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Realizing Sustained School Improvement

Jeanice Kerr Swift

University of Denver

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REALIZING SUSTAINED SCHOOL IMPROVEMENT

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A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

________

by

Jeanice Kerr Swift

June 2011

Advisor: Dr. Kent Seidel
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Title: REALIZING SUSTAINED SCHOOL IMPROVEMENT  
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Abstract

Developing effective methods for improving America’s schools is dependent upon coordinated work of practitioners and researchers. School improvement proves a complicated, confusing and most often troubled process; one characterized by the unprecedented challenges of dramatic societal shift, increasing levels of student need, and ongoing involvement from political and governmental influences. The drive to discover better ways to consistently improve schools is fueled by urgency for dramatic results.

This research examines both the macro and the micro levels of the school improvement process and illuminates the need for an intentional new way of thinking and leading. At the macro level, the study examined the need for implementing a systems approach to improve America’s schools. The study explored a single school’s improvement journey. This work aligned individual and group perceptions of staff members alongside student achievement outcome data framed against the findings in the literature.

The study rendered themes from within the reflected experiences of participant educators; the work pointed to the need for an improved social technology, the importance of teams, and shared leadership in the orchestrating of successful school improvement processes, particularly the essential roles of collective listening, learning, and leading to realize transformed outcomes for schools.
Acknowledgements

“The law of flotation was not discovered by contemplating the sinking of things, but by contemplating the floating of things which floated naturally, and then intelligently asking why they did so.”

-Thomas Troward

I offer much gratitude to the many individuals who have contributed to enriching this work and my life in so many ways:

To my immensely helpful advisors on this project, Dr. Kent Seidel and Dr. Linda Brookhart, Dr. Mary Thurman, Dr. Elinor Katz, and Dr. Ellen Bennett Steiner


To the strong women, all teachers in their unique ways, who have profoundly influenced me: my mother, Shirley Goodin Crabtree, grandmother, Jewell Byrd Kerr, step-mother, Ruthanne Jackson Kerr, step-grandmother, Elizabeth Preston Crabtree Misener, lifetime mentor and friend, Judy Chapman, and, always, my beautiful and remarkable twin sister, Jeanette Kerr Jacinto.

Having lived and worked on the ‘corner of research and practical application’ for almost 25 years, I am most grateful for the rich experience shared with those who participated in this research.

To the amazingly competent, committed, and caring staff of Colorado Middle School, Colorado School District who faithfully and enthusiastically embraced the challenge of translating our beliefs and hopes about school improvement into our daily reality and never stopped asking the question, “What if?” for the good of our ‘kids.’

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Chapter 1: Introduction

Despite several decades of school reform efforts, orchestrated from both within and without the public education environment, American schools have failed to realize sustained positive achievement trends for students. Achievement gaps between traditionally underperforming and performing groups of students prove one of the major challenges in improving U.S. education. Outcomes in stimulating systems improvement remain flat overall and prove particularly dire for those students and schools characterized by poverty and minority populations (Darling-Hammond, Noguera, Ravitch, Reeves, Fullan). While a great deal of emphasis has been placed on single-faceted improvement approaches applied from external sources into school settings including research-based interventions, program implementation, and whole-school initiatives, significantly less attention has been invested in examination of the improvement processes of schools that have realized sustained improvement.

This research was dedicated to moving toward a future when transformative school improvement processes consistently produce positive student achievement outcomes, results that bear no correlation to ethnicity, socioeconomic status, gender, and zip code. This pressing demand was the focus for this study. School improvement movements over recent decades have sought to quantify precisely what is needed to improve student achievement and American public schools, to develop a ‘recipe’ that schools could follow to improve outcomes for students and to transform public schools
from mediocre to excellent. Educational movements in conjunction with the No Child Left Behind legislation have focused largely on single-faceted approaches to improve schools. Many improvement efforts in schools and districts assumed a program application approach to improving student achievement, one that equates school success to locating and implementing the correct, ‘research-based’ program into a school. Success has been measured in scores on high-stakes achievement tests in math, reading, and writing. This study presents an alternative path.

At the heart of this study lies the story of one school’s journey. That journey demonstrated that the intuitive understanding necessary to solve complex problems is most often discovered on the scene by those who are invested in the setting, not remotely by policy-makers, political pundits, legislators, or other bystanders. Listening to voices from the field was an appropriate place to examine how to improve student achievement outcomes for students. The study explored how dedicated and reflective practitioners were: willing to face brutal realities of the current state of student achievement, courageous about implementing change processes, and reflective about their work to ensure continuous improvement. The solution to improving academic and behavioral outcomes for students is multidimensional in nature; it exists within a systems approach, rather than in the ‘quick fix’ of a purchased program. At the nexus of research and practice there is rich possibility for enlightened discovery; the strength of this study is that it originates from this place and benefits from the rich diversion of the twin sisters of learning, intuition, practice, and data. If school improvement is to be realized, it will certainly be accomplished by individual school-based teams such as the one highlighted
in this study, and it will result from working within a systems approach to improve achievement outcomes for America’s children.

**Definition of Terms**

*21st Century Competencies* - skills and habits of mind that allow people to actively participate in a 21st century society. These competencies are imbedded in critical thinking and working together to develop innovative solutions to solve personal and societal needs.

*Access* – Universal access to quality education is the ability of all people to have equal opportunity in education, regardless of their social class, ethnicity, background, or physical disabilities.

*Accountability* – The high-stakes testing and accountability movement in education has asserted that educators must be held ‘responsible’ or accountable for student performance outcomes.

*Equity* – Equity in educational opportunity suggests more than equality; equity refers to creating an equivalent chance for success in learning and may involve compensatory opportunities for children who arrive at school behind in experience, skills, learning, and understanding.

*High-stakes testing* – Made popular with the 2001 legislation, No Child Left Behind, high stakes testing refers to the one-point-in-time method of administering standardized measures of achievement the results of which contribute to rating schools, leading to honors or sanctions for the school, dependent on student scores.

*Positive Behavior Supports* — PBS is a decision-making, operational process to improve academic and behavioral outcomes for all students by guiding student thinking in embracing core values, sound decision-making processes, and improved social interactions.

*Presencing* – defined by Scharmer as to sense, tune in, and act from one’s highest future potential – the future that depends on us to bring it into being. Presencing blends the words ‘presence’ and ‘sensing’ and works through ‘seeing from our deepest source.’

*Realizing* – defined by Hayashi (2010) as the skillful means needed to engage in compassionate, powerful and wise action, as a process of bringing insights, sparks of inspiration, and crystals of ideas into prototypes. Hayashi describes realizing as a phase when we move into action quickly and create small projects that can move the vision forward; bring the vision down to earth and join the ideas with all the on-the-ground practicalities, restrictions, demands and obstacles.
Response to Intervention – Response to Intervention is a framework for instructional design featuring three tiers or levels. Intensity and duration of instruction increase as a student moves up the tiers. Tier 1 is Universal, Tier 2 is Strategic, and Tier 3 is Intensive. In a Response to Intervention system, students begin in the universal tier of instruction and move along the continuum in order to meet their needs and achieve improved learning.

Sensing – Sensing is defined by Otto Scharmer as the view from within. When one enters a state of sensing, one experiences a collapse of the boundary between observer and observed.

The Challenge of Improving American Public Schools

American school improvement efforts, one decade into the 21st century, prove a complex and convoluted process, one characterized by the realities of societal shift, increasing levels of student need, and demands for vastly differing 21st century competencies. Despite unprecedented political and governmental, business, and private sector influence in public education over recent decades, efforts to improve America’s schools have failed to produce sustained positive achievement outcomes (Darling-Hammond, Fullan, Neuman, Noguera, Payne, Ravitch, Reeves). Since President Johnson’s declaration of a “free and equitable education for all,” a statement uttered against the backdrop of the Civil Rights movement, school improvement initiatives have failed to achieve the ideal of equity (Elementary and Secondary Educational Act, 1965). Presently, only 1 in 10 kindergartners from poverty becomes a college graduate; unfortunately, a significantly greater number become inmates, contributing to what the New York Times recently labeled ‘our prison nation’ (Darling-Hammond, 2010, p.3).

Despite decades of work, characterized by numerous improvement initiatives from a variety of constituents, American schools have not realized positive achievement trends for students, particularly among those students most at-risk. Fullan (2010)
describes the American school system as, “a large, egregious example of failed reform” (p.xv). The A Nation At Risk report, authorized by the National Commission on Excellence in Education, 1983, referred to the gap in American educational delivery, stating, “if an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war” (p.1). Improving the quality and consistency of positive outcomes for students in public schools remains a critical hurdle in improving America’s future.

Three central areas of concern are revealed within public school improvement research: an overall lagging level of academic performance and preparedness for college and work, a persistent inequity in student performance across traditionally under-performing and performing student groups, known as the ‘achievement gap,’ and the dismally poor performance observed in many of the nation’s urban schools. These three distinct realities recur in reviewing both the historical and current state of US public education (Darling-Hammond, Neuman, Payne, Singham). These distinct realities inform the work in improving educational outcomes for American public school students.

A lack of academic performance is illustrated in the most recent National Association for Educational Progress (NAEP) scores; the majority of students nationwide failed to reach proficiency in all areas tested. Thirty-eight percent of twelfth-grade students performed at or above the Proficient level in reading and one quarter (26%) performed at or above the Proficient level in mathematics in 2009 (National Center for Education Statistics). In Colorado, among 8th grade students who moved to high school in the fall of 2010, just 64% of students scored proficient in reading on the Colorado Student Assessment Program (CSAP) and half of students (50%) rated proficient in math.
(Colorado Department of Education). Clearly, there remains much work to do in reconciling the American ideal of top-quality education for all with the current reality in performance outcomes.

**Study Significance and Research Questions**

While there exists in the research an abundance of theories, ‘good’ ideas, and proposed program applications as to how best to improve American schools, far too few authentic stories of school improvement exist in the body of literature on school improvement. Certainly, many examples of failure have been documented in the public media as well as in educational research. Although rare, examples of schools that continue to see improvement in achievement outcomes despite increasing impacts of poverty, second language learners, and other factors known to inhibit learning can serve as models and inform the collective work. The purpose of this study was to analyze a school improvement process and enhanced instructional design to:

- improve math achievement for *all* students at a middle school over a five year timeframe (2005-2009),
- narrow the achievement gap across traditionally high-performing and low-performing subgroups, including black, Hispanic, white, boys, and girls, at 6th, 7th, & 8th grade, over five years,
- improve math achievement in all subgroups (comprising 30 or more students) including black, Hispanic, white, boys, and girls, and
- increase the percentage of students scoring *Advanced* while reducing the percentage of students scoring *Unsatisfactory* as measured by CSAP
Research Questions

The research questions of the study were:

1. What were the reflections of the personal and shared experience of participant educators who worked in the school during the five years of a successful school improvement implementation?

2. What components of school improvement do educators believe contributed most directly to the sustained improved achievement?

Analysis of verbal and written responses from focus group discussions of the reported experiences of educators who participated in the improvement of the subject school, patterns and discoveries were viewed through Theory U’s three lenses of listening, learning, and leading. These findings were examined against the backdrop of learning organization and school improvement research to discover more about a successful school improvement process.

Researcher Bias

As a veteran educator, this researcher participated in school improvement processes over 23 years, working in the roles of teacher (grades 6-12), literacy coach, assistant principal, and executive director, K-12 schools including working within the school and school district that was the subject of the study. Personal biases were controlled for by using clearly outlined processes for gathering and analyzing data. This study contributed to knowledge of effective school improvement processes, potentially advancing educational practice in the areas of informing an improved process for schools, one based in systems-thinking and focused on improving achievement outcomes for all students.
This study is the authentic story of one school improvement journey. The analysis of outcomes, observed through the voices of its teachers opens insights into the behaviors, attitudes, practices, and systems-organization that resulted in positive results in student performance. In discussing a commitment to focus on the kinds of research findings that, “hit us right between the eyes, on robust, outlier findings,” Payne (2010) points out, “Knowing what happens on the average in urban schools is often perfectly useless. We need to know more about what can happen, not what ordinarily does happen. One success, Robert Merton noted, tells us more than a thousand failures: one success tells us what is possible” (p. 7). This study sought to ‘show and tell’ precisely what is possible when a school team discovers a way to realize and sustain positive outcomes for students, despite increasing levels of need. This is precisely why the story of one Colorado middle school presents an authentic and worthy illustration.

This examination of one school’s improvement process, observed through the lens of Theory U (Scharmer, 2009) and Five Disciplines of a Learning Organization (Senge, 2006), enlightens an alternative path to school improvement. Theory U was developed by C. Otto Scharmer, Joseph Jaworski, Adam Kahane, and their colleagues as a way “to design and lead deep collective learning processes” (Senge, 2006, p. 401). Theory U has been described by Hayashi (2010) as a framework for effecting change personally and organizationally and as an approach to address complex issues such as climate change, poverty, health, financial instability, and education. Hayashi explains, “It addresses issues that cannot be solved by relying on an upgraded version of the past. These issues require innovative, fresh, and deeper ways of knowing and acting” (p. 2). A foundation of
Senge’s Systems Thinking animated by Scharmer’s Theory U improvement process form the framework of this analysis of effective school improvement process.

