest in the education community for decades. Although some educators and members of the public might think that little changes in education, others would disagree. In their view, at any given time some aspect of schooling is undergoing change. These opposing perceptions exist because some changes in education are too far removed from the classroom for teachers, students, and parents to notice or care. Changes that do relate to the core work of schools — teaching and learning — are often abandoned before they can take root. In other words, few people exhibit the knowledge, skills, and attitudes associated with the change and the change has not become part of the day-to-day operation of the school or district. This section summarizes two reviews of educational change models and explains how McREL's model of change

draws from and builds on these various models to help school and district staff understand and manage the change process, reaping positive results for teachers and students.

SASHKIN AND EGERMEIER'S REVIEW OF SCHOOL CHANGE MODELS

In their review of research and practice related to school change, Sashkin and Egermeier (1993) identified three perspectives on how and why schools change: (1) the rational scientific perspective, (2) the political perspective, and (3) the cultural perspective. The rational scientific perspective, which was dominant from the late 1950s to the 1970s, "assumes that people accept and use information that has been scientifically shown to result in educational improvement" (p. 2). During the 1980s, the political, or policy, perspective was prominent. This top-down perspective assumes that schools change as a result of external directives in the form of laws and mandates for implementing reforms or incentives for achieving desired outcomes. In the 1990s, the cultural perspective dominated. This perspective "emphasizes changes in meanings and values within the organization undergoing change" (p. 2). Leaders play a prominent role in this perspective, transforming the culture through their actions.

Sashkin and Egermeier (1993) also identified four strategies for bringing about change in schools: (1) fix the parts, (2) fix the people, (3) fix the school, and (4) fix the system. Each of these strategies reflects one or more of the three perspectives described above.

The "fix the parts" strategy reflects the rational scientific perspective by focusing on the transfer of innovations, such as new curriculum materials, teaching practices, or leadership practices, from the developer to school staff members. The "fix the people" approach focuses on providing training that helps teachers and administrators acquire the knowledge and skills they need to use new practices. This approach generally reflects the rational scientific perspective, but occasionally includes elements of the cultural perspective. The goal of the "fix the school" strategy, which draws from the field of organization development, is to help schools develop the capacity to solve their own problems. Use of data figures prominently in this approach, as do other processes that promote good quality of work life, sharing of information, and good organizational performance. This strategy primarily reflects the cultural perspective but sometimes includes the rational scientific and policy perspectives. The "fix the system" approach includes all three perspectives, focusing particularly on the cultural perspective. This approach, known as systemic reform, acknowledges that improving student achievement for all students "involves changes in roles, rules, and relationships" (Sashkin & Egermeier, p. 14) at all levels of the education system. These changes include decentralizing decision-making and redefining accountability in a way that takes into consideration the needs of various stakeholders (e.g., state education agency, school board, teachers, parents).

Sashkin and Egermeier (1993) sum up their review of approaches to educational change by emphasizing that each of the individual strategies can be successful in some circumstances. For example, they conclude that the "fix the parts" strategy can be successful if adopters are provided with high-quality information and appropriate levels of technical assistance. Similarly, their review of programs using the "fix the people" approach indicates that "staff development can be an effective tool for change, both in terms of change in teaching and improvements in learning. But as Fullan points out, such effects are not easy to produce, and there is no evidence that even when attained these outcomes lead to overall school improvement " (p. 10). The "fix the school" approach also can be effective, but it takes a great deal of time and money to train members of the organization in using data and other processes and to change the organization's culture. Although each of these strategies can be successful in some circumstances, none of them is successful on the broad scale that is needed to help all students succeed in school. Sashkin and Egermeier propose that combining the strategies to produce a systemic approach will be most effective for achieving wide spread success with school reform.

We have learned from past failures and from research that an approach to educational change must take a broad, systemic approach that involves structural change. This is done by allowing and attaining autonomy at the school-site level and by building strong school cultures that foster professional (and student) growth and development, encourage innovation and constant improvement, and are accountable for their results. This ideal condition can be approximated, if not fully attained, when there is a stable and supportive political consensus in the community affected, be it local, state, or national. And we believe it can be sustained if, under those conditions, educators are adequately prepared and motivated as professionals to continually strengthen and improve the technical core of content and pedagogy they use to advance student learning (p. 20).

This quote was written in 1993, in the early days of standards-based education when many inside and outside education thought that standards held great promise for accomplishing a variety of educational goals. More than a decade later, many are still waiting for the promise of standards to be fulfilled, and many have come to realize how difficult it is to apply the systemic approach.

ELLSWORTH'S REVIEW OF SCHOOL CHANGE MODELS

Similar to Sashkin and Egermeier, Ellsworth (2000) classifies the research and practice related to educational change into perspectives or models of change and suggests that the best approach to dealing with change is to draw from the various approaches. Ellsworth assumes that change can be understood and managed and considers change as a "specialized instance of the general communication model" (p. xvi) described by Rogers (1995). He presents a number of change frameworks that address different aspects of the change communication model and emphasizes that to produce desired effects, practitioners should closely match their interventions to the part of the change communication model on which they are operating. Further, for maximum and lasting effects, practitioners should strive for "coordinated operation on multiple portions of the change communication model" (Ellsworth, 2000, p. xvi).

Ellsworth adopts a systemic perspective on change and uses that to organize his presentation of the research on change. He views this perspective as a "fusion" of two traditions: the diffusion of innovation tradition, which emerged in the 1940s and reached prominence in the 1970s and general systems theory, which was developed in the 1950s and used in the business world for many years. This theory became a focus of education research in the late 1980s as a result of Banathy's (1988) work. Although historically the various change researchers seemed reluctant to share information, today there is "increasing recognition that there is value in uniting the empirical knowledge base of the classical models [of change] within a systemic context" (Ellsworth, 2000, p. 25). Ellsworth presents a number of change models to demonstrate how practitioners can use such an approach to effect change in the individual parts of the system as well as the system as a whole. The models and their key elements or features are presented in Exhibit 1 and explained in the following paragraphs based on information provided in Ellsworth's review.