Senge (2006) points to the advantage of a Theory U process for improvement in organizations based authentically in the emerging future adding, “the real point in moving up the U, and the point of the whole U process, is building capacity in large and diverse communities to see ‘what is’ and to enact new social systems; it is learning how to learn for complex intra- and inter-organizational networks” (p. 403). A dramatically different proposal for creating more successful educational outcomes is one that moves through a figure U process including the three critical stages of an open mind, open heart, and open will. In this case study research, the exploration into an effective school improvement process was analyzed within the framework of Scharmer’s Theory U. Translating Scharmer’s phases of sensing, presencing, and realizing (Scharmer, 2009) as processes of listening, learning, and leading through which the examination of school improvement, at the macro level of the body of research as well as the micro level of one school team’s experience, will take shape.
Chapter Two: Literature Review

Introduction

This chapter presents critical information needed to grasp the context for educational leadership and school improvement. Examining school improvement processes from a generative, future-oriented perspective formed the foundation of this research work and is explored within the context of the learning organization, effective systems change and school improvement processes. This study focused on an examination of one school’s successful improvement journey. The work of Scharmer (2009) and Senge (2006) serve as vehicles for organizing the vast amount of information and research regarding school improvement. Scharmer’s (2009) *Theory U*, describes change process in three progressive phases — *sensing, presencing, and realizing* (Hayashi, 2010). Scharmer (2010) describes Theory U in this way:

Theory U is \( r = f(a) \). The reality \( r \) that a system of players enacts is a function of the awareness \( a \) that these players operate from. Put differently: The quality of results in a system depends on the quality of relationships between the players in a system, and the quality of relationships depends on the quality of awareness that these players are operating from (p. 4).

In the context of this application to school improvement processes, three corresponding terms have been selected to frame the articulation of change process in schools and teams; the study will examine the process through the lenses of *listening, learning, and leading*. Senge’s (2006) *Five Disciplines of a Learning Organization* provides foundational perspectives for framing school improvement. Table 1 illustrates
the *Listening, Learning, and Leading* framework used to organize this study as well as demonstrates the relationship to the works of Scharmer and Senge. The historical context and current condition of American public education, effective change processes, systems improvement, transformational leadership, and the learning organization are examined within this framework.

Table 1

**Connections Chart: Theory U - The Fifth Discipline**

<table>
<thead>
<tr>
<th>Theory U</th>
<th>Five Disciplines of a Learning Organization</th>
<th>Listening, Learning, and LeadingSchool Improvement Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co – sensing</td>
<td>Mental Models</td>
<td>Listening – Observe, Observe, Observe</td>
</tr>
<tr>
<td>Transforming</td>
<td>Team Learning</td>
<td>What is the current reality in the school?</td>
</tr>
<tr>
<td>perception</td>
<td>Systems Thinking</td>
<td>What is the collective pattern that gives rise to all of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the specific examples observed?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observer becomes part of the system observed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What strengths do we already have on which we can build?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What areas of weakness/incongruence exist?</td>
</tr>
<tr>
<td>Co – presencing</td>
<td>Personal Vision</td>
<td>Learning – What capacities will need developing?</td>
</tr>
<tr>
<td>Transforming self</td>
<td>Building Shared Vision</td>
<td>What is our highest vision for our school?</td>
</tr>
<tr>
<td>and will</td>
<td></td>
<td>What individual and collective capacities will be needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to accomplish this growth?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How will we create a shared vision for the future of our</td>
</tr>
<tr>
<td></td>
<td></td>
<td>school?</td>
</tr>
<tr>
<td>Co – realizing</td>
<td>Team Learning</td>
<td>Leading – Take action toward immediate gains and</td>
</tr>
<tr>
<td>Transforming</td>
<td>Systems Thinking</td>
<td>establish work for long-term projects</td>
</tr>
<tr>
<td>action</td>
<td>Continual Reflection</td>
<td>What immediate short-term ‘wins’ can be implemented</td>
</tr>
<tr>
<td></td>
<td>on mental models and visions</td>
<td>quickly?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What steps can be taken now to create structures within</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the organization toward long-term improvements and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sustainable growth?</td>
</tr>
</tbody>
</table>
Listening: Performance Problems Persist

Careful observation of the current state of educational achievement in American public education reveals three areas that command attention: gaps in achievement, a pattern of chronically underperforming schools, and the escalating challenge of educating increasing numbers of at-risk students. Achievement gaps between traditionally underperforming and performing groups of students prove one of the major challenges in improving American education. The most recent National Assessment for Educational Progress (NAEP) assessment data reveal that score gaps persist in both reading and math between White students and their Black and Hispanic peers. On 2009 reading assessments, neither the 27-point score gap between White and Black students, nor the 22-point gap between White and Hispanic students was significantly different from the score gaps in previous years. In math, while all three racial/ethnic groups made gains in 2009, neither the White – Black nor the White – Hispanic score gap was significantly different from corresponding gaps in 2005; the White – Black gap in math hovers at a 30 point difference and the White – Hispanic remains consistent at a 23 point difference. Volumes have been written over the previous decade regarding gaps in performance across subgroups of students (Darling-Hammond, Noguera, Paik, Singham). Equity of opportunity and quality educational outcomes for minority students and students from poverty form critical issues in the school improvement discussion. Darling-Hammond (2010) states, “we face pernicious achievement gaps that fuel inequality, shortchanging our young people and our nation”
Reducing and eliminating these persistent achievement gaps remains central to improving American public school outcomes.

Singham (2005) establishes the achievement gap as a problem symptomatic of a much deeper issue: that underachievement affects all subgroups of students. Referring to groups of traditionally underperforming students as ‘canaries in the mine,’ he argues, “White students underachieve, and black students underachieve even more,” and, “we are not doing a good job of teaching in general, and the size of the achievement gap should be viewed as a measure of our failure to teach all students, not just the currently underachieving ones” (p.3). Singham concludes that the achievement gap is a direct outcome of a systemic failure to implement teaching practices that promote conditions for significant learning to occur for all students. Noguera and Wang (2006) describe this generation of educators as having been “called on to reduce racial disparities in achievement – to move beyond equity in opportunities and focus attention on the need for equity in results” (p. xi). Observing the realities of disparity in performance compels the work to improve academic achievement for all students while reducing and eliminating persistent performance gaps across student groups.

Nowhere is the failure to improve student outcomes more graphically depicted than in the nation’s chronically underperforming schools, many located in urban centers (Payne, Noguera, Chenowith, Bryk, Ravitch). Thompson (2010) concludes that low-performing schools are more likely to be attended by, “three of the most marginalized groups in the U.S. – poor children, Latinos, and African Americans” and adds that the failure to resolve this problem has resulted in a nation of ‘haves’ and ‘have-nots;’ the
outcome is that this nation, “proclaims equality and justice for all while practicing a pernicious caste system” (p. 167). Payne (2010) characterizes these chronically low-achieving schools as the most ‘intransigent schools, the schools at the very bottom,’ declaring them worthy of intense public scrutiny. He concludes that after two decades of energetic reform many, “especially the bottom-tier schools, and most school systems seem to be pretty much the same kind of organizations they were at the beginning” (p. 4).

The current status of the most at-risk schools and the underserved, at-risk students attending them is a significant measure of the lack of progress in American school improvement. Recently, updated numbers were released in an addendum to the November, 2010 report, Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic. This report celebrated a reduction in the number of U.S. students attending ‘dropout factory’ schools (schools with graduation rates no higher than 60 percent) and yet 2.1 million students (2009 data) still attend these schools characterized by dramatic deficiency in graduation rates (p. 5). Clearly, there remains much work to do in elevating performance outcomes in America’s lowest-performing schools. Stephens (2010) describes the crisis of low-performing schools as the civil rights issue of our generation, stating, “So far, there has been no universal remedy for this chronic low performance” (p. 3). Discovering ways to effectively improve America’s schools must prioritize a plan to revitalize underperforming schools.

Improving academic performance becomes increasingly challenging when considering the growing numbers of students who arrive at school heavily impacted by backgrounds of poverty, language deficits, nutritional inequities, and lack of support at
home. These factors rank among the most predictable realities of disadvantage. The demographic shift in the population of students arriving to public schools is most profoundly characterized by a dramatic rise in the number of students living in poverty.

In the 2007 UNICEF Innocenti Report Card 7 assessing the lives and well-being of children and adolescents in economically advanced nations, the U.S. ranks next to last in children’s well-being (p. 2). The Census Bureau recently reported that the percentage of Americans struggling below the poverty line in 2009 was the highest it has been in 15 years and points out that, “this rise in poverty was steepest for children, with one in five affected” (Eckholm, September 16, 2010). Students disadvantaged by their circumstances make up an increasing number among students who attend U.S. public schools. Achievement scores demonstrate that while most school systems do moderately well with middle and high-income students, there remain dramatic lapses in reading and math achievement among students from poverty; Neuman (2009) describes the fortunes of poor students as having worsened over the previous two decades, “with graduation rates plunging to a new low of 17% in some urban communities” (p. 1). Improving achievement for public school students will require an enlightened understanding of the complications of poverty and a corresponding implementation of effective measures to overcome the obstacles to learning that living in poverty creates.

Close observation of the American educational environment renders a graphic picture of the current reality and yet astute observation and deep understanding of these circumstances forms a foundational step from which to initiate improvement. Lagging achievement, a steadfast gap in performance across sub-groups of students, and a
continuing increase in the proportion of students at-risk combine to perpetuate an escalating challenge in improving public schools, particularly when combined with the diminished resources resulting from current economic conditions. As a result of unprecedented societal shift, increasing need, and limited resources, practitioners who hope to realize school improvement currently do so amidst unprecedented educational circumstances. Recently, an urban superintendent characterized this current situation by borrowing from the title of a U2 song, dubbing this present education reality a place, Where the Streets Have No Names (C. Stevenson, February, 2010).

Listening: Beginning with Careful Observation

The importance of beginning with observation in the process of systems improvement is established in a wide body of research literature (Senge, Scharmer, Jaworski, and Flowers, 2004). Looking, listening, and utilizing the senses for careful understanding forms an appropriate entry into effective organizational learning processes. Commencing with a phase dedicated to observation involves more than just initial fact-finding. A deeper, more intuitive dimension in surveillance is referred to as ‘sensing’ (Senge, Scharmer, Hayashi, Jaworski, and Flowers, 2004). Hayashi (2010) describes this process, “The sensing phase can be divided into first seeing clearly what is present and then sensing into what is observed” (p. 2). Senge (2006) explains sensing as deep inquiry into mental models “through seeing reality beyond their filters,” and articulates this phase as a process of collective inquiry “based on directly experiencing the system as well as dialogue involving many points of view regarding reality” (p. 401). As the sensing phase of the improvement process unfolds, participants are encouraged to use sense perceptions
rather than, “relying on past or second-hand information” (Hayashi, 2010, p. 2).

Openness and a posture of leaning forward distinguish this observation of the current situation. This phase of the process, at its deepest level, is one of integration between seer and what is seen. Scharmer (2009) describes this transformation as, “connecting to the field and attending to the situation from the whole – the boundary between observer and observed collapses, the system begins to see itself” (p. 39). Looking and listening deeply enough to shed boundaries, discard previously held notions, and open up to ‘listen with full attention’ (Hayashi, 2010) forms an initial step to a well-grounded improvement process.

A fundamental prerequisite in improving the quality of observation during the initial phase of Theory U process lies in the recognition and setting aside of previously-held mental models. Senge (2006) defines mental models as, “deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action” (p. 8). Often individuals are unaware of mental models and the ways they affect individual and group behavior. Senge suggests that the discipline of developing awareness of mental models begins with:

- turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny. It also includes the ability to carry on ‘learningful’ conversations that balance inquiry and advocacy, where people expose their own thinking effectively and make that thinking open to the influence of others (p. 8).

Convening groups and talking to people are essential steps in this phase of the process, paying attention in an unbiased way, watching and listening with full attention (Hayashi, 2010). Mental models left unrecognized and unaddressed can become obstacles, making
progress more difficult or impossible to achieve. As team members are able to let go of preconceived ideas and work with an unfettered understanding of the present reality, there is a natural opening to new understandings and uncovering possibilities for moving forward.

**Generative Listening: Making a Space for Creative Improvement**

In the past, emphasis has been placed on open communication among teams; Senge (2006) distinguishes the vivid contrasts between ‘participative’ openness and ‘reflective’ openness. Participative openness has to do with speaking openly about ones views, assumes an outward direction and, ultimately, forms an incomplete solution to working as a learning team. Reflective openness, in contrast, leads to “looking inward, allowing our conversations to make us more aware of the biases and limitations in our own thinking, and how our thinking and actions contribute to problems” (p. 261). Meaningful team learning doesn’t begin until participants move beyond talking ‘at’ one another to really listening to each other. A core capacity for reflective listening is described by Senge (2004) as presence, and defined as, “deep listening, of being open beyond one’s preconceptions and historical ways of making sense” (p. 13). This kind of deep listening has been described as creating ‘space;’ Hayashi (2010) terms it, “listening into the space,” adding that in this phase of listening, we take the time to, “let go of all our expertise and experience” (p. 2). Listening without preconceived notions brings more space into the daily work, allowing opportunity for a collective wisdom to emerge.

While listening seems a simple enough concept to comprehend, Scharmer (2010) adds depth to understanding the quality of listening, attending, and awareness and their
importance in realizing progress. He articulates four types of attending and listening, using simple numerical designations to distinguish the levels of attention:

Listening 1 means to attend to what you already know (downloading); listening 2 means to recognize some new external facts (factual); listening 3 means to see a situation through the eyes of another (empathic). Finally, listening 4 means to sense the highest future potential of another person or a situation (generative) (p. 5).

Scharmer (2009) describes Listening 1 as, “listening by confirming habitual judgments.” A characteristic response that one may be listening at the level of downloading is the familiar, ‘yes, I thought so.’ Scharmer (2008) points out, “When everything you hear confirms what you already know, you are listening by downloading” (p. 53). Moving toward a new future possibility requires that participants abandon the prevalent mode of downloading that results in continuously reproducing, “the patterns of the past” (p. 119) and move toward deeper levels of listening and understanding to embrace new possibilities.

As participants become more adept at moving toward deeper levels of listening, there is a greater attention to the space and to differing views. Scharmer (2009) describes a shift that takes place that allows one to, “see the collective pattern that gives rise to all of the specific examples in front of you – you see the formative force that is connecting them” (p. 149). He describes a simple test to help judge whether one has successfully redirected attention, “the picture of the whole you see should include yourself – the observer – as part of the system you are trying to fix” (p. 149). In the initial phase of organizational improvement, deep listening in this way provides a doorway to more
openness, suspension of judgment, and letting go of mental models in order to observe closely and see in new ways.

In direct contrast to listening 1 (downloading) is listening 4 (generative). Scharmer (2009) describes this level of listening as moving beyond the present field and connecting to a “deeper realm of emergence” or “listening from the emerging field of the future” (p. 11). Listening 4 is explained (Scharmer, 2010) as to, “sense the highest future potential of another person or a situation” (p.5) Hayashi (2010) points out that while pausing, letting go, and hanging out in a place of ‘not-knowing’ can be scary, this approach asks us to, “trust that human beings individually and collectively have wisdom… people have all the wisdom they need to solve the world’s problems. As change agents, we therefore create situations in which this wisdom naturally comes forth” (p. 3). When participants achieve the level of generative listening, there is a collective understanding that the change process has become creative, is future-oriented and will create something new rather than render iterations of the solutions offered in the past. This level of listening (Scharmer, 2009) requires participants to access, “capacity to connect to the highest future possibility that wants to emerge” (p. 13). Careful observation, casting off mental models, and moving into deep, generative listening form necessary, powerful steps in ‘moving down the U’ to initiate the organizational improvement process.

**Learning: Promises Made**

Over the previous five decades, the evolution of public discourse in how best to improve American public school education has been documented in a series of federal
reports and associated legislation. These texts illustrate the evolvement of public rhetoric on the subject and explore federal participation in improving public education on multiple levels, from articulated ideal to legislated mandate. More importantly, these texts detail the national progression and collective understanding on the topic of American public school improvement. Improving the quality of America’s schools, a subject that echoes continually throughout public dialogue, reverberates as an articulately stated priority, a perennial campaign slogan, and provides for ongoing public debate. This national dialogue is punctuated by political, legislative, public and private sector participation. Recently, President Obama’s (2010) words, “Every child in America deserves a world-class education” (p. 1) posted beneath the White House insignia on the opening page of the United States Department of Education’s A Blueprint for Reform, abridges the contemporary version of the publicly articulated vision of how best to improve America’s schools.

The modern timeline of federal involvement in educational improvement dates from the Civil Rights movement of the 1960’s. The Elementary and Secondary Education Act of 1965, the most expansive educational bill ever passed to date and signed into law by President Lyndon B. Johnson, established access for all students to a quality education. As a former teacher who had witnessed poverty's impact on his students, Johnson believed that equal access to education was vital to a child's ability to lead a productive life; he stated on the signing of this education bill in April, 1965, “By passing this bill, we bridge the gap between helplessness and hope for more than 5 million educationally deprived children” (p.2) adding that the legislation represented a major
commitment by the federal government to both quality and equality in education.

President Johnson’s beliefs mirrored those of John F. Kennedy, who had authored some of the Act’s wording prior to his assassination. The Elementary and Secondary Education Act of 1965 launched what is now almost fifty years of public debate on how best to improve America’s schools.

Two decades later, Ronald Reagan’s, A Nation at Risk report, prepared by the National Commission on Excellence in Education and published in 1983, opened by stating outright the concern that educational foundations of the country were being eroded by a, “rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments” (p.1). The A Nation at Risk report articulated specific steps schools should take to improve, including prescribing a heavy emphasis on enhancing curriculum, a focus on the education of gifted students, and recommended that schools should dedicate ‘significantly more time’ to learning (A Nation At Risk, U.S. Department of Education). In retrospect, Ravitch (2010) reminisces on the merits of this seminal report by reflecting, in the context of more recent legislative reforms, on what A Nation at Risk did not do. She argues that it did not:

offer simple solutions to complex problems or demand the impossible. Every one of its recommendations was within the scope of the schools as they existed then and as they exist now, and none had any potential to harm public education. The report treated public education as a professional, purposeful enterprise that ought to have clear, attainable goals (p. 28).
However, most education historians agree that the 1983 A Nation at Risk report opened the door to decades of “tough talk about public schools” (USA Today, August 1, 2008), ultimately leading to reforms that culminated in the No Child Left Behind Act.

In early 2001, the controversial No Child Left Behind Act, signed into law by President George Bush, established the ideal of proficiency for all students and articulated the most invasive approach to educational accountability in American history. This legislation prescribed the goal of all students proficient at grade level reading and math by the year 2014 and included recommendations for highly-prescriptive instructional programs as well as an elaborate system of public sanctions for schools not ‘making the grade,’ this critical designation determined by the meeting of Adequate Yearly Progress (AYP) in every school. The No Child Left Behind Act was heavy-handed in approach, with an intense focus on high-stakes testing, ranking of schools, and accountability. Ravitch (2010) points out:

A Nation at Risk was animated by a vision of good education as the foundation of a better life for individuals and for our democratic society, but No Child Left Behind had no vision other than improving test scores in reading and math. It produced mountains of data, not educated citizens (p. 29).

Separated by a span of a quarter century, as well as by a dramatic difference in philosophy and prescribed methods for improvement, the A Nation at Risk report and No Child Left Behind legislation represent dramatic attempts to articulate a successful path to improved outcomes in American schools.

Presently, the working draft of the Reauthorization of the Elementary and Secondary Education Act of 2010, A Blueprint for Reform, embraces the goal of, “every student graduating high school work or college-ready.” President Obama’s introduction
to this legislation articulates an urgent national concern with public education: Obama states that a generation ago, “we led all nations in college completion, but today 10 countries have passed us” (p.1). The recommendations included in the current draft of A Blueprint describe the goal of producing college and career-ready students as the projected outcome of providing great teachers and leaders in every school, equity and opportunity for all students, and promoting an approach of innovation and continuous improvement in all schools (p. 2-6). Further, the plan articulates a shift to rewarding success instead of sanctioning failure and to measure progress and growth instead of a single achievement ‘snapshot.’ It determines to renovate a flawed No Child Left Behind law as well as revise the federal role in education (p. 2). Although not yet finalized, it is evident that the Reauthorization of the Elementary and Secondary Education Act, A Blueprint for Reform, will include significant changes from the previous decade of No Child Left Behind.

Government-sponsored reports and legislation record the national progression in rhetoric to improve schools; they form an impressive evolution in the argument for equity of opportunity, enriched curriculum and learning opportunities, skill-acquisition for all, and in graduating every child ready for work or college. These documents illustrate on a national level worthy goals the nation should aspire to in improving outcomes for students. Unfortunately, they also reflect a compellingly ironic contrast to the current reality of lagging academic performance in American public schools and serve as an indictment of the meager progress realized thus far. These public promises echo against the pervasive reality that educational outcomes for American students have consistently
fallen short of the pronounced ideal and in many cases remain directly related to the zip
code in which students reside. Despite the progress in national rhetoric, there exists a
marked incongruence between America’s stated goals for public education and the
outcomes achieved.

**Hard Lessons Learned: The Solution**

While the thoughtfully articulated goals of federal acts have failed to generate
desired results, legislative and business leaders have eagerly joined the school
improvement campaign, participating in high-profile ways in numerous school reform
movements. These initiatives range from the elaborate accountability systems articulated
in the No Child Left Behind Act, 2001, to pay-for-performance systems such as
Colorado’s recently adopted Senate Bill 191, and have come at an extensive cost of
public funds. Neuman (2010) estimates 400 billion annually is consumed by the No Child
Left Behind Act of 2001 alone (p. viii). The Gates Foundation’s investment of 2 billion in
new small high schools proved unsuccessful in improving achievement (Ravitch, 2010, p.
211). Despite billions of dollars expended and ongoing involvement of multiple sectors in
the problem, solutions to-date have failed to produce sustained positive results. Senge
(2010) states, “In essence, we have thrown more money at more ineffective reform
agendas than any nation” (p. ix). In surveying the variety of reform efforts, Payne (2010)
concludes that at the school, district, and national level even where some progress is
realized, “we continue to see attempts to implement reform in ways that are manifestly
unlikely to work,” concluding that even good ideas for school improvement, when they
are reduced to ‘The Solution,’ become part of the problem (p.5). Hargreaves (2008)
suggests that sustainable improvement in organizations, like sustainable improvement in physical health or ecosystems, requires more than a single-faceted approach and, “does not occur through singular strategies, emphasizing only one crop or health solution. Rather, it is the interaction of these elements in complex and holistic systems that move organizations and environments forward” (p. 230). The implementation of a plethora of programs and initiatives may have, in reality, demonstrated more clearly what does not work than what does. Discovering more effective school improvement processes rooted in a holistic systems approach forms the focus of this research.

Legislators, both state and federal, continue to take a variety of increasingly invasive steps to stimulate improvement including the provision of vouchers, the authorization of charter schools, and external take-over, including privatization of under-performing schools. High-profile foundations, such as the Bill and Melinda Gates Foundation, the Ford Foundation, and the Broad Foundation, among others, have involved themselves heavily in promoting their respective agendas for reforming public education. Former Assistant Secretary of Education and educational historian, Diane Ravitch (2010) relates her personal disillusionment with this brand of school reform after many years of enthusiastic support. “Where once I had been hopeful, even enthusiastic, about the potential benefits of testing, accountability, choice, and markets, I now found myself experiencing doubts about these same ideas” (p. 1). She shares that her views changed as she observed how the ideas were turning out in reality and likens the steady march of school reformers as resembling the characters in a Dr. Seuss book, “who never have troubles, at least very few;” concluding with the warning, “in education, there are no
shortcuts, no utopias, and no silver bullets” (p. 3). Darling-Hammond (2010) emphasizes that although investments in education are necessary, it will take far more than financial responses to assure economic and social well-being and preserve the democracy. She counters by suggesting an approach based in the fundamentals of classroom practice more than in ‘fix it’ approaches, adding, “We cannot just bail ourselves out of this crisis. We must teach our way out” (p. 3). Presently, successful approaches to turning around school and student performance are sorely needed and yet a direct path to achieving this goal remains elusive. America is positioned at a juncture where discovering a dramatically more productive way to consistently improve student and school outcomes proves a pressing demand of this time.

**Learning: A Changing Awareness in the Work of Improving Schools**

Educators dedicated to improved outcomes for students are driven by a moral imperative that compels the work and yet many of these same practitioners have become weary of the ongoing roller-coaster approach to school improvement. Many educators share the experience that program-based school improvement initiatives, such as the ‘silver bullet’ improvement methods popularized with the implementation of the No Child Left Behind Act, often do not take the school culture, unique student needs, or community context into consideration and end up falling short of their intended effect. As a result of repeated experiences of this kind, there exists a growing awareness that many program approaches to improving educational outcomes prove insufficient to meet the host of complex issues that currently plague America’s schools. Senge (2010) describes what he terms the tragic results of these efforts:
One simplistic quick-fix nostrum after another has seized the political limelight and been ‘driven’ through the system as if it was all that was needed: decentralized site accountability, small high schools, high-stakes testing. While all these efforts embodied ideas with merit, the belief in one-size-fits-all fixes might itself be the real problem” (p. vii).

There exists a widespread desire for a more meaningful process to generate positive trajectories in student achievement. Fatigued with a ‘band aid’ methodology, many educators express the desire for a more authentic approach, one that features learning and working together within the context of the students, school and community to create a foundation for realizing improved positive outcomes for students. The hope is that a better path to improving schools can be the genuine and sustained result of purposeful, respectful, internally-driven professional work of school teams.

With the emerging realization that the high-stakes accountability approach to improving schools is an initiative that has stalled, Hargreaves (2008) describes the current situation as one where, “The curriculum is shrinking, classroom creativity is disappearing, and dropout rates are frozen. Top-down prescriptions without support and encouragement at the grassroots and local level are exhausted” (p. 135). Shirley (2009) adds, “It is becoming increasing clear that educators’ classroom-level resistance to certain aspects of the recent reforms has reached such a critical mass that a redesign of school-improvement strategies is a matter of the utmost urgency” (p. 139). Hargreaves and Shirley (2007) describe this shift as the dawning of an era of greater complexity, labeling it as a period of ‘post-standardization.’ Hargreaves (2009) articulates a new path as The Fourth Way, explaining that a viable theory of educational change must be based in the fundamental principles of sustainability. He states, “What ultimately bears the weight of
sustainable educational change is not an overarching set of government policies and interventions, but people working together as partners around shared and compelling purposes” (p. 22). In The Fourth Way, Hargreaves (2009) emphasizes the pillars of purpose and partnership, describing these precepts as foundational to the next generation of school improvement work. There exists an understanding that what is needed to move forward in school improvement is a departure from the ways of the past and an exploration into entirely new ways of thinking about learning.