Exhibit 1. Overview of Key Elements of Selected Models of Change

Attributes of an Innovation that Promote Adoption (Rogers)	Environmental Conditions that Promote Change (Ely)	Change Agent Roles in Adoption of Innovations (Fullan & Stiegelbauer)	Stages for Communicating an Innovation to Adopters (Havelock)	Adoption of an Innovation on the Individual Level (Hall & Hord)		Conditions Hindering Adoption of an Innovation (Zaltman & Duncan)	The Systems View of Change (Banathy, Reigeluth & Garfinkle)
				Stages of Concern	Levels of Use		
Relative Advantage	Dissatisfaction with the status quo	Teacher	Care	Awareness Personal Management	Orientation	Cultural	Stakeholder involvement
Compatibility	Sufficient knowledge and skills	Principal	Relate	Informational	Preparation	Social	Designing for the ideal
Complexity	Availability of resources	Students	Examine	Personal	Mechanical	Organizational	Understanding interrelationships
Trialability	Time	District Administration	Acquire	Management	Routine	Psychological	Creating a viable system
Observability	Rewards or incentives	Consultants	Try	Consequence	Refinement		
	Expectation for participation	Parent and Community	Extend	Collaboration	Integration		
	Commitment	Government	Renew	Refocusing	Renewal		
	Leadership						

The first of these models, exemplified by the work of Rogers (1995), relates to the innovation itself and the factors that affect its rate of adoption. One of these factors is attributes of the innovation. As shown in the first column of Exhibit 1, there are several key attributes: (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, and (5) observability. The first three of these attributes relate to the extent to which adopters perceive the innovation as an improvement over existing tools or practices; congruent with their existing needs, values, and experience; and easy to understand and adopt. The fourth attribute, trialability, relates to the opportunity to adopt the innovation a little at a time or over an extended period, gradually letting go of the old practice. Observability, the fifth attribute, relates to the ability to see the innovation in practice and to see the positive results of using the innovation.

The second model in Exhibit 1, Ely's Conditions of Change (1976), helps to explain the role of the environment — the organizational, structural, and motivational context — in promoting change. According to Ellsworth (2000), knowledge of these components can help change agents make better decisions about ways to proceed with the innovation and ease its adoption. Conditions that affect change include (1) dissatisfaction with the status quo, (2) sufficient knowledge and skills to implement the innovation, (3) availability of resources, (4) time to learn the necessary skills and integrate them into daily practice, (5) rewards and incentives for adopting the innovation, (6) expectation and encouragement to participate in the adoption of the innovation, (7) commitment to the innovation at all levels from leaders and other key stakeholders, and (8) leadership in the form of affective support (e.g., inspiration, encouragement, enthusiasm for the work).

Exhibit 1 also highlights the work of Fullan and Stiegelbauer (1991) who explain how stakeholders at various levels can affect the adoption of an innovation. Column three of Exhibit 1 lists seven levels of stakeholders: teachers, principals, students, district administrators, internal or external consultants, parents and community members, and government agencies such as the state department of education. The model emphasizes that because teachers are ultimately in control of what happens in classrooms, they play the key role in educational change. Nonetheless, other stakeholders are also important since their actions can serve to support or hinder teachers' efforts related to the innovation.

The fourth model included in Exhibit 1 serves as "the change agent's guide to the change process" at the system level (Ellsworth, 2000, p.112). This model was developed originally by Havelock (1973) and later refined by Havelock and Zlotolow (1995). The model includes seven inter-related phases through which change agents communicate the innovation to adopters: (1) care, (2) relate, (3) examine, (4) acquire, (5) try, (6) extend, and (7) renew. Although the model appears linear, in practice it is not – phases may be addressed in an order other than that listed, but the issues in each phase should be eventually visited and sometimes revisited. The cycle begins with bringing to light the reason for entering the change process and the extent to which there is desire for change. Remaining stages involve building relationships among the parties involved in the change effort, diagnosing the problem, finding resources, identifying and trying out various solutions with small groups, extending the innovation to a broad group, evaluating the effort, and strengthening internal capacity to support the innovation and to undertake new change efforts in the future without assistance from the change agent.

The next model of change considered, the Concerns Based Adoption Model (CBAM) (Hord, Rutherford, Huling-Austin, & Hall, 1987; Hall & Hord, 2001), addresses the change process from the perspective of individuals. Key dimensions of CBAM deal with how well different people put different elements of an innovation into practice (Innovation Configurations), the extent to which people are using the innovation (Levels of Use), and how people are reacting to the innovation (Stages of Concern). Exhibit 1 lists the seven Stages of Concern and seven Levels of Use that are central to the Concerns-Based Adoption Model. The Stages of Concern include awareness, informational, personal, management, consequences, collaboration, and refocusing. These stages, which focus on "the concerns of individuals

involved in change" (Hord, Rutherford, Huling-Austin, & Hall, 1987, p. 30), range from being aware of, but unconcerned, about the innovation (awareness) to using the innovation and reflecting on what might work even better (refocusing). The seven levels of use — orientation, preparation, mechanical, routine, refinement, integration, and renewal — refer to the adopter's first attempts to learn about the innovation, preparing to use it, focusing on basic use of the new practice, routinely using the practice without thought to improving use, adapting use of the practice first on a personal level and then in conjunction with colleagues, and making major adaptations to enhance the practice or considering other innovations that might work even better.

Resistance to change is natural and, according to Ellsworth (2000), the wise change agent understands the possible sources of resistance and views resistance as a form of feedback. Ellsworth presents Zaltman and Duncan's (1977) work on resistance factors as a way to help change facilitators interpret the causes of resistance and adjust their actions accordingly. Zaltman and Duncan identify 18 factors associated with resistance to change and organize them into four broad categories. Exhibit 1 lists these four broad categories of resistance to change: (1) cultural barriers related to values and beliefs characteristic of the broader social system , (2) social barriers related to values and beliefs of members of groups within the social system (e.g., group solidarity), (3) organizational barriers related to structures and power relationships in the client system, and (4) psychological barriers (e.g., commitment) that are characteristic of individuals.

In the last column of Exhibit 1, the big picture view of change — the systemic change model — is characterized by several features: (1) including stakeholders, (2) designing for the ideal, which means seeking the best conceivable design for the system, (3) understanding interrelationships — among the parts of the system, between the parts and the system as a whole, between the system and other systems, and (4) creating a viable system. This last characteristic means that regardless of the extent of the system that is the focus of the innovation, those involved in the change must ensure that they maintain the viability of the system as a whole. Authors associated with the systemic change model include Banathy (1988) and Reigeluth and Garfinkle (1994).

As Ellsworth (2000) explains, there are two approaches to systemic change in education that are distinguished by their emphasis on stakeholder involvement or stakeholder influence (centralized versus distributed leadership for systemic change). Those who hold the centralized view of systemic change believe that design of the system is best left to "professionals," with strong local leaders implementing the design and national or regional leaders coordinating the implementation. The distributive view of systemic change emphasizes the involvement of stakeholders at all levels in the collaborative design of the system.

MCREL'S THEORY OF CHANGE

Similarly to Ellsworth, McREL believes that a systemic model of change is most appropriate for guiding school change. For a number of years, McREL's work has reflected the Cordell and Waters (1993) model of systemic change in educational settings (Exhibit 2). A key premise of this systems view is that careful attention must be given to the areas and variables within each of three domains of educational systems — Technical, Personal, and Organizational — for purposeful and effective systemic change to occur. The Technical Domain focuses on the core work of the organization. The Personal Domain addresses human development, motivation, and learning. The Organizational Domain focuses on organizational learning and development.