It is becoming clear that the answers for improving education will not be discovered in lessons from the past, but rather in a new path to improvement. A generative approach to school improvement, based authentically in the context of the daily work of the school, facilitated by practitioners closest to the issue, and rooted in the understanding that schools are complex, living organizations proves a methodology worthy of examination. A primary shift to the concept of living organizations forms an initial step in this type of process; Senge (2006) states, “the basic problem with the new species of global institutions is that they have not yet become aware of themselves as living. Once they do, they can then become a place for presencing the whole as it might be, not just as it has been” (p. 5). Examining school improvement processes from a generative, future-oriented perspective forms the foundation of this research work.

**Learning: Learning Together From the Future**

Collective learning proves a foundational component to improving professional practice in schools. In pursuing authentic systems change to improve school performance, individual and team learning is central to achieving real and sustained growth (Scharmer,
Senge, Hargreaves, Shirley, Fullan, Reeves). Learning together is a natural state of healthy organizations. Hargreaves (2008) describes all living systems, natural and human, as destined to learn together; in this process they “foster creativity, imagination, and innovation” (p. 230). Senge (2006) shares that, “Real learning gets at the heart of what it means to be human. Through learning we re-create ourselves” (p. 13). Schon’s observation, shared by David Hargreaves (2003), reminds us that we must operate, first and foremost, as learners:

We must…become adept at learning. We must become able not only to transform our institutions, in response to changing situations and requirements; we must invest and develop institutions which are ‘learning systems,’ that is to say, systems capable of bringing about their own continuing transformation (p. 74).

The kind of organizational learning that is required of teams as the world becomes more interconnected, complex and dynamic is described by Senge (2006) as, “the work must become more ‘learningful’ It is no longer sufficient to have one person learning for the organization . . .” (p. 4). Fullan (2010) establishes that, actually, learning is the work to be accomplished, stating, “Make learning the work that you do day after day. You and those you work with get better and better because you are learning how to do it in the setting in which you work. This is real change” (p. 52). Collective learning proves a prerequisite for school teams intent on realizing improved outcomes in schools.

A wide body of research exists in the area of organizational learning (Schon, Argyris, and Senge). Senge (2006) establishes the importance of team learning, articulating it as one of the five disciplines of the learning organization; he describes the desired state of team learning by pointing to striking examples such as sports, performing arts, and science where the intelligence of the team surpasses the intelligence of the
individuals on the team and, “where teams develop extraordinary capacities for coordinated action. When teams are truly learning, not only are they producing extraordinary results, but the individual members are growing more rapidly than could have occurred otherwise” (p. 9). Senge (2006) prioritizes the importance of uncovering what actually happens when teams learn as differentiated from individuals on a team learning and concludes that, “unless teams learn, the organization cannot learn” (p. 10). Fullan (2005) characterizes the learning that is required in order to move organizations forward as collective capacity building which he defines as, “developing the collective ability – dispositions, skills, knowledge, motivation, and resources – to act together to bring about positive change” (p. 4). Developing clear understanding and achieving proficiency in team learning are essential steps to forging a new path to effective school improvement work.

Scharmer (2009) adds a critical dimension in understanding individual and collective learning processes by examining two ways, or two sources, of learning. He shares that his most important insight from years of work in organizational learning has been that there are, “two different sources of learning: learning from the experiences of the past and learning from the future as it emerges” (p. 7). The first type of learning is well known; it forms the foundation for all major learning theories and best practices. By contrast, the second way of learning, learning from the future, is still virtually unknown. The challenges and complexities presently facing educators cannot be met by working only on the basis of past experience. Often, the experiences of the past represent the major portion of the problem and can become the greatest barrier to implementing
creative solutions to present challenges. Senge (2006) emphasizes that in a learning organization, survival learning or adaptive learning, “must be joined by ‘generative learning,’ learning that enhances our capacity to create” (p. 14). Scharmer (2009) uses the term presencing to describe learning together in ways that develop solutions for the future (p. 467). He defines presencing as to, “sense, tune in, and act from one’s highest future potential – the future that depends on us to bring it into being” (p. 8). When this shift in learning source occurs, the forces shaping a situation change from, “recreating the past to manifesting or realizing an emerging future” (Senge, Scharmer, Jaworski, and Flowers, 2004, p. 7). Teams learning together in open, creative and future-oriented ways form an essential step in building more autonomous and dynamic school improvement processes.

Learning: Conversation and Dialogue for Collective Creating

Developing the capacity for effective conversation and dialogue proves foundational to learning together. Scharmer (2010) states, “Through conversation, we as human beings create our shared reality” (p. 5). The etymology of the word provides insight into this dimension of effective communication; for the ancient Greeks, *dia – logos*, ‘flow of meaning,’ was seen as a cornerstone of civic practice, and was integrated with self-governing (Senge, 1999). Isaacs (1999) defines dialogue as, “a shared inquiry, a way of thinking and reflecting together . . . Dialogue is a living experience of inquiry *within and between* people” (p. 9). Facilitation of rich conversations focused on realizing the highest possible future, as opposed to reenacting patterns from the past, is requisite to productive communication.
The goal of effective dialogue is the act of thinking together; Isaacs (1999) describes the failure to think together as operating from ‘memory.’ He describes:

Human beings live out of their memories, insulated from direct experience. Memory is like a tape recording; it plays back a once-experienced reality that may or may not apply well to the current situation. Like a tape, memory is limited. The parameters of its responses are already set. The emotions are already defined. Thus, when we face novel situations where the instincts of our memories don’t apply, we don’t know how to respond. Instead, we fall back on the habits that most people learn from hard experience: to protect ourselves from one another’s words, actions, and behaviors. Lacking any new way to operate that might let us move beyond the false ‘solutions’ we remember, we cling to our views and defend them as if our lives depended on it (p. 5).

Thinking together in an inquiry process promotes creation and opens the option of ideas that are no longer repeats from the past, but explorations into new ways of behaving. Isaacs (1999) concludes that the, “most important parts of any conversation are those that neither party could have imagined before starting” (p. 9). Learning to participate in creative, innovative dialogue provides a transformative pathway in navigating school and organizational improvement.

Brown (2005) describes a method for orchestrating such meaningful conversations in describing the World Café conversational strategy. She characterizes the World Café as, “a simple yet powerful conversational process for fostering constructive dialogue, accessing collective intelligence, and creating innovative possibilities for action” (p. 3). She describes the potential of World Café to tap into a group’s collective capacity to communicate knowledge and direct the future together. Café conversations are built on the premise that individuals already have the wisdom and inner knowing to confront even the most challenging situations. As groups participate in meaningful conversation, a collective wisdom emerges.
The depth and quality of conversation prove critical. Brown (2005) distinguishes between ordinary conversations that limit, are superficial, and may even become divisive, and, “conversations that matter, in which there is deeper collective understanding or forward movement in relation to a situation that people really care about” (p. 4).

Scharmer (2009) also references a shift that occurs in productive discussion, describing it as moving from debate to dialogue. He describes the shift as moving, “from facing the world as an exterior set of objects to experiencing the world from (within) the field, the shift from debate to dialogue also involves a shift from trying to beat down the contrary view to inquiring into one another’s views, empathically listening from (within) the other” (p. 278). Open, productive, and creative conversations form a conduit for tapping into the collective wisdom of a team, allowing the group to transcend the habits of thinking on one’s own, trying to convince others, and resorting to solutions that are only reincarnations of the past. Senge (2005) states, “How is it that sometimes, as if by magic, people create something together that has beauty, power, and life?” (p. ). Regular participation in conversations that matter unleashes a creative capacity essential to achieving sustained organizational improvement.

Leading

School improvement efforts suffer from a deep disconnect in sustaining sufficient leadership necessary for effective change to produce improved outcomes in today’s vastly more complex educational environment. Scharmer (2008) describes a collective and profound inability, at a global level, to produce positive outcomes, highlighting world issues such as climate change, AIDS, hunger, poverty, violence, and terrorism. He
states, “We live in a time of massive institutional failure, collectively creating results that nobody wants” (p. 52). He perceives that the cause of our collective failure is that:

we are blind to the deeper dimension of leadership and transformational change. This ‘blind spot’ exists not only in our collective leadership but also in our everyday social interactions. We are blind to the source dimension from which effective leadership and social action come into being’ (p. 52).

In analyzing leadership as a component critical to realizing school and system improvement, examining for essential shifts: from solitary to collective leadership, implementing systems, achieving a deeper dimension in leadership, and sustaining leadership for positive change prove areas worthy of consideration.

**Leading: Systems and Superheroes**

Over the previous decade, the popular refrain in leadership has been to seek ‘salvation’ in the installation of ‘superhero’ leaders who, like Moses of the Old Testament, lead the people in dramatic fashion through the ‘desert’ to the Promised Land of organizational improvement. In fact, growing evidence leads to quite an opposite conclusion: rather than a single leader as the ‘solution,’ the emerging understanding is that what is essential is the development of systems that support cultivation of leadership capacity across the organization in order to realize and sustain positive change. This lesson has been discovered as many schools and districts experience the precipitous disintegration of progress when a dynamic leader leaves, thus revealing a lack of systems to support distributed leadership and continued progress. Flowers (2006) states:

while leadership cultivation has been the main part of wisdom traditions of the past, it will be different in the future. The leadership of the future will not be provided simply by individuals but by groups, institutions, communities, and networks. She points out that groups often stumble as they await the emergence of an individual leader, someone who embodies the future path. But I think what
we’ve been learning with the U process is that the future can emerge within the
group itself, not embodied in a ‘hero’ or a traditional ‘leader.’ I think this is the
key going forward – that we have to nurture a new form of leadership that doesn’t
depend on extraordinary individuals (p. 185).

Zelman (2008) states, “Clearly, the time has come to abandon the notion that ‘Superhero’
leaders are the solution to all of our ills” (p. 33). She points out that what must happen,
“if we want to move from the era of superheroes to an era where high performance is a
given and not an exception, we must invest in complete and interlocking systems to
support reform” (p. 33). Moving from solitary to collective leadership proves a
transformational step in sustaining leadership for positive change.

Senge (2006) establishes systems thinking as the ‘Fifth Discipline,’ describing it
as the theoretical cornerstone that underlies all of the five learning disciplines; he
emphasizes that systems thinking is needed to meet the complexity of the problems faced.
Systems thinking provides a framework for seeing parts and wholes, for examining
interrelationships rather than things, for observing patterns of change rather than point-in-
time snapshots. Senge points out that organizations break down, “despite individual
brilliance and innovative products because they are unable to pull their diverse functions
and talents into a productive whole” (p. 69). Parsley and Galvin (2008) suggest that
schools begin operating from a systems perspective, “while tackling real, pressing
challenges by designing and implementing a ‘fractal improvement experience’ - a
manageable, carefully designed change initiative that is meant to help staff members gain
skills in thinking systemically and acting systematically while building a sense of
collective efficacy and making measurable progress” (p. 4). The fractal improvement
cycle includes:
1. Taking stock of current needs using data
2. Focusing on the right solution
3. Taking collective action
4. Monitoring implementation and the impact of efforts on students
5. Maintaining momentum by identifying sustainability strategies (p. 5).

In working improvement initiatives through generating collective action, the fractal improvement cycle translates Senge’s systems approach to extend leadership in building collective capacity to generate and sustain authentic improvement.

**Collective Leadership**

Leadership capacity holds great potential for energizing transformative improvement in schools and district systems. Building collective leadership capacity will require expanding a model of leadership as Scharmer (2010) illustrates, “from a few people at the top to all change makers across all institutions in a system” (p. 8). Senge (2006) decries the perception that ‘leader’ has come to refer largely to positional authority and addresses this confusion by offering the term, “ecology of leadership,” stating that “local line leaders, internal network leaders, and executive leaders contributed to this ecology” (p. 319). Scharmer (2010) describes the biggest roadblock, “to moving from institutional paralysis to profound systemic renewal is the same: it’s the missing collective leadership capacity to draw together all key stakeholders and involve them in a process that begins with uncovering common intention and ends with collectively creating profound innovation on the scale of the whole system” (p. 2). Scharmer (2010) concludes that collective leadership capacity is the rarest resource in society today and is
one not nurtured in higher education. Achieving collective leadership involves a shift in
the model of leadership, “from organizational hierarchies with leaders at the top to more
distributed, shared networks,” and will mean that many people will need to be deeply
committed to cultivating their capacity to serve what’s seeking to emerge. Collective
leadership is most effectively deployed from a level of deep, shared understanding,
agreement, and committed will to realize positive change.

**Leadership Source and Social Action: A Deeper Dimension of Leading Change**

Beyond superheroes, systems thinking, and collective leadership capacity, there
exists a doorway to a profoundly different way of viewing leadership, one that moves
away from the individual and embraces a much deeper dimension of articulating a
desired outcome and moving a group in the direction of change. Sharmer (2009)
describes the essence of leadership as one where we, “shift the inner place from which we
operate both individually and collectively” (p. 11); he further describes this deeper
understanding of leadership as creating conditions that inspire people and groups to
operate from a ‘different place,’ moving from management to leadership and beyond
leadership to inspiration. Scharmer (2008) describes this inner place in leaders as
something of a mystery, comparing it to studies of, “athletes’ minds and imaginations as
they prepare for a competitive event” (p. 52). These studies have led to recommendations
designed to improve athletic performance from the inside. While these deep states of
attention are well known in athletic circles, Scharmer concludes: “in the arena of
management and leading transformational change, we know very little about this inner
dimension, and very seldom are specific techniques applied to enhance management
performance from the inside out. This lack of knowledge constitutes a blind spot in our approach to leadership and management” (p. 53). Getting at this level of inspiration involves focus and accessing the collective will. Scharmer (2009) states, “Leadership is about being better able to listen to the whole than anyone else can. Look around you. What do you see? We are now engaged in global leadership, and this means we extend our attention and listening from the individual (micro) and group interaction (meso) to the institutional (macro) and global (mundo) systems levels” (p. 20). Shifting to a deeper understanding and awareness of leadership taps into a group synergy and prompts a profoundly different perspective on what it means to lead improvement efforts.

Exploring deeper levels of collective leadership promotes a profound unity of effort on a team; it also brings more humanity to the act of leadership for individuals as they engage in this leadership development process. Senge (2006) states that, the word *charism* comes from the Catholic church, where it means one’s distinctive personal ‘gifts,’ given by the Holy Spirit. To be charismatic, then, means to develop one’s gifts. In short, we develop as true charismatic leaders to the extent that we become ourselves. Herein lies the secret of real leadership development” (p. 339). Accessing a deeper level of leadership involves participating authentically with others; Senge, Scharmer, Jaworski, and Flowers (2006) describe this cultivation as, “becoming a real human being, seeing this process as the primary leadership issue of our time, but on a scale never required before. It’s a very old idea that may actually hold the key to a new age of ‘global democracy’”(p. 186). Attaining a deeper level of collective leadership and coming together to listen together and engage in ‘leading from the future’ (Scharmer, 2010) form
a bridge into a shared and profoundly deeper leadership experience, illustrating Scharmer’s descriptive of moving from ‘egosystem’ to ‘ecosystem.’

**Leadership Sustainability**

The term sustainability (Hargreaves, 2006) was first used in the environmental field in the 1980’s; Lester Brown, founder of the Worldwatch Institute, defined a sustainable society as “one that is able to satisfy its needs without diminishing the opportunities of future generations to meet theirs” (p. 16). Sustainability is basically concerned with, “developing and preserving what matters, spreads, and lasts in ways that create positive connections and development among people and do no harm to others in the present or in the future” (p. 17). Hargreaves (2006) describes the potential of developing sustainability from a leadership perspective, “Sustainable educational leadership and improvement preserves and develops deep learning for all that spreads and lasts, in ways that do no harm to and indeed create positive benefit for others around us, now and in the future” (p. 17). Sustainability focuses more on systems than on extending particular initiatives.

Fullan (2006) describes the attainment of sustainability this way:

> From a system perspective, the single answer to the question of how to increase the chances for greater sustainability is to build a critical mass of developmental leaders who can mix and match, and who can surround themselves with other leaders across the system as they spread the new leadership capacities to others (p. 104).

Scharmer (2010) states, “The leadership capacity that I believe is necessary is one that emerges when a constellation of leaders see and sense together what is going on” (p. 13). Cultivating leadership capacity across the organization promotes the progression and sustenance of organizational improvement in powerful ways.
Shifts in Listening, Learning, and Leading for School Improvement

There are three fundamental ‘shifts’ of mind suggested in listening, learning, and leading for school and organizational improvement. As participants learn to listen deeply, shifting from the phases of downloading, factual, empathic listening to generative listening provides a more robust entry into the improvement process. As teams learn how to learn together, shifting from learning from the experiences of the past to learning from the future that wants to emerge, opportunities arise for breakthroughs and innovative work. As leadership moves from a focus on management to leadership to inspiration, leadership becomes more distributed in an organization. Conditions are created that inspire people to operate from the highest possibility for the future. This study examined school improvement from the perspectives of listening, learning, and leading to better understand fundamental steps of successful improvement process.

Educators experienced in school improvement work consistently point to elements of process as the ‘magic’ that animates structures to mobilize action for improved outcomes. Effective process ensures that the organization remains agile in responding to student and team needs and adjusting to continuously improve outcomes for students. These processes, in particular, include individual, team, and organizational continuous improvement cycles and problem-solving processes. Figure 1 represents the movement through the phases of listening, learning, and leading for transformational change.
Figure 1: Listening, Learning, and Leading: Three Phases of Improvement
Chapter Three: Methodology

Purpose

The purpose of this study was to investigate one school’s improvement process. This study contributed to knowledge of effective school improvement processes, potentially advancing educational practice in the areas of informing an enhanced process for transforming schools, one based in systems-thinking and focused on improving achievement outcomes for all students.

The study examined the macro and micro levels of the school improvement process and related the authentic story of one school improvement journey. The analysis of process and outcomes, observed through the reflections of its teachers, reveals the behaviors, attitudes, practices, and systems-organization that yielded positive results in student performance. This case study of one school’s successful improvement was examined within the context of school improvement research. The communication of the school’s improvement journey was enlivened by the voices of the educators who accomplished the work. This study aligned perceptions of staff alongside an implementation timeline and student achievement data in seeking to better understand successful school improvement process.
Research Questions

The research questions of the study were:

1. What were the reflections on the personal and shared experience of participant educators who worked in the school during the five years of a successful school improvement implementation?

2. What components of school improvement do educators believe contributed most directly to the sustained improved achievement?

Background

This case study converges in the telling of a story. Daniel Pink (2005) concludes, in A Whole New Mind that, “We are our stories. We compress years of experience, thought, and emotion into a few compact narratives that we convey to others and tell to ourselves” (p. 113). The power of narrative rests in the hope that, in the fruitful relating of a story, a pathway is opened to a deeper, more enlightened understanding, interpretation, and transformation. Mears (2009) states, “Stories evoke complex emotions and permit the reader to connect to the experience of others on many levels of understanding” (p. 146). Tschannen-Moran (2010) explains, “Telling stories is a powerful way for people to make sense of experience. . . . When people tell a new story, they experience a new reality. Through telling and exploring their stories, people feel heard and discover new alternatives” (p. 63). In relating the story of Colorado Middle School’s improvement process, the intent was to explore the inner dimension of the school improvement process, including the dynamics of change that resulted in transformation within the individuals, the teams, and the school, rendering sustained improvement in performance outcomes.
**Study Design: The Case Study**

The design of this study was distinguished from much of the previous work in school improvement in three significant ways. First, collective thinking on American school improvement in recent years has been heavily influenced by individuals and groups external to day-to-day work with students in schools. Political, private, and legislative entities promote various approaches as the ‘solution’ to public school achievement concerns. Conversely, this study was based in an authentic school improvement process and enlivened by the voices of the teachers and staff who accomplished this improvement work; this effort is informed from within the school setting by those directly involved. Much attention from the public sector has been placed on underperforming schools, those schools that have not yet shown positive achievement outcomes or those declining in performance. The case school was one that realized stable and improved outcomes with students despite increasing impacts of poverty and second-language issues. Many of the students represented in this study arrived to school suffering significant gaps in reading and math achievement. The study analyzed a school improvement process over a five-year period and sought to leverage the firsthand experiences of educators to enhance collective understanding of sustained school improvement work.

The study implemented a qualitative design to explore an individual school improvement progression. Through focus group interviews with participant staff members who reflected on the improvement process and the development of an implementation timeline juxtaposed with achievement outcomes, the study sought to
reveal the lived experience of a sustained school improvement process. The research examined the evolution of an authentic school improvement process in a large, diverse middle school to better understand this process across time, spanning year one through five of the implementation. A modified gateway method (Mears, 2009) was used to analyze the focus group interview data, gleaning patterns within and across the individual staff members and groups who participated. The goal of this study was to observe patterns of effects up close and over time of a school process anchored by an implementation timeline, punctuated by achievement outcomes, and enlivened by the reflections of staff members on their individual and collective experiences during the evolution of school improvement.

This case study included an implementation calendar documenting the school improvement processes that occurred in the subject school alongside focus group interviews of staff members who participated during the five years of the school’s improvement process. This protocol included mapping of the implementation into a timeline, reflections of staff members as shared during focus group interviews, and analysis of achievement data.

The study data included:

- A calendar of the improvement implementation process year 2004-2005 to 2008-2009,
- Individual written response data from teacher focus groups
- Discussion data from teacher focus groups
- Student achievement outcomes, as measured by the Colorado State Assessment Program (CSAP).
In promoting an in-depth understanding of lived experience, the individual case study provides an avenue for close examination of what occurred in the school over the timeframe of the school improvement implementation. Gall, Gall, and Borg (2003) share that individual case study is designed according to the phenomenon studied and the researcher conducting the study. Alan Peshkin (2000) points out that the essence of case study design is interpretation. It is the researcher's interpretive acts that give, “importance, order, and form” to the study (p. 5). These interpretive acts occur throughout the course of the study. Gall, Gall, and Borg (2003) state, "In this view of case study design, the researcher's interpretive skill - acquired through study, apprenticeship, and experience - determines the specific features of the design. In this view, too, case study design is not an event, but a process that occurs throughout the case study" (p. 441). This case study was formed by the interpretive acts of the researcher; a primary decision was in the selection of this particular school, the formation of the focus groups, and in the combining of qualitative methods to render a more complete representation of a school that proved a positive example of sustained school improvement.

**Communicating a Lived Experience: Membrane of Separation**

Mears (2009) uses the phrase, “membrane of separation” as a metaphor to describe the barrier to the inner workings of a situation; she explains the “boundary of experience and understanding” that must be penetrated to explore meaning inside research settings. Mears explains this dynamic as, “a separation exists between those who have lived an experience and those who have not” (p. 3). Mears articulates her personal
goal in conducting research in the Columbine tragedy, “I wanted to connect those outside of the event directly to those inside, communicating the experience in a way that would evoke a depth of understanding with me, the researcher, as invisible in the process as possible” (p. 5). These words aptly describe the approach of this researcher. The goal was to provide an entrance into the experience of a sustained school improvement process, examining the phenomena through qualitative lenses to gain insight. In defining the work that was accomplished and in giving voice to the practitioners who participated, the goal was to enlighten a deeper understanding of the inner workings of a school improvement setting.

**Researcher Bias**

At the same time, while researchers who have in-depth knowledge of the research setting certainly have a depth of understanding not available to outsiders, there is also the potential for bias. In this case study, the researcher served as the school principal during the course of the implementation of school improvement initiative. To protect the data from bias, the protocols of the gateway method were adhered to very strictly. Careful attention was given to the “presence of a subjective lens” and vigilance exercised to assess its impact throughout the research process (Mears, 2009, p. 4). This researcher was mindful to avoid subjectivity that would prove detrimental to successful research, recording the focus group discussions and transcribing them precisely. Using a modified version of Mear’s gateway process, the researcher worked to accurately record the perceptions of the staff who participated in the focus groups through their own words, discovering meaning within this qualitative data.
Sample: Research Site

It was important to select a school that had experienced a successful, sustained school improvement process; it was also significant to choose a school that had experienced demographic changes that placed it on par with changing semi-urban schools across the country. Colorado Middle School was a school that clearly met these criteria as seen in:

- Improved math achievement for all students at a middle school over a five year timeframe (2005-2009),
- Improved math achievement in all subgroups (comprising 30 or more students) including black, Hispanic, white, boys, and girls (2005-2009)
- Increased percentage of students scoring Advanced in math while reducing the percentage of students scoring Un satisfactory in math, and
- Narrowed achievement gap in math across traditionally high-performing and low-performing subgroups, including black, Hispanic, white, boys, and girls, at 6th, 7th, & 8th grade.

Built in 1972, Colorado Middle School was a traditional middle school of approximately 825 students located in an aging residential, semi-urban setting. Two-thirds of the students enrolled attended from the nearby area which was a 1970’s vintage locale experiencing the turnover of many previously owner-occupied homes to numerous rental properties in the area nearest the school. Located in a neighborhood of mature trees, across the street from the local park and around the corner from the neighborhood church, the school was populated with a mix of students from nearby rental properties as well as middle and a few upper middle-class subdivisions of the wider area where there existed well-kept custom homes of about the same age.
In addition to this neighborhood setting near the school, one-third of the student population consisted of students who were transported from the highest-poverty and crime neighborhood in the city, an area commonly known as ‘Little Chihuahua’ for the large number of residents there relocated from Chihuahua, Mexico. Approximately 250 students from this remote neighborhood traveled about 30 minutes to school on district-provided school busses. This unusual arrangement was due to the conversion of the neighborhood school across town to an Edison charter school several years prior. Thus, the district provided bussing to a non-charter school option, Colorado Middle School. The school was a veritable crossroad of all variations of ethnic and socioeconomic backgrounds. Data representing the socio-economic and minority/majority make-up of the student population is represented in Figure 2 below.