Exhibit 2. The Cordell and Waters Model as Applied to Education Organizations

	DOMAIN		
	Technical	**Personal**	**Organizational**
Areas of Focus	- Curriculum - Standards - Instruction - Assessment	- Human Development - Learning - Motivation	- Organizational Learning - Organizational Development
What it Means	The subsystems that best promote learning and achievement of all students. These subsystems are primarily concerned with specifying the content and structure of the curriculum, instructional strategies, and assessment strategies	Subsystems that support the personal, motivational, learning, and interpersonal needs of those who serve, or are served by, the system	The subsystems that provide organizational and management structures, and policies that support the personal and technical domains
Premise	Systemic change is affected by the alignment of standards, curriculum, instruction, and assessment, and the interactions among relevant assumptions.	Systemic change is affected by underlying beliefs, assumptions, and values of those affected by innovations.	Systemic change is affected by organizational structures and the contexts within which innovations are expected to function.

Exhibit 3 provides examples of issues that are the focus of attention in each domain. When applying the McREL Approach, McREL staff assist school staff members in addressing these issues.

It should be noted that the three domains sometimes overlap and interact. Consequently, there are some crosscutting themes that are considered when McREL staff work with schools and districts to improve student achievement. For example, the overlap between the Technical and Personal Domains might occur in the area of professional development. An overlap between the Technical and Organizational Domains might occur in the area of curriculum, learning, and instruction. The change process itself might reflect the overlap between the Personal and Organizational Domains. Finally, systemic reform is an overlap among all three domains (McCombs & Whisler, 1997). Examples of areas that might be addressed in the various overlaps or intersections include the following (McCombs & Whisler, 1997):

- preservice teacher preparation reform strategies
- inservice staff development strategies
- standards, curriculum, instruction, and assessment alignment strategies
- a standards-based, learner-centered, interdisciplinary, and technology-supported instructional model
- personal change strategies
- leadership and organizational change strategies
- leadership and school culture assessment

Exhibit 3. Examples of Issues Addressed in the Technical, Personal, and Organizational Domains

Technical Domain	Personal Domain	Organizational Domain
Delineating comprehensive and cohesive sets of standards in core disciplines (e.g., science, mathematics, history) Identifying most effective strategies for enhancing the learning of diverse populations Providing alternative curriculum frameworks for organizing content areas into meaningful learning units Identifying alternative assessment strategies for measuring learning progress and achievement	Having meaningful connections to others Feeling empowered or provided with opportunities for personal choice and control Feeling validated and acknowledged as competent and of worth Being supported in a school or classroom climate of trust and respect Perceiving learning tasks or content to be meaningful and personally relevant Understanding personal roles and responsibilities Being committed to continuous change and lifelong learning Feeling that personal "voice" is heard and respected Understanding personal beliefs and attitudes about learning, learners, and teaching Communicating effectively with others and fostering positive interpersonal relationships	Supporting collaborative inquiry and participatory decision making Ensuring effective communications and information flow Fostering leadership among all system constituencies Providing flexible policies and procedures to allow creative practices within the practical constraints of system resources (e.g., time, equipment, and money) Providing visionary leadership and shared responsibility for change Ensuring public confidence with accountability strategies that inform and involve constituencies Supporting choice and responsibility at all levels of the system Enhancing collaboration and teaming strategies

Consistent with Ellsworth's (2000) recommendation, McREL's systemic approach to change integrates a number of theories, matching them to the three domains and the aspect of change that is the focus (e.g., resistance, the environment, the adopters). For example, work under the Technical Domain incorporates Rogers' (1995) theory about attributes of innovations.

McREL's theory of change also incorporates models of change that are related to the Personal domain. Specifically, McREL's theory of change posits that not all change is the same. Change that is viewed as an extension of the past is considered to be change with first-order implications; change that represents a significant break with the past is called change with second-order implications for those involved.

Change is considered to have first-order implications when stakeholders agree upon the importance of a change effort, can implement it with existing knowledge and skills, believe it is consistent with their prevailing values and norms, and have sufficient resources and motivation to implement the change. Change with first-order implications is sometimes referred to as *technical* (Heifetz, 1994) or *incremental* (Beckard & Pritchard, 1992) change.

In the case of change with second-order implications, neither the change that is needed nor the way to bring it about is readily apparent. There is conflict between the change and various stakeholders' norms and values, and stakeholders must learn new knowledge and skills and how to work collectively and collaboratively. Change with second-order implications also is known as *adaptive* (Heifetz, 1994) or *fundamental* (Beckard & Pritchard, 1992) change. Exhibit 4 summarizes the characteristics of change with first- and second-order implications.

Exhibit 4. Characteristics of Change with First- and Second-Order Implications

First-Order Change	Second-Order Change
• An extension of the past	• A break with the past
• Within existing paradigms	• Outside of existing paradigms
• Consistent with prevailing norms and values	• Conflicts with prevailing norms and values
• Incremental	• Complex
• Linear	• Nonlinear
• Implemented with existing knowledge and skills	• Requires new knowledge and skills
• Implemented by experts	• Implemented by stakeholders

When working with schools to address second order change in particular, McREL staff members incorporate ideas from various change models, including resistance to change (Zaltman & Duncan, 1977; Kotter, 1996), characteristics of innovations (Rogers, 1995), the environment for change (Ely, 1976), and stages that adopters go through when adopting an innovation (Hall & Hord, 2001).

In the Organizational Domain, McREL's theory of change incorporates ideas from living systems theory. Living systems theory focuses on the whole rather than the parts of a system and emphasizes that living systems follow five imperatives (Wheatley & Kellner-Rogers, 1996):

- The need for self-determination and freedom to create itself
- The need to preserve itself
- The desire to form relationships that connect the system to itself and its environment
- The capacity to invent new forms of itself in response to changing conditions in the system's environment
- The need for meaning, contribution, and growth

McREL's theory of change addresses these imperatives in three broad categories: *identity*, *information*, and *relationships* (Wheatley & Kellner-Rogers, 1996). A description of each category (drawing on Baird-Wilkerson's [2003] work) follows.

Identity refers to the organization's sense of self — its purpose, values, core beliefs, competencies, principles, and traditions. When an organization is clear about its identity, it is better able to withstand the constant onslaught of change because it knows its fundamental purpose. The organization knows when and how it needs to change to maintain its core purpose.

The *information* category focuses on how information flows in the organization — who gets to know what, when — and how information is used to take actions such as making decisions, planning work, and identifying solutions to problems. The organization's ability to take effective action will be impaired if information flow is restricted to certain members or if members do not feel it is safe to openly share their opinions about the organization and its work.

The *relationship* category focuses on trust and how individuals within an organization agree to work together. The relationship and information areas are intertwined. If there is little trust in the organization, or if relationships are constrained by hierarchy, power, and control, members of the organization cannot share information freely. They will be disconnected from one another and will not be able to fully tap the expertise that is within the organization. In addition, information that might help the organization examine its practices, such as information about how decisions are made, will not come to light in productive ways, and the organization's capacity for learning and growth will be limited.