![Graph showing Colorado Middle School Free/Reduced Lunch & Minority Students by Percentage](image)

Note: Source for this data is Colorado Department of Education and Certified District October Student Counts

Figure 2: Demographic breakdown of student population of Colorado Middle School:
This individual school evidenced a setting worthy of investigation into school improvement processes in that it experienced, over the five year timeframe of the study, a documented increase in the impact of poverty, second-language learners, and other factors placing students at-risk for positive achievement trends. Further, the shifts in student population experienced by this school mirror those commonly occurring in many urban schools across the country. As the school continued to show stable and improving results despite the change in demographic student population, the setting was then considered an ‘outlier,’ one demonstrating positive achievement results despite significant changes that might suggest otherwise. Payne (2010) refers to these kinds of settings as robust and worthy of scrutiny; he emphasizes the importance of examining schools with results that, “hit us right between the eyes,” and points out that, “Social scientists need to wean their thinking from the tyranny of central tendency. Knowing what happens on the average in urban schools is often perfectly useless. We need to know more about what can happen, not what ordinarily does happen. One success, Robert Merton noted, tells us more than a thousand failures: one success tells us what is possible” (p. 7). In the selection of this particular school for the case study as well as in the design of the research investigation, the aim was to develop an approach that allowed for entrance into the dynamics of the successful school process to enhance understanding of school improvement.

**Calendar of Implementation**

The calendar of implementation, depicted in Table 2, provides a picture of the chronology of the implementation process and illustrates the nature of this school
improvement initiative over the five year timeframe. The calendar serves to reveal more depth of understanding in the nature of the improvement process in the school. First, the improvement initiative involved systemic, higher-order change in two major areas. Most of the improvements that followed cluster around these two fundamental shifts in the school:

1. **Instructional Redesign** in organizing the school into a three-tiered delivery model. This was accompanied by initiating a standard protocol for placing students into Tier 2 and Tier 3 interventions, the ‘building out’ of intervention classes at all three grade levels, and animating the structure with a problem-solving process to move students seamlessly in and out of intervention support.

2. **Culture, Climate, and Behavior Makeover** characterized by the agreement and establishment on core values to guide adult and student behavior and the implementation of Positive Behavior Supports. A key feature of this initiative was a commitment to achieving the PBS prescribed 8:1 ratio of positive feedback to students.

These changes were introduced into the school, beginning in school year 2004-2005 and they were layered into the school system over the subsequent five years.

This school improvement process featured some initiatives that were implemented simultaneously in the whole-school, as in the case of the Positive Behavior Support implementation; others were phased-in by grade level or content area. These adjustments included some fairly straightforward processes, such as the addition of math intervention teachers at 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades over the course of three years or the addition of technology –based support in the Tier 2 math classes. A third distinction in the nature of implementation involved certain initiatives that can be marked with a distinctive beginning point; these campaigns gained momentum over the months and years following the initial shift in practice. The adoption of shared core values, the lead with
the positive implementation, and a school wide Positive Behavior Supports (PBS) system would fall into this group. All improvement initiatives were continuous and overlapping in their implementation cycles and thus any attempt to measure correlation or effect must embrace the organic nature in which these enterprises evolved within the living system of the school.
**Table 2**

*Calendar of Implementation, 2004-2009, Colorado Middle School School Improvement*

<table>
<thead>
<tr>
<th>Year</th>
<th>Theme</th>
<th>Systems Development: Three-Tiered Instructional Design Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005 Year 1</td>
<td><em>Push to Succeed: Prepare to Excel!</em></td>
<td>Add 1.0 S/M Math Interventionist Exploratory Team Serves 100 6th, 7th, &amp; 8th</td>
</tr>
<tr>
<td>2005-2006 Year 2</td>
<td><em>CSAP: It’s Only A Mountain!</em></td>
<td>Add 1.0 S/M Math Interventionist 6th Grade Add 100 6th</td>
</tr>
<tr>
<td>2006-2007 Year 3</td>
<td><em>Breakthrough to Excellence!</em></td>
<td>Total students served = 100 Math, Tier 2</td>
</tr>
<tr>
<td>2007-2008 Year 4</td>
<td><em>Achieve the Summit: Success!</em></td>
<td>Add 1.0 S/M Math Interventionist 7th Grade Add 100 7th (Elim explor)</td>
</tr>
<tr>
<td>2008-2009 Year 5</td>
<td><em>Shift Your Thinking: Change the World!</em></td>
<td>Total students served = 200 Math, Tier 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add 1.0 S/M Math Interventionist Exploratory Team</th>
<th>Add 1.0 S/M Math Interventionist 6th Grade</th>
<th>Add 1.0 S/M Math Interventionist 7th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total students served = 100 Math, Tier 2</td>
<td>Total students served = 200 Math, Tier 2 6th, 7th</td>
<td>Total students served = 200 Math, Tier 2 6th, 7th</td>
</tr>
<tr>
<td>Implement Algebraic Thinking Tier 2 Math Curriculum, at 6th, 7th</td>
<td>Implement Algebraic Thinking Tier 2 Math Curriculum, at 6th, 7th</td>
<td></td>
</tr>
<tr>
<td>Discontinue Connected Math &amp; Implement Prentice-Hall Math at Tier 1 6th, 7th, &amp; 8th</td>
<td>Discontinue Connected Math &amp; Implement Prentice-Hall Math at Tier 1 6th, 7th, &amp; 8th</td>
<td></td>
</tr>
<tr>
<td>Add 1.0 S/M Math Interventionist 8th Grade</td>
<td>Add 100 8th</td>
<td></td>
</tr>
<tr>
<td>Total students served = 300 Math, Tier 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented Study Island tech-based test-prep program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue with S/M Math Interventions 6th, 7th, 8th grade (15 sections)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total students served = 300 Math, Tier 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Three-Tiered Instructional Design &amp; Problem-Solving Process</td>
<td>Focus on Positive Culture &amp; Climate</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>2004-2005 &lt;br&gt;Year 1</td>
<td>Begin Implementation of three-tiered instructional design</td>
<td>Implementation of Raider PRIDE behavior code</td>
</tr>
<tr>
<td>2005-2006 &lt;br&gt;Year 2</td>
<td>Implementation of Response to Intervention instructional model</td>
<td>Worked on reinforcing positive behavior building-wide</td>
</tr>
<tr>
<td>2006-2007 &lt;br&gt;Year 3</td>
<td>Begin development of Problem-Solving Process</td>
<td>Established ROCKS CORE Values &amp; Lead with the Positive approach</td>
</tr>
<tr>
<td>2007-2008 &lt;br&gt;Year 4</td>
<td>Refine Behavior of Pyramid of Interventions</td>
<td>Purposeful work began in positive behavior expectations schoolwide</td>
</tr>
<tr>
<td>2008-2009 &lt;br&gt;Year 5</td>
<td>Refine Problem-Solving Process</td>
<td>Refined the ROCKS Citizenship Rubric to calibrate/reinforce ROCKS values with all students, staff</td>
</tr>
</tbody>
</table>

- Early work in developing Academic Pyramid of Intervention
- Implemented RACE, schoolwide short constructed response structure
- Implemented SOLVE schoolwide problem-solving response structure
- Implemented GLOBE & BEAKERS schoolwide social science and scientific process structures
- Continued implementation of schoolwide structures for teaching and learning
- Refine behavior & student dress code expectations
- Introduced assessment rubric
- Implementation of BIO room, a behavior intervention opportunity
- Refined the ROCKS Citizenship Rubric to calibrate/reinforce ROCKS values with all students, staff
- -Refined ROCKS CORE Values, integrated into the school system
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAP Composite Score</td>
<td>57%</td>
<td>60%</td>
<td>62.5%</td>
<td>63%</td>
<td>63%</td>
</tr>
<tr>
<td>CSAP Score Composite from previous year</td>
<td>Improved</td>
<td>Improved</td>
<td>Improved</td>
<td>Stable</td>
<td>Stable</td>
</tr>
<tr>
<td>Overall Academic Performance Rating</td>
<td>Average</td>
<td>Average</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Academic Growth</td>
<td>Improvement</td>
<td>Improvement</td>
<td>Improvement</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>School Accountability Report, CDE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AYP Outcomes</td>
<td>-Achieved 35 of 36 targets in AYP</td>
<td>-Achieved 34 of 36 targets in AYP</td>
<td>-Achieved 40 of 40 targets in AYP</td>
<td>-Achieved 42 of 42 targets in AYP</td>
<td>-Achieved 40 of 42 targets in AYP</td>
</tr>
<tr>
<td></td>
<td>-Did not achieve AYP in Reading</td>
<td>-Did not achieve AYP in Reading</td>
<td>-Achieved AYP in Reading</td>
<td>-Achieved AYP in Reading</td>
<td>-Did not achieve AYP in Reading</td>
</tr>
<tr>
<td></td>
<td>-Achieved AYP in Math</td>
<td>-Achieved AYP in Math</td>
<td>-Achieved AYP in Math</td>
<td>-Achieved AYP in Math</td>
<td>-Achieved AYP-in Math</td>
</tr>
<tr>
<td>Year</td>
<td>Recognition</td>
<td>Year</td>
<td>Recognition</td>
<td>Year</td>
<td>Recognition</td>
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<tr>
<td>------</td>
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</tbody>
</table>

August, 2009 – CMS Designated a Colorado High-Performing School, for three continuous years of high growth in Math (62%) 1 of 15 middle schools in Colorado to receive this designation. Awarded the Colorado Schools of Character Award, Feb, 2010.

**Achievement Data**

Achievement data for the school highlights a summary, holds up a mirror to illustrate another perspective on the outcomes of this improvement process; like the students, staff, and the school they represent, these outcomes are not perfectly ascending arrows all pointing toward trends of perfection. They represent the kind of ‘two steps forward: one step back’ growth that is natural to any living, breathing, complex organization.

During the years of the improvement initiative, the shared goal across the school team was to discover a process that would result in improved achievement, particularly in progressing in four key areas in the pursuit of equity and excellence in achievement.
These targets served as the goals for the staff and leadership of the building as a way of determining the momentum of the improved outcomes; they serve as worthwhile measures now in summarizing achievement progress. The measures were:

- Improve the achievement of ALL students
- Improve the achievement of all subgroups (comprising 30 or more) of students. At CMS this included black, Hispanic, white, boys, and girls (2005-2009)
- Increase the percentage of students scoring Advanced while reducing the percentage of students scoring Unsatisfactory, and
- Narrow the achievement gap across traditionally high-performing and low-performing subgroups, including Black, Hispanic, White, boys, and girls

Table 3

Achievement Changes Colorado Middle School 2005-2009

<table>
<thead>
<tr>
<th>Grade Level/Subj</th>
<th>ALL Improved</th>
<th>Subgroups Improved</th>
<th>Advanced Increased</th>
<th>Unsatisfactory Decreased</th>
<th>Gap Narrowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Math</td>
<td>Yes 50% to 67%</td>
<td>Yes +9 to +25 pts</td>
<td>Yes 12% to 26%</td>
<td>Yes 16% to 10%</td>
<td>Stable at 37-38 pts</td>
</tr>
<tr>
<td>7th Math</td>
<td>Yes 39% to 54%</td>
<td>No - In 4 of 5</td>
<td>Yes 12% to 16%</td>
<td>Yes 18% to 13%</td>
<td>Yes 37 to 25 pts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+9 to +29 pts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black group stable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Math</td>
<td>Yes 45% to 61%</td>
<td>Yes +13 to +30 pts</td>
<td>Yes 10% to 22%</td>
<td>Yes 17% to 9%</td>
<td>Yes 34 to 14 pts</td>
</tr>
</tbody>
</table>

Table 3 represents the progress attained in improving student achievement outcomes during the school improvement timeframe. Comparison charts of this progress in relationship to the district and the state are included in Appendix C. The stated goals in the school included increasing the rate of students scoring Advanced to 25%, reducing the
rate of *Unsatisfactory* to 5% or fewer, and narrowing the performance gap between groups to 5% or less. While a great deal of progress has been made, work will continue in these areas, particularly in working to reduce the gap across subgroup performance which remains a persistent challenge. Of note is the more significant progress in gap reduction in the 8th grade group; overall in the school, the trends are positive toward the 8th grade year, suggesting that the longer students are in the school, the better they perform. These results inform the next chapter of school improvement work at Colorado Middle School.

**Sample: Selection**

The staff of the school was somewhat stable over many years during the 1990’s and during the time of this school-improvement initiative (2004-2005 to 2008-2009), the predominantly aging staff went through a period characterized by a higher-than-usual number of retirements resulting in several younger members who joined the school team. This change was true for each of the grade level teams, 6th, 7th, and 8th as well as the Exploratory Team. During the time of this five-year implementation, several mature staff members were replaced by younger teachers with considerably less teaching experience; the result was that the staff consisted of a mix of younger, mid-career, and highly-experienced teachers at the time of this study.

**Focus Groups**

Four focus group interview sessions were conducted with teams of teachers and support staff; most teachers who regularly engaged in school team meetings at the time of the study participated in the focus group sessions excepting only one or two teachers who were absent on the date of the focus groups. Focus groups were held with the Building
Leadership Team, the Language Arts/Reading Team, the Math Team, and a mixed team.
The composition of the Language Arts/Reading and the Math focus groups included
teachers grouped by subject area from across 6th, 7th, and 8th grades; the Building
Leadership Team was organized with representatives from all grades and subjects in the
school. These groups were configured in a manner very similar to the regular team
meetings regularly held to conduct the improvement work in the school over the time of
the study. The focus groups served as an accurate reflection of the team meeting, a school
structure central to carrying out the work of the improvement, and formed the most
natural, integrated setting in which to discuss the reflections of staff members on their
individual and shared experience of school improvement.

The 48 focus group participants ranged from 1 year to 29 years’ experience
working in the school. As illustrated in Table 4, the groups comprised a mix of new, mid,
and highly-experienced teachers:

Table 4

*Focus Group Composition*

<table>
<thead>
<tr>
<th>Team / Years Working in School</th>
<th>1-5</th>
<th>6-10</th>
<th>11-19</th>
<th>20+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Leadership Team</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Math Team</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Literacy Team</td>
<td>6</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Mixed Team</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

Themes generated from the focus group participants resonated across the spectrum of
levels of experience. Written responses generated prior to the focus group discussions
served as a way to ensure the stability of the data as well as to validate that the discussions were an accurate reflection of patterns that emerged from many participants, not just merely the ideas of only a few individuals. As a result, the patterns of meaning generated from focus group discussions transcended age and years of experience in the school.

Confidentiality was carefully maintained by using a pseudonym for the name of the school and the school district. In reporting achievement data only for groups containing 15 or more students, confidentiality preserved the identity of all students. Focus group participants signed informed consent agreements and the focus group data is reported using pseudonyms for participant educators. Due diligence was observed throughout this study to maintain confidentiality of identity and associated achievement data.

**Data Collection Methods**

The study encompassed an analysis involving both process and people. The information needed to answer the research questions required discovering the what, when, and how of the school’s improvement process through examination of teacher perceptions alongside a calendar of implementation and student assessment results. Focus groups were conducted during May, 2010 and the calendar of implementation was developed and refined during 2010 and 2011. With the principal’s approval, email invitations (Appendix B) were sent to teachers in early May, soliciting attendance. Four focus groups were facilitated, including the Building Leadership Team (17), Literacy Team (10), Math Team (11), and Mixed Team (10). Although there were 48 staff member
participants in the focus groups, it should be noted that some staff members, particularly some members of the Building Leadership Team, participated in more than one group. A breakfast or lunch was provided prior to the beginning of the discussion and all teachers attended except 1 or 2 who were absent on the day of the discussion. The focus groups were conducted with a paid scribe attending to collect the discussion responses; the scribe charted responses on chart paper posted on the walls around the conference room so that participants could see what was recorded. The sessions were audio recorded. The responses recorded by participants onto individual response sheets at the beginning of the focus groups were tabulated into a matrix for each focus group. They were later combined into one matrix to represent the responses of the entire group. The achievement data was collected during the years 2004 to 2009; graphs were further refined during 2011.

**Focus Groups**

The purpose of implementing focus groups into this research design was to honor the voices of the educators who participated in this work. The focus group data added the voice of lived experience, the reflections, thoughts, and first-hand observations; this component was pivotal in bringing life to the story featured in this study. Simons (2009) explains that in educational and social research, “…people figure prominently. They are the key protagonists in classroom transactions, in developing policies and translating these into practice. Policies and programmes are devised by people and implemented by people” (p. 69). The use of focus group discussions in this research allowed for the
appropriate introduction of people into the equation; dialogue invigorated the relating of the school’s story.

The selection of focus groups over other interview research options was key to this study. The team meeting formed the setting and the occasion for the discovery and implementation in the progression of the school over the five-year implementation of school improvement process. This is where the countless discussions, collaboration, tension and laughter occurred; these weekly team meetings formed the heart of the improvement process, the primary setting for group interaction, invention, and discovery. The team meeting was consistently the venue for analysis, problem-solving, brainstorming and breakthroughs. As such, it is most appropriate that the focus groups in this study were selected similarly; the focus groups met in similar combinations of individuals and in the same room as the work actually occurred over the previous years. As such, the team meeting format proved a natural, integrated approach to reflecting on the school improvement process and it is significant that this same arrangement was used in assembling the focus groups. This protocol is meaningful in validating the discoveries and reflections offered in the groups.

**Focus Group Procedures**

Qualitative data included in this study consisted predominantly of focus group data that was collected by first inviting the participants to attend the focus groups where teachers and support staff recorded individual responses in writing and then participated in a group discussion. Focus group discussion prompts were:
1. Think back over the time you were involved, as a teacher, in the school improvement process at Colorado Middle School (specifically the school years 2004-2009).

2. Please list any components of the process of implementation that you believe contributed to a positive difference in building capacity in the school and student achievement outcomes.

3. Please list your answers (as many as you want) on the piece of paper provided, and, in a moment, we’ll share these with each other.

4. Participants answer individually for a few moments.

5. Participants share answers and discuss.

6. If you had to pick 3 items from this list that you feel proved most important to our school improvement, which would they be? Why did you choose these?

The focus group participants shared in a forty-five minute discussion of their responses with a member responding and then the group discussing their recollections of various components of the improvement implementation. In turn, each focus group participant offered a component from their list and at the conclusion, group members responded to the question, “Any additional thoughts?” The focus group experience consisted of response sheets where staff recorded initial individual responses to the focus group probes followed by the physical recording on chart paper visible to the group during the discussion. The recording of charted data was completed by a paid scribe from outside the school. The focus group discussions were audio-recorded. The focus groups occurred during May, 2010.

Assessment Data

Achievement data was collected for this study with the purpose of enhancing the story of the improvement, and included student performance data consisting of Colorado
Student Assessment Performance (CSAP) information. Standardized assessment data was collected primarily using the Colorado Department of Education website and Alpine Achievement, a district-provided data resource. Analysis of sub-group data included those groups considered to determine Adequate Yearly Progress, those with an n=15 or more students enrolled in the school. At Colorado Middle School, these groups were: all students at 6th, 7th, & 8th grades, and subgroups at each grade level, consisting of Black, Hispanic, White, boys, and girls. The measure of reporting the achievement of these groups of students consisted of the percentage of students scoring Proficient and Advanced (P+A) and was displayed in trends over the five years of the study. Trends measuring the percentage of students scoring Unsatisfactory and Advanced in math in each area as well as a measure of the gap between highest and lowest performing subgroups. The researcher accessed this data from district data sources including Alpine Achievement and the Colorado Department of Education, creating the achievement graphs in a simple Word application.

Calendar of Implementation

Data for the calendar of implementation was assembled from a thorough review of school documents generated during the five-year timeframe. Each year of the implementation, the school employed a theme for the year; these themes ‘anchored’ the progression of the calendar. A draft calendar was initially compiled from a review of school artifacts including agendas from Building Leadership Team, grade-level team, staff meetings, professional development sessions, staff retreats, school improvement plans, and other school functions. The draft calendar was then presented during the focus
group sessions so that the groups could offer any suggestions or clarifications as needed. Adjustments were made to the calendar as information was clarified by staff members.

**Data Analysis Procedures**

The focus group data was analyzed using two approaches. First, the written response data was analyzed for frequency of response. This response data was placed into a simple matrix for each focus group, *Building Leadership Team, Literacy Team, Math Team,* and *Mixed Team.* Each matrix contained the names of the narrators across the top and the emerging themes along the left margin. The written response data from each of the three groups was then compiled into a summative matrix displaying the collection of written responses provided by staff members during the focus group discussions. This element of the data analysis process informed the research question: “What components of school improvement do educators believe contributed most directly to sustained improved achievement?” In this analysis, written response data were examined, first from each of the focus groups and then combined from the whole to demonstrate themes from staff perceptions of the components that contributed to improved student achievement in the school.

**Excerpted Narratives and Global Themes**

Secondly, the focus group discussion data was analyzed using the excerpted narrative approach as described in the gateway method developed by Carolyn Mears. Although the quickest way to present the reflections would be to summarize and report, Mears (2009) points out that merely summarizing, “risks losing the intricacies and nuances of understanding by negating the authority of the voice that spoke the words and
gave them life” (p. 122). Through the excerpted narrative format, the voices of those who did this work will be heard and highlighted to uncover the individual and collective journey to improvement. In using the excerpted narrative approach, the content is presented with the, “original expressions intact,” and a “clarity emerges from the narrative since it recreates the experience instead of telling about it” (Mears, 2009, p. 126). The voices of staff members as they reflect on the process provide a unique and valuable entry into the experience of school improvement.

Mears (2009) describes the purpose of this excerpted narrative as, “a means to distill and display a narrator’s words in a story-like or thematic presentation that informs a research question and provides a gateway to the analysis and understanding of an experience” (p131). In this case, the presentation of the excerpted narrative reveals the individual and shared experiences of staff members who worked together in a school improvement process. Excerpted narratives were created for each of three focus groups: Building Leadership Team, Literacy Team, and Math Team. From this work, combined narratives were created around themes. Mears (2009) points out that, “larger patterns and themes can be discerned by considering all of the narratives in relation to each other” (p. 135). In using the gateway method, it is also important to understand that the narratives here do not represent direct quotations as they were written but have been excerpted from the focus group discussion and then sequenced into an understandable form for presentation (Mears, 2009). In creating the excerpted narrative, the researcher listened repeatedly to audio recordings and reviewed the written transcript numerous times to discover patterns within the discussions. A pattern emerged when an element was heard
two or more times, when common phrasing emerged, or when terms were repeated within or across focus group discussions. Through construction of the excerpted narratives from focus group discussion data, entrance was gained into the school improvement experience of educators; their voices were united into one revelatory display.

Steps employed by the researcher in the creation of the excerpted narratives are adapted from Mears (2009, p. 124); these narratives serve as an interpretive display of focus group data.

- Transcripts were created from the recorded focus group sessions.
- Transcripts were reviewed, passages were highlighted that were of value in communicating the story and those necessary to provide the context.
- In the electronic version of the transcripts, the chunks of relevant data were cut and pasted into a single document.
- These chunks were examined closely to observe repeated patterns, phrases, elements, metaphors,
- Surveyed material to develop plan for communicating the experience – determine chronological, thematic, or other ways to organize information.
- Paid special attention to phrases that were repeated verbatim; determine if they will form a sort of refrain that gets at the heart of the participant’s relationship to the experience and help to discern underlying patterns.
- Reflected on patterns observed and considered broader themes that these might embody.
- Closely assessed other words or phrases to determine if they were essential to communicating the meaning. Transition words, filler words were deleted at this stage.
- Arranged the fragments in a ‘string’ that runs down the page, looking much like a poem.
• Reviewed again and again, distilling the narrative into its essence, working to refine document to the simplest, purest form that communicated coherently.

• Cut, deleted, purged; there is power in the fewest words.

• Narratives were sequenced with attention to both chronology and theme.

• Experimented with the placement of individual passages, switching order to create effect.

• Checked the original transcripts one more time to be sure nothing was left out that connected to what was emerging from the data.

• Excerpted narratives were considered with respect to their message (a vertical consideration) as well as in regard to all of the other narratives (a horizontal analysis) to discern common themes, patterns, understandings, or differences that emerge across the study.

• Poetic displays were grouped around themes and patterns; each poetic display brought a different perspective to the story of school improvement.

Limitations

This study comprises the relating of one school’s journey. As such, it is not generalizable to other sites. Gall, Gall, and Borg (2003) explain, “If one subscribes to the assumption of post-positivist epistemology that meaning is embedded in local, immediate contexts, it follows that generalizations about features of social reality necessarily will be difficult and tentative” (p. 19). Mears (2009) points out that what can accurately be reported is that among the individuals interviewed, certain patterns of response were discovered. Regarding the stories shared, she adds, “the stories you have heard do not represent the full range of experience and response to the situation. . .” (p. 140). Readers are advised to read for understanding of this particular school improvement story and then attentively apply their own reasoned thinking to any potential applications.
**Ethical Considerations**

Each individual who participated in the focus group discussions was informed about what would occur during the research study and the intended use of the data collected. Each participant received a letter that described the research and the conditions of their participation and each participant signed an Informed Consent agreement (Appendix B). At the beginning of the focus group session, all participants were reminded of their option to withdraw from participation at any time they felt any discomfort.

Data collection in case study research poses specific ethical dilemmas. Gall, Gall, and Borg (2003) reference ethical considerations that can provide a foundation for seeing and resolving issues that arise in case study research. Relational ethics was most applicable in this research study, meaning that all decisions and actions were evaluated by whether they reflected a caring attitude toward others. An ‘ethics of caring,’ as explained by Noddings (1986) supports the primacy of people with particular attention given to maintaining community, growth of individuals, and the enhancement of relationship. Gall, Gall, and Borg (2003) conclude, “Relational ethics require that the case study researcher be a sensitive, fully engaged member of the participants’ community rather than a detached observer” (p. 447). Careful adherence to the precept of preserving community and enhancing relationship through a caring approach were central practices observed by the researcher in maintaining an ethical approach to conducting this research.
Summary

The goal of this study was to achieve an up-close exploration into an individual school improvement process. Through a careful analysis of qualitative data including a calendar of implementation and reflections of the practitioners who accomplished the work set against the achievement data, the aim was to uncover an authentic improvement process, rendering an enhanced understanding of successful and sustained school improvement work.
Chapter Four: Findings

Introduction

The purpose of this case study was to tell the story of one school by exploring the dynamics of the school’s five year improvement process. Through focus group discussions, the researcher sought to uncover the reflections on the personal and shared experience of teachers and what components of school improvement educators believed contributed most directly to a successful improvement in the school. The data informing the case study included evidence from focus groups including written responses and discussion, a calendar of implementation, and achievement data outcomes.