McREL's theory of change is designed to support schools and districts in becoming dynamic, adaptable, sustainable, and coherent organizations. As a result, the theory of change also incorporates concepts from institutional theory, including *organizational memory* and *organizational learning*. Hanson (2001) describes organizational memory as the collective memory of the past experiences of an organization. Organizational memory includes knowledge stored as rules, routines, role requirements, and standard operating procedures as well as knowledge stored as personal experiences, beliefs, attitudes, conventional wisdom, and non-routine and informal documentation.

McREL's theory of change also encompasses Hanson's (2001) idea that organizational learning takes place at the collective level and that knowledge is acquired and exchanged among the individual, group, and organizational levels. As Hanson explains, this learning must include the acquisition of knowledge for the short term (e.g., to solve day-to-day routine problems) as well as knowledge for the long term (e.g., to design new governing policies and perspectives that allow the organization to adapt to changing environments). Hanson (2001) further notes that organizational learning is dependent on the accumulated knowledge on which the organization bases its decisions and on the experience, skills, education, and motivation of its employees. Guided by this aspect of the theory of change, McREL helps school and district teams develop procedures for maximizing organizational memory and organizational learning — and interactions between them — in order to accomplish organizational change.
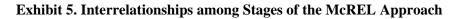
As described in this section, the McREL theory of change is comprehensive, incorporating elements from a number of theories that relate to specific aspects of adopting a change while maintaining the viability of the system as a whole. It differs from other theories of change in its attention to the implications of first and second order change in combination with its application of various theories of change to different domains (technical, personal, and organizational) of the education system.
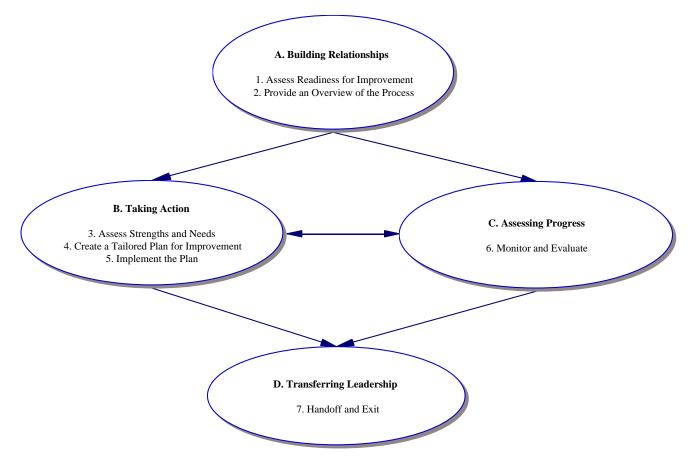
COMPONENTS OF THE McREL APPROACH

Improving student achievement is a complex task that requires a long-term commitment on the part of school staff. This section highlights how the McREL Approach reflects this commitment and complexity by describing several of the major aspects of the McREL Approach: (1) the stages of the Approach, (2) the focus areas of the Approach, (3) the theory of action embedded in the Approach, and (4) the roles that the change agent plays in carrying out the Approach. The theory of change underlying the Approach was discussed in the previous section.

STAGES OF THE MCREL APPROACH

The seven stages of the McREL Approach are interrelated and can be organized into four clusters: (1) building relationships, (2) taking action, (3) assessing progress, and (4) transferring leadership. These clusters and the interrelationships among stages and clusters are depicted in Exhibit 5.

Exhibit 5. Interrelationships among Stages of the McREL Approach

The descriptions that follow explain the goal(s) and types of activities that occur during each of the stages of the McREL Approach. Although each stage involves realizing particular goals, it is not imperative that one stage be completed before another begins. In addition, the stages vary in length, and progress within a stage may not be linear. Reflecting the complexity of the school change process, the length of a particular stage is not fixed. The following stages are named to capture the actions carried out by McREL staff as they work with schools and districts.

Stage 1: Assess Readiness for Improvement

The goal of Stage 1 is to gather background information about the facts and dynamics that led to the request for assistance with improvement, the nature and extent of current initiatives in the school, and how current initiatives build on past initiatives. This stage includes determining who is leading the change effort and the strength of their commitment to change as well as the commitment of other staff members. The readiness assessment also examines the resources that are available and the structures that are in place to support change. Relationship building begins in this stage and expands considerably in Stage 2.

Stage 2: Provide an Overview of the Process

In Stage 2, the McREL consultant explains the overall intervention process, the stages of the McREL Approach, the content that serves as the basis for designing the site-specific implementation plan, and the collaborative nature of the partnership. The focus is on building relationships among the parties, clarifying expectations and outcomes, and detailing the roles and responsibilities of all involved. For example, this is the time when everyone commits to using data for ongoing monitoring and evaluation of the improvement plan. McREL staff emphasize that although there will be some immediate successes as a result of the work, this effort is not a "quick fix" focused only on improving test scores. Rather, it is a systemic — and systematic — effort to build the capacity to identify and meet challenges to sustaining improvement. All parties involved sign a memorandum of understanding to formalize the partnership and their two- to three-year commitment to the improvement effort.

Stage 3: Assess Strengths and Needs

Data is the key word for Stage 3 of the McREL Approach. McREL staff focus on collecting information about the demographics of the site, student performance, and the status of the site in terms of organizational development and the use of effective school and teacher practices. Data collection may occur formally through surveys, interviews, and observations or informally through conversations with key leaders and review of data provided by the client. During this stage, McREL staff members keep in mind the size of the system and its access to data when making requests for information. The intent is not to overwhelm the site with demands for data but rather to gather enough information to determine an overall "need for improvement" ranking (e.g., "extensive," "significant," "moderate," "minimal") and an appropriate focus and entry point (i.e., strategy and content area) for working with the school.

Stage 4: Create a Tailored Plan for Improvement

The purpose of Stage 4 is to define the focus areas and process elements of the work. During this stage, McREL and school staff members work collaboratively to create a tailored plan for improvement. This includes defining goals for the work and establishing progress and outcome measures, including short- and long-term changes that will result from the work. It also includes identifying the specific issues that will be the focus of the work, for example changes in practice that might need to occur. Collaborative decisions also are made about how goals will be accomplished. For example, on-site, monthly book study groups or online discussion groups might be established for school staff to learn about effective teacher, leadership, and schoolwide practices. Regular meetings between McREL staff and school leaders might be scheduled to learn about the elements of a professional learning community and how to take actions to establish one in the school.

Part of developing the plan for improvement is deciding how the work will be monitored, adjusted, and evaluated. The plan establishes checkpoints for collecting and analyzing data, defines measures and expected progress at these checkpoints, and identifies data sources. The plan also outlines how data will be collected, analyzed, reported, and used to make adjustments.

Stage 5: Implement the Plan

Stage 5 of the McREL Approach is the heart of the work. During this stage, school leaders begin to put the plan for improvement into action. This stage is characterized by individual and collective learning of knowledge and skills related to leadership, instruction, curriculum, professional development, and a host of other topics that depend on the pre-existing conditions (e.g., working relationships among staff members, policies that support collaborative work) in the site. This learning is dependent on a high

level of rapport and trust between McREL staff and key school leaders — and between school leaders and their staff.

Since distributed leadership is a key concept underlying the McREL Approach, during this stage McREL staff work closely with site leaders to help them understand and apply this concept. Although distributed leadership is important, it does not mean that the Approach minimizes the role of the principal. In fact, the opposite is true. The Approach acknowledges the key role that principals play in building a culture that supports improvement. As a result, during this stage of the work, it is important for consultants to establish a good working relationship with the principal to support him or her in understanding how to carry out leadership responsibilities in a distributed leadership environment.

Stage 6: Monitor and Evaluate

Stage 6 of the McREL Approach addresses an area that is critical to the health of system — feedback. During this stage, McREL staff members assist clients in carrying out the data collection, analysis, and reporting processes outlined in the improvement plan developed in Stage 4. McREL staff members also help clients determine whether feedback is being used effectively for system improvement and whether the monitoring and evaluation system needs to be refined.

Stage 7: Hand-off and Exit

One of the purposes of the McREL Approach is to build the capacity of school staff members to sustain improvement. McREL staff work toward this goal throughout the various stages, but in Stage 7, deliberate actions are taken to help school staff members focus specifically on the elements of sustainability and assess the extent to which they have addressed these elements. School staff members use the results of this assessment to develop a plan that ensures that they have the appropriate structures and processes in place for sustainability. The plan may include ways to connect with other schools to form a network of ongoing support and "long-distance" ways to connect to McREL (e.g., through email, online discussions, phone calls). Including these connections in the plan helps to ensure that the last stage of the transfer of leadership for change from McREL to the school staff occurs gradually rather than abruptly.
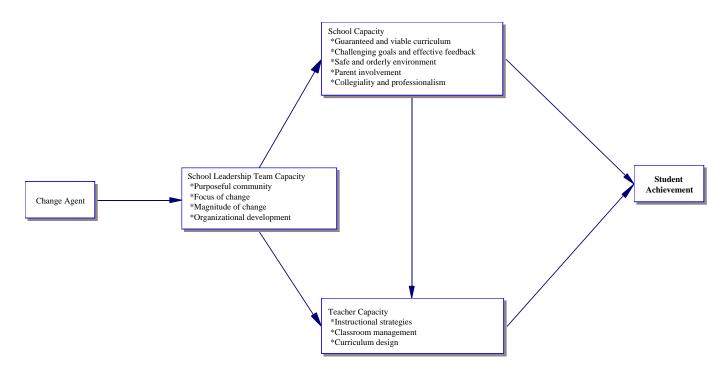
MCREL'S THEORY OF ACTION

McREL's theory of action for its work in schools (see Exhibit 6) assumes that improving student achievement for all students is a task that cannot be accomplished by the principal alone. To accomplish the task, the principal must share leadership for improvement with other staff members. This belief is reflected in McREL's focus on working with school leadership teams to increase their capacity to lead school improvement.

The role of the leadership team is to establish a professional learning community that can determine an appropriate focus for change, manage the implications of change for individual members of the staff and the staff as a whole, and develop skills for addressing organizational development issues such as problem solving and using data. These aspects of the team's leadership role are included under school leadership team capacity in Exhibit 6. McREL's theory of action includes the idea that the focus of school improvement efforts should be on the school-level and teacher-level factors that influence student achievement (Marzano, 2003). These factors are included under school capacity and teacher capacity, respectively, in Exhibit 6. The theory of action is built on the premise that leadership teams increase their individual capacity for improving instruction through their work on the team. In addition, as they work with other teachers on grade-level or cross-grade-level teams, leadership team members increase the

capacity of other individual teachers and the staff as a whole to improve instruction. This increased school capacity and individual teacher capacity are mutually reinforcing and lead to the ultimate goal of improved student achievement. As shown in Exhibit 6, the theory of action also includes the assumption that internal or external change agents can assist school teams in building capacity for improvement (Hall & Hord, 1987; Havelock & Zlotolow, 1995).

Exhibit 6. Representation of Theory of Action

THE FOCUS AREAS OF THE McREL APPROACH

The stages of the McREL Approach describe a change process in which an external change agent works with a school or district to improve student achievement. As described previously, during Stage 4 of the McREL Approach, change agents work with school staff to design a plan for improvement that includes the specific actions the school will take to address areas of need. The specific focus for the work that will be conducted as part of the plan for improvement is determined by gathering data related to a set of factors that have been associated with student achievement. These factors were identified through a series of three meta-analyses conducted by McREL. The first of these meta-analyses reviewed the research on instruction (Marzano, 1998), the second reviewed effects of various aspects of schooling and student characteristics (Marzano, 2000), and the third examined the effects of principal leadership (as reported in Waters, Marzano, & McNulty, 2004). The focus areas of the McREL Approach are derived from the results of these meta-analyses and McREL's systemic view of education described previously. The focus areas are organized into three categories: (1) schooling, (2) leadership, and (3) organizational development. McREL provides professional development and technical assistance to help schools address these focus areas.

Because the schooling category encompasses a number of factors, it is divided into three subcategories: school factors, teacher factors, and student factors. These subcategories were chosen to

organize McREL's review of the research on variables that affect student achievement because there is wide acceptance of these categories across a multitude of studies on this topic.

The factors shown in Exhibit 7 are those described in *What Works in Schools* (Marzano, 2003). These factors reflect collapsing and renaming of the original factors described in *A New Era of School Reform.* For example, "Guaranteed and Viable Curriculum" encompasses the original factors "Opportunity to Learn" and "Time" described in *A New Era of School Reform*. The collapsing and renaming was done in some cases for simplification and in other cases to more closely reflect the findings across a number of studies (Marzano, 2003). Details about the schooling subcategories (i.e., school-level, teacher-level, and student-level factors) are provided in this section. Details about the leadership and organizational development categories are provided in later sections.

Exhibit 7. Factors that Affect Student Achievement

School Factors	Guaranteed and Viable Curriculum Challenging Goals and Effective Feedback Parent and Community Involvement Safe and Orderly Environment Collegiality and Professionalism
Teacher Factors	Instructional Strategies Classroom Management Curriculum Design
Student Factors	Home Environment Learned Intelligence and Background Knowledge Motivation

Note*:* See *What Works in Schools* (Marzano, 2003), and see *A New Era of School Reform* (Marzano, 2000).

School Factors

School practices are those over which schools have control (Marzano, 2000). These practices are the result of formal or informal policies and have been associated with positive effects on student achievement. Descriptions and recommended action steps reviewed in this section draw heavily from *What Works in Schools* (Marzano, 2003), which is based in part on research reported in *A New Era of School Reform: Going Where the Research Takes Us* (Marzano, 2000).

Guaranteed and viable curriculum. The curriculum is considered "guaranteed" if teachers are given clear guidance regarding the content to be taught in specific courses and at specific grade levels and they do not have the option to disregard or replace this assigned content. The curriculum is considered "viable" if teachers can address the required content in the instructional time available. Activities that might be conducted with schools to address this practice include the following:

- Defining the essential content that students are to learn
- Developing curriculum documents that sequence and organize the essential content in such a way that students have ample opportunity to learn it
- Providing opportunities for all teachers to understand the district's standards and how to use the curriculum document
- Developing procedures and tools for monitoring the implementation of the essential curriculum, including how the curriculum is attained by different groups of students

- Developing policies and procedures for protecting the instructional time that is available
- Developing policies and procedures to promote learning by special populations of students (e.g., English language learners, special education)

Challenging goals and effective feedback. Challenging goals refers to high expectations or "pressure" for all students to achieve. This means that academic goals are set for individual students and for the school as a whole. In addition, student progress is systematically monitored. Students receive feedback that is timely and specific to the content being learned. Activities that might be undertaken to address this practice include the following:

- Developing teachers' assessment literacy and providing opportunities for teachers to collaboratively score student assessments
- Developing assessments that are used by all teachers at particular grade levels within a school or across a district to provide timely feedback on student performance in relation to the identified essential knowledge
- Developing report cards and transcripts keyed to students' performance in relation to the identified essential knowledge and valued nonacademic outcomes
- Establishing a limited number of specific, challenging achievement goals for the school as a whole (e.g., increase the percentage of students performing at the proficient level on the district assessment of reading comprehension from 25% to 35% in one year)
- Working with individual students (particularly those performing below the proficient level) to set specific, short-term goals related to specific topics within specific content areas

Parent and community involvement. Parent and community involvement relates to the extent to which parents (in particular) and the community (in general) are supportive of or involved in a school. Involvement includes (1) participation in the day-to-day activities of the school, (2) participation in decision making about school programs and practices related to student achievement, and (3) communication between home and school. Activities to address this practice include the following:

- Developing and implementing a communication plan that makes information easily and readily available and includes multiple ways for the school to communicate with parents and the community
- Establishing a volunteer program that provides multiple ways for parents and community members to be involved in the day-to-day activities of the school
- Creating structures (e.g., school improvement teams, site-based management teams) that involve parents in decision making in the school (e.g., establishing policies; planning, implementing, coordinating, or evaluating various school activities)

Safe and orderly environment. This practice is related to the climate, culture, or atmosphere for learning in a school. A culture conducive to learning protects students from physical or psychological harm and maintains order rather than fosters chaos. Activities to address this practice include the following:

- Establishing rules and procedures that decrease the chance that the school's characteristics or routines will result in student behavior problems

- Developing and communicating rules and procedures for general behavior (e.g., obscene language, truancy, fighting) in the school
- Establishing and enforcing appropriate consequences for violations of school rules and procedures and examining the effectiveness of those consequences
- Engaging students in designing and implementing a schoolwide discipline program that teaches self-discipline and responsibility to students
- Developing a system that identifies and helps students who have violent or extreme behavioral tendencies

Collegiality and professionalism. This practice deals with the professional interactions in a school and teachers' individual and collective belief in their ability to effect change. Professionalism also includes teacher subject-matter knowledge and pedagogical knowledge. This practice might be addressed with activities such as the following:

- Establishing norms of behavior that promote professional interactions among teachers
- Developing ways for teachers to be involved in making decisions about school-level policies
- Developing and implementing staff development plans that involve teachers in activities that are focused on specific strategies for specific content areas, provide opportunities for teachers to apply what they have learned and receive feedback on their application of that knowledge, and form a coherent sequence of experiences that build on one another

Teacher Factors

Recent research (e.g., National Commission on Teaching and America's Future, 1996; Sanders, 1996) has underscored what we have known for some time — teachers matter when it comes to student achievement. For example, Marzano's (2000) meta-analysis of the research on schooling found that the following three categories of teacher practices are positively correlated with student achievement.

Instructional strategies. There are a number of instructional strategies that are correlated with improvements in student achievement, which teachers should be aware of and use. These strategies include identifying similarities and differences; summarizing and note taking; reinforcing effort and providing recognition; homework and practice; nonlinguistic representations; cooperative learning; setting objectives and providing feedback; generating and testing hypotheses; and cues, questions, and advance organizers. Applying these strategies at appropriate times throughout an instructional unit can help maximize students' learning. Activities that McREL staff might provide to assist schools in this area include the following:

- Providing teachers with a framework for designing units of instruction that incorporates research-based strategies and a variety of assessment methods
- Providing information that helps teachers understand and use the nine categories of research-based instructional strategies associated with improved student achievement

Classroom management. Classroom management entails taking four main actions to maintain an environment where teaching and learning can occur. These actions include (1) establishing and enforcing rules and procedures, (2) carrying out disciplinary actions, (3) maintaining effective teacher and student relationships, and (4) maintaining an appropriate mental set for management, which includes being able to

quickly recognize problem behavior and act on it and being emotionally objective. This practice might be addressed with activities such as the following:

- Articulating and enforcing a set of classroom rules and procedures that address general classroom behavior, beginning and ending of the day or period procedures, transitions and interruptions, use of materials and equipment, group work, independent work, and teacher-led activities
- Using specific strategies (e.g., nonverbal disapproval, time out) that reinforce appropriate behavior and recognize and provide consequences for inappropriate behavior
- Implementing a schoolwide approach to discipline
- Helping teachers develop a healthy balance between dominance (providing direct guidance) and cooperation (providing opportunities for student choice and control, taking a personal interest in students, treating students equitably, and responding to students' incorrect responses in constructive ways) in their relationships with students
- Providing teachers with information about types of student behaviors (e.g., shyness, defiance), possible reasons for each type of behavior, and ways to address each of the behaviors
- Helping teachers learn how to use strategies that increase their ability to monitor students' actions in the classroom
- Helping teachers learn how to use strategies that foster teachers' emotional objectivity in their relationships with students

Classroom curriculum design. Classroom curriculum design refers to the sequencing, pacing, and learning experiences that are under the classroom teacher's control. Effective classroom curriculum design includes being clear about the types of knowledge addressed in the lesson or unit, structuring classroom tasks to allow for transfer of knowledge, and providing students with multiple opportunities to practice and apply new knowledge. This practice might be addressed with activities such as the following:

- Identifying the important declarative and procedural knowledge in the topics that are to be the focus of instruction
- Discussing strategies for presenting new content in a variety of ways
- Distinguishing between those skills and processes students are to master versus those they are not
- Organizing and presenting content in ways that highlight the critical features (e.g., sameness) of the content
- Designing and using complex tasks that require students to defend and justify their conclusions
- Designing and using assessments that are aligned with the types of knowledge that students are learning
- Designing and using formative and summative assessments

Student Factors

Most people acknowledge that student background characteristics have a significant influence on student achievement. Although many believe that there is little that schools can do to alter the effects of

these characteristics, others find guidance in research that indicates there are specific actions schools can take to lessen the effects of some student characteristics.

Home environment. Home environment is comprised of three basic elements: (1) communication about school, (2) supervision, and (3) parental expectations and parenting styles. The first element includes parents talking with and encouraging children about their schoolwork and providing resources to help their children do schoolwork. The second element includes monitoring time spent on homework and time spent in other activities (e.g., watching television, participating in sports). The third element relates to parents' aspirations for their children, the extent to which they communicate these, and the way they are communicated. Activities to help schools address this student characteristic might include the following:

- Helping schools develop parent involvement plans
- Providing training for teachers and parents on how parents can talk to their children about the value of school, encourage their academic progress, and provide resources for doing schoolwork; monitor and control their children's behavior that affects school work (e.g., time spent doing homework, time spent watching television); communicate high expectations for their children's academic success; and use an effective parenting style (authoritative)

Learned intelligence and background knowledge. Learned intelligence, or "crystallized intelligence," refers to knowledge of facts, generalizations, and principles. According to Marzano (2003), "crystallized intelligence is learned knowledge about the world; background knowledge is learned knowledge about a specific domain" (p. 136). Further, crystallized intelligence can be enhanced through mentoring or vocabulary development. To help schools address this student characteristic, McREL staff might engage school staff in such activities as the following:

- Developing programs that directly increase the number and quality of out-of-class experiences for students
- Developing a program of wide reading that also addresses vocabulary development
- Developing a list of vocabulary terms and phrases for specific subject-matter areas
- Using a sequential process for teaching vocabulary terms and phrases that are important to academic content

Student motivation. On its simplest level, motivation is the reason we do things. Student motivation is related to what drives them (striving for success vs. fear of failure), what they attribute success to (luck, effort, ability, task difficulty), their sense of self-worth, their emotions, and their deeply seated needs and aspirations. Teachers can take actions that address these elements in ways that increase motivation. To help school staff members motivate students, McREL staff might engage school staff in such activities as the following:

- Developing strategies for providing students with feedback on their knowledge gains
- Developing engaging learning tasks for students
- Creating opportunities for students to construct and work on long-term projects of their own design
- Teaching students about motivation and its effects on achievement

Leadership

Few would deny that good leaders are critical for the success of school improvement efforts. As a result, developing the capacity of leaders, both principals and teachers, is a focus of activities in several stages of the McREL Approach. These activities are based on McREL's extensive knowledge related to leadership gained from experience in the field, reviews of the literature, and a meta-analysis of principal leadership practices associated with student achievement (see Waters, Marzano, & McNulty, 2004). Consultants using the McREL Approach help school and district leaders learn how to apply leadership practices to the areas they must focus on when trying to improve student achievement. As a result, activities in the leadership area are designed to help school leaders accomplish the following:

- Develop a "purposeful community" in which there is collective ability to use assets and agreed upon processes to accomplish goals that are important to all community members.

- Choose an appropriate focus for the school's change efforts (McNulty & Bailey, 2004)

- Manage the transition from the old way of doing business to the new way (Bridges, 2003).

Organizational Development

As described in the theory of change section, the McREL Approach views schools as living systems that must address the systems imperatives of identity, information, and relationships. The McREL Approach also incorporates the concepts of organizational learning and organizational memory. Activities that McREL staff undertake with schools to address these areas include the following:

Identity

- Developing a shared understanding of collective purpose
- Identifying values and beliefs and expressing those as behaviors
- Developing a vision statement
- Examining the mission and vision and defining ways to act in congruence with them

Information

- Understanding the school's collective history, knowledge, and skills
- Identifying the school's resources and effective ways to use them to support student achievement
- Developing processes for communicating information to all stakeholders
- Developing ways for staff members to access the information they need
- Developing agreements and understanding about how decisions are made in the school

Relationships

- Examining the implicit and explicit agreements about how people will behave when they are together

- Developing strategies and attitudes to increase the level of honest and open communication
- Developing ways to encourage and learn from diverse and diverging views

ROLES OF THE CHANGE AGENT

The McREL Approach provides McREL staff with a framework for their roles as change agents. These roles can be described in various ways. For example, Baird-Wilkerson (2003) identifies the following four roles:

- The reflector facilitates both group and self-reflection in order to promote recognition of issues and deep learning.
- The provocateur engages people in defining and owning who they are by inciting their response to an outrageous statement that the facilitator makes.
- The confronter takes people exactly where they don't want to go in a discussion and unveils what people avoid or would not see otherwise.
- The space keeper provides groups with an environment for authentic dialogue, even when the dialogue is uncomfortable for people.

Havelock and Zlotolow (1995) offer another set of roles — catalyst, solution giver, process helper, and resource linker. Like the confronter and provocateur, the catalyst prods the system to help it overcome the inertia that keeps it from making necessary changes. The solution giver, or content expert, serves as a "surveyor of the larger landscape," making others aware of new ideas and stirring their interest in change. The process helper attends to all aspects of the change process — including evaluation — and focuses on helping others become problem solvers. The resource linker helps leadership teams find and make the best use of a variety of resources.

Under the McREL Approach, change agents serve in each of these roles depending on the needs of the site and the stage of the Approach. For example, in the early stages of the Approach, staff primarily serve as process helpers, catalysts, and solution givers. During the implementation of the plan, when the emphasis is on helping school staff establish structures and processes to support their improvement efforts, the process helper role is the dominant one that McREL staff play. This stage also calls for McREL staff to serve as confronters, space keepers, and provocateurs as they help school staff to think in new ways about their efforts to improve student achievement and what it will take to accomplish that. At any stage of the Approach, it may be appropriate for McREL staff to serve in the solution giver and resource linker roles, but the goal is to build schools' capacity to identify and solve their own problems.

NEXT STEPS

As described in this report, the McREL Approach provides a framework that guides McREL's work with schools and districts that are engaged in improvement efforts. The stages of the Approach and the focus areas in which professional development and technical assistance are provided have been defined. From 2002 through 2004, McREL field staff developed and/or pilot-tested various tools and strategies to assist schools during the stages of implementing the Approach in McREL's intensive sites in South Dakota and Kansas. Initial efforts are underway to document what is being learned about implementing the McREL Approach in these sites (McIver & Dean, 2004).

During 2005, McREL will focus on improving documentation of strategies and lessons learned in each stage, and field test existing strategies and tools in the South Dakota and Kansas intensive sites. For

example, the site visit summary report form will be revised so that consultants will be able to capture more details about how they made decisions about which tools to use for each visit to the South Dakota and Kansas sites. The electronic system for organizing and documenting tools and strategies for the various stages will be revised to increase ease of access and use.

Efforts will continue to further define how change agents can assist site leadership teams in identifying and taking appropriate actions in the focus areas (i.e., schooling, leadership, organizational development) described in previous sections. For example, when school leaders are considering ways in which to ensure that the curriculum is guaranteed and viable, they often have difficulty making decisions about which content is essential for students to learn and sequencing the curriculum in ways that provide students with the opportunities to learn that content. McREL staff might need to provide more examples of how other schools have accomplished these tasks. In the area of challenging goals and effective feedback, school staff members tend to struggle with focusing their efforts on one or two goals and providing timely feedback to students in relation to their performance on specific topics in the curriculum. In their work with school teams across the Central Region, McREL staff will define "prerequisite" activities that serve to scaffold clients' learning in these areas and prepare them to tackle the larger problems of ensuring that all staff are implementing the curriculum as intended and using classroom assessments formatively to provide feedback to students and to modify instruction.

Development efforts in the leadership area also will continue during 2005. Much is left to be done to translate the results of the meta-analysis on principal leadership into practical guidance that will help school leaders make the leadership responsibilities and practices identified by that meta-analysis part of their repertoire of skills. In addition, further work is needed to learn how to help principals and teachers understand and apply the concept of distributed leadership. A number of tools will be developed over the coming year to assist with this effort.

During 2005, the McREL Approach will be informed by research, development, and evaluation related to each of the focus areas, the role of change agents in school improvement, and development of professional learning communities. For example, the results of McREL's study of high-performing, high-needs schools (HPHN study) and McREL's synthesis on standards-based education will be incorporated in the design of tools and strategies for the school improvement Approach. In addition, McREL staff will continue to review related research literature and comb data collected in our intensive field sites in South Dakota and Kansas to enhance understanding of how to apply the Approach most effectively. McREL staff also will begin several new projects in the Central Region that involve application of the McREL Approach. Evaluations of these projects also will inform further development and application of the Approach.

The McREL Approach provides a way for McREL staff to learn about what is involved in helping schools and districts make the kinds of changes in their policies, practices, and programs that enable them to sustain improvement efforts for the long term. During 2005, McREL will capitalize on this learning opportunity and incorporate what is learned in revisions to the McREL Approach.

REFERENCES

Baird-Wilkerson, S. (2003). *A monograph on creating organizational change using a living-systems approach*. Aurora, CO: Mid-continent Research for Education and Learning.

Banathy, B. (1988). Systems inquiry in education. *Systems Practice*, *1*, 193-212.

Beckard, R., & Pritchard, W. (1992). *Changing the essence: The art of creating and leading fundamental change in organizations*. San Francisco: Jossey-Bass.

Bridges, W. (2003). *Managing transitions: Making the most of change* (2nd ed.). Cambridge, MA: Da Capo Press.

Cordell, F. D., & Waters, J. T. (1993). *Improving student performance: New strategies for implementing higher standards.* Greeley, CO: The Center for Peak Performing Schools.

Education Commission of the States. (1998). Comprehensive school reform catching on. *State Education Leader*, *16*(3).

Ellsworth, J. (2000). *Surviving change: A survey of educational change models.* Syracuse, NY: ERIC Clearinghouse on Information & Technology, Syracuse University. (ERIC Document ED 443 417)

Ely, D. (1976) Creating the conditions for change. In S. Faibisoff and G. Bonn (Eds.), *Changing times: Changing libraries (pp. 150-162).* Champaign, IL: University of Illinois Graduate School of Library Science.

Fullan, M., & Stiegelbauer, S. (1991). *The new meaning of educational change.* New York, NY: Teachers College Press.

Fuhrman, S. H., & Massell, D. (1992). *Issues and strategies in systemic reform*. New Brunswick, NJ: Rutgers University, Consortium for Policy Research in Education.

Hall, B. P. (1994). *Values shift: A guide to personal and organizational transformation*. Rockport, MA: Twin Lights Publishers, Inc.

Hall, G., & Hord, S. (1987). *Change in schools: Facilitating the process*. Albany, NY: State University of New York Press.

Hall, G. & Hord, S. (2001). *Implementing change: Patterns, principles, and potholes*. Boston: Allyn and Bacon.

Hanson, M. (2001). Institutional theory and educational change. *Educational Administration Quarterly, 37*(5), 637–661.

Havelock, R. (1973). *The change agent's guide to innovation in educations.* Englewood Cliffs, NJ: Educational Technology Publications.

Havelock, R. & Zlotolow, S. (1995). *The change agent's guide* (2nd Ed.). Englewood Cliffs, NJ: Educational Technology Publications.

Heifetz, R. (1994). *Leadership without easy answers*. Cambridge, MA: Belknap Press.

Hord, S., Rutherford, W., Huling-Austin, L., & Hall, G. (1987). *Taking charge of change*. Alexandria, VA: Association for Supervision and Curriculum Development.

Kotter, J. P. (1996). *Leading change*. Boston: Harvard Business School Press.

Marzano, R. J. (1998). *A theory-based meta-analysis of research on instruction*. Aurora, CO: Mid-continent Research for Education and Learning.

Marzano, R. (2000). *A new era of school reform: Going where the research takes us*. Aurora, CO: Mid-continent Research for Education and Learning.

Marzano, R. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Massell, D., Kirst, M., & Hoppe, M. (1997). *Persistence and change: Standards-based reform in nine states*. New Brunswick, NJ: Consortium for Policy Research in Education (CPRE Research Reports Series #37).

McCombs, B. L., & Whisler, J. S. (1997). *The learner-centered classroom and school: Strategies for increasing student motivation and achievement*. San Francisco: Jossey-Bass.

McIver, M., & Dean, C. (2004). *Intervention for School Improvement: Site Work Progress Report for 2004*. Aurora, CO: Mid-continent Research for Education and Learning (Regional Educational Laboratory Contract Deliverable 2004-10).

McNulty, B., & Bailey, J. (2004). McREL's *Balanced Leadership Framework*: School leadership that works. *Journal for Effective Schools, 3*(1), 17-33.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Department of Education.

National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future.* New York: Author.

Ravitch, D. (1995). *National standards in American education: A citizen's guide*. Washington, DC: Brookings Institution.

Reigeluth, C., & Garfinkle, R. (Eds.) (1994). *Systemic change in education*. Englewood Cliffs, NJ: Educational Technology Publications. (ED 367 055)

Rogers, E. (1995). *Diffusion of innovations*. New York: Free Press.

Sashkin, M., & Egermeier, J. (1993). *School change models and processes: A review and synthesis of the research and practice*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, Programs for the Improvement of Practice.

Sanders W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement. Research Progress Repor*t. Knoxville: University of Tennessee Value-Added Research and Assessment Center.

Southwest Educational Development Laboratory. (2004). Comprehensive school reform database. Retrieved from http://www.sedl.org/csr/awards/html

Turnbull, B. (1996). *Technical assistance and the creation of educational knowledge.* Washington, D.C: Policy Studies Associates, Inc.

U.S. Department of Education. (2004a). *Comprehensive school reform program*. Retrieved from http://www.ed.gov/programs/compreform/2pager.html

Waters, T., Marzano, R., & McNulty, B. (2004). Developing the science of educational leadership. *ERS Spectrum*, *22*(1), 4–13.

Wheatley, M., & Kellner-Rogers, M. (1996). *A simpler way*. San Francisco: Barrett-Koehler Publishers.

Zaltman, G., & Duncan, R. (1977). *Strategies for planned change*. New York: John Wiley and Sons.