The findings are organized to systematically address each research question. In response to the first question:

- What were the reflections on the personal and shared experience of participant educators who worked in the school during the five years of a successful school improvement implementation?

The findings were uncovered from the reflections shared by school staff members who participated in each of the four focus group sessions including the Building Leadership Team, Literacy Team, Math team, and a mixed team. Focus group data is presented in themes gleaned from participant responses and illustrated with specific excerpts from the words of the participants; the data was examined across the four groups to determine key patterns. Mears (2009) describes this step as, “looking to make connections across the narratives, noting the commonalities of experience and response as well as the
differences, and then accounting for and making sense” of what is discovered (p. 136).

The collective findings from the focus group responses are shared through an excerpted narrative format (Mears, 2009).

In response to the second question,

- What components of school improvement do educators believe contributed to the sustained improved achievement?

Findings are presented through a matrix display demonstrating the frequency of written response by staff members during the focus group interaction. A calendar of implementation is displayed along with achievement data to complete the picture of the improvement.

**Findings Research Question #1**

In response to the question:

- What were the reflections on the personal and shared experience of participant educators who worked in the school during the five years of a successful school improvement implementation?

Responses from the focus group participants were categorized into distinct domains across the four discussions. These areas included: the ways the school team defined success for students, the role of data, the advantage of school wide instructional strategies, a focus on developing positive culture and a behavior pyramid, the effectiveness of intervention classes, the importance of team and reflections on the school improvement journey.

Poetic displays illustrate understandings gleaned from the focus group discussions and serve as an analysis of the reflections of staff members. A complete rendering of poetic displays is contained in Appendix A; excerpts from the full poetic displays are
used to illustrate themes emerging from within and across focus groups. The poetic displays are presented in combinations of two, three, or four ‘poems’ at a time around a single theme. The reader is requested to read each poem; individual poems illustrate a particular perspective on the issue; group poems note relationships and animate themes across the group of poetic renderings thus reflecting depth and breadth of responses.

**Theme 1: Success of the ‘whole-child’.** Valuing the well-being and growth of the ‘whole child’ as the way of determining success in work with students emerged as a clear pattern in the focus group data. Success was described in terms much broader than the narrow focus of attaining of higher CSAP or other standardized achievement scores. The conversation highlighted various ways of connecting with students and measuring success in the daily work in the school. In the words of this team, success for students emphasized a variety of indicators of student progress and focused on the whole child. The team viewed the opportunities for students participating in performing arts and exploratory classrooms as a doorway to support student engagement, build confidence, and perpetuate success in school. While they articulate commitment to an academic priority, staff members were clear that their roles extend beyond academics. They hope to accomplish much more with students than achieving higher standardized scores; there emerged a strong life skill focus, on equipping students behaviorally as well as academically, and on development through the performing arts, technical skills, and problem-solving. Staff reflections in understanding and measuring success in value-add areas beyond narrowly defined academic endeavors are observed in the following poetic displays, excerpted from the focus group data.
Success comes in a lot of ways at CMS

Focus on the performing arts really helps students achieve
In performing arts students can see success is possible
They might not be good students but they know how to sing
they know how to play they can draw really well
and by seeing in one aspect of their life they can do well
they also see, “Maybe I can do well in other things”
they’re more willing to work hard pride in their school
it really makes a difference Kids know that they can succeed here
It’s a way to keep kids engaged in school
while they’re struggling If they’re successful in the performing arts
it’s going to improve their math and science

Singing, Playing, Dancing, Creating

------------------------------------------
**Exploratory learning as a challenge**

A real shift
when
instead of home-ec and metals
implemented pre-engineering, *Gateway to Technology*
more academic focus
in exploratory classes
school year 2006-2007
the collaborative effort
of students reading and writing
in exploratory classes
They’re not little,
“Hey, let’s just go have a break”
classes
pre-engineering – technology – piano lab - art
in art class, they do research, they write
they don’t just go to have fun
high levels of student engagement
students challenged
in exploratory classes
*exploratory learning*
*challenging, engaging, fun*

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Focus on the Whole Child

Always very, very clear
we do have an achievement focus here
but it’s also very, very clear
that’s not in any way
all we do
have never felt that sort of achievement pressure
It was more self-imposed
I think
than anything else,
wanting to be on a team
and contribute to the team
rather
than feeling pressured to do it
I do this because
it is something that I want to do

Theme 2: Understanding data as a doorway to change

The use of data in the school appeared as a pattern in the discussion in distinct ways: Longer term staff members remembered first becoming aware of the school’s performance data and recalled that event as a catalyst that initially prompted the need for change in the school. They lucidly recalled that when the staff embraced the reality of the school’s achievement data, they understood the need to change practice. Also, the staff shared how much they value using data in terms of moving students seamlessly in and out of intervention support to stimulate achievement growth. The staff valued the use of data with their students as a tool to invite students into ownership of their individual academic growth. Finally, the staff expressed their appreciation that data in the school
was not used as an indictment of their work, but rather to inform the improvement process. Staff perceptions around data are illustrated in the following poetic displays.

_The Data Brought Us to Understand_

our demographics

our reality

data provided a focus

we wouldn’t have had otherwise

What made us change

was understanding

our school demographics

had changed

We couldn’t continue the way we were

_We could not continue the way we were_

Had to look at new ideas

Without new ideas

we were stuck

not moving

Important piece

_we were willing to change_

have to be on board together

_We had to be willing to change_

_________________________
Tiered Instructional Design and Problem-Solving Process

*Everybody knowing the data*

open conversations
what the data looked like
Response to Intervention process
looking at how we move students
data supporting decisions
moving students
in and out
of intervention
Not just knowing the data
*using* the data
coming up with strategies
to address the issues
Having time to really work with the data
to get to the strategies right
look at those strategies
play around with them
‘tinker’
to get achievement growth
Knowing our strategies

*Knowing our data*

-------------------------------

*Kids And Data*

*Our kids know where they are*
in their achievement
MAP Testing
I like being able to check
throughout the year
not have to wait til August
to see how my 8th graders were doing
from the August before
Get the kids
on board with goals and their scores
“*This is was your score in the fall,*
*this is where you should be about this time of year.*”
Gives kids something to work for
“*What’s your goal for this test going to be?*”
Throwing it back to the kids
Like a physician
this is where you should be
let’s see if you’re really there
Just had a little boy
in J’s Tier 2 reading class
he went up like 20 points
when you can give them
that feedback
you can see how proud of themselves
they get
when they have a big growth
just show *that* to the kid
and they light up
I had a student
that actually went to his next class
he was so excited
about his growth
that the teacher let him call home
I could tell he was excited
He was in math class
and he wanted to call home
right at that moment and share that data
And on the front end of that
we have a climate
of students taking accountability
where they respond very well
to being encouraged to set goals
“This is what you got on CSAP,
this is what you need
to get to the next level
you just need that much.”
Working on a way
to grade them on their growth
rather than
did you just do your homework
*Attitude: “It’s fun being smart!”*

-----------------------

**Data Digging**

presentation of the data
made a big difference
when we’d come back in August
to hear what the CSAP scores are
that could just be devastating
for teachers
if you’re that grade level that’s this year
‘dipped down’
If that were presented differently
you could just want to go home
call it ‘done’ for the year
but the way it was always presented
it was so positive
if there was a dip
immediately
thinking about all the factors
that may have contributed
so careful to have
not even
an iota of blame
when the data was presented
we weren’t so terrified to come in
see the data
set the goals

**Theme 3: Connections in learning: School wide academic strategies.** School wide academic strategies emerged as a pattern in creating connections across teaching and learning in the school; these common strategies provided learning connections for students and instructional focus for staff. A pattern that surfaced often within all groups was the belief that common school wide academic strategies formed a significant contribution in attaining success with students. These structures: a common short-constructed response framework, RACE, a problem-solving acronym, SOLVE, as well as GLOBE for social studies, and BEAKERS, the common CMS acronym representing the scientific process, were believed to stimulate students to learn, connect, and respond across the boundaries of content classrooms and from grade-to-grade. Colorful posters
highlighting these academic structures are displayed in all classrooms in the school. The theme of school wide strategies is shared through the following poetic display.

School Wide Academic Strategies

Connections
The most success we’ve had
is when
we do a schoolwide
implementation
“*We’re all on the same page, and that page is positive, and that page is moving forward.*”

RACE
very effective
making connections for kids
a building-wide constructed response format
no matter where they go at school
kids are going to have a reminder
of how we write responses here
everyone learned RACE
everyone expected RACE
writing essays
all subjects
science, language arts, history
reading and writing on CSAP
not just a Language Arts ‘burden’
it was embraced schoolwide
that’s unique

*RACE, SOLVE, GLOBE, BEAKERS*
Theme 4: Creating positive culture, core values, behavior. Echoing through each of the focus group discussions was a resounding theme of the value placed by staff on the emphasis in creating positive culture in the school, the prominence of the core values, ROCKS, as well as the work in developing the Positive Behavior Supports (PBS) initiative and the behavior side of the school’s pyramid of interventions, featuring prescriptive behavioral steps at the Universal, Strategic, and Intensive levels. The theme of intentionally building positive culture based on core values in the school is illustrated through the following poetic displays.

Consistency of ROCKS CORE Values

CMS ROCKS
Consistency across the school
Developing the CORE values
ROCKS rubric
Consistency
not just in instruction
but in the way kids dress
in how the building is kept up
in the way the building looks
it was different here
all of those things
give the expectation
to our kids
we are here to learn
this is our home
we respect where we are
a lot of that came with PBS
a common language
developing the CORE values

ROCKS
how kids will treat each other
how adults will behave together
partner and parallel academic achievement
ROCKS lays a good foundation
every day
every class
every task
hope my students receive
internally
that between stimulus and response
lies our greatest power
and that’s the freedom to choose
Middlers are very stimulus-oriented
if they can take that moment
to reflect,
“Is my choice going to be
that
of an investor
or a gambler?”
then we can have more hope
for their academic progress
PBS
A tool to support academics
CORE values extend
student learning, effort, and inquiry
Assessments have improved
because of PBS system
We are now tied to good
effort-based data

*Respect, Ownership, Choices, Knowledge, Safety*

Life on the Other Side
(of the Pyramid)

*Behavior*

A big piece
of what we’ve learned
lies on the other side
of the pyramid
shifts made behaviorally

Have a kid who is struggling
the teacher knows he can do better
try a different class
to improve their success rate
not strictly academic moves
sometimes just not a behavioral fit
look at that side of it as well
work the other side

We remember well
the names of four or so kiddos
who helped us explore
develop the behavior side
they drove our practice
our development

86
our growth
they ‘pushed’ us to develop our behavior interventions

(laughter)
We learned a lot
we learned how to quantify behavior that year
before, we worked a lot with stories
although the stories are fun
So grateful
for those kids
We learned so much from them
When we started our RtI process
we were really good
at the academic side
We were hitting roadblocks, though
when we started doing root cause
Root Cause
Behavior, Motivation
Dead End
Our system really took off
when we launched our behavior side
Now, it’s a more comprehensive system
look at our system now
aligned resources
We started to make
a shift
in understanding that behavior
plays such a large role
in academic success
Can’t really look just at a student
being academically successful
We’re looking at the ‘whole child’
We’re looking at every aspect
that we can help with
or do something with
We’re not just looking at reading, math, science
We’re looking at, “How is that student doing in art or in choir?”
Focus on the character of the students
little things such as the morning announcements
when we think no one is listening
when we’re talking about apologizing
Really understanding
root cause behavior
especially for middle school students
How can we understand their behaviors
to help them help themselves?
Determination
we will not accept that a kid
is not going to be successful
Tools like the CSAP assessment rubric
teach tenacity in testing, developing a mindset
Important
because it’s going to help them down the road
when they start taking ACTs, SATs
‘We realize the kids we have’
The kids we have
do not learn how to test from their parents, typically
If they’re going to learn those skills,
they’re going to learn them from us

*The kids we have*

----------------------------------

**Clear Expectations**

*Clarity of expectations*

consistency spans across grade levels
everything at CMS
we find the strength
in
clarity, consistency
whole team approach
The more we do as an entire team
rather than just a small team
or a grade level
Clarity of schoolwide expectations
easier to be consistent
the language we use
‘here’s what we do at CMS’
‘that’s not what we do’
‘this is how we behave at CMS’
this is the standard
for when you’re here
those little things
make a big difference
‘Let’s make it a great day at CMS,
the choice is yours!’

*Clarity and Consistency*
Theme 5: Infrastructure of improvement: intervention classes and schedule.

Each focus group emphasized their belief in the effectiveness of the intervention and support classes in promoting student success in the school. Core academic teachers spoke of the support that is felt with the interventionist providing additional instruction at a separate time every day. Interventionists openly shared the thrill of watching students soar academically once their learning gaps are addressed. Staff members articulated their conviction that the three-tiered instructional design involving the additional class for Tier 2 and Tier 3 students had a strong correlation to the solid academic growth rates in the school. In each of these discussions, staff emphasized the importance of Tier 2 instruction for students who are behind as an additional class as opposed to taking the time away from Tier 1 instruction by pulling students from core class time. Central to this discussion was the critical importance of a flexible schedule that allowed for the essential movement needed to support students instructionally. The theme of intervention classes and flexible schedule is illustrated through the following poetic displays.

**Intervention and Support Classes**

*Adding Tier 2 & 3*

strategic and intensive classes

*feel* the support in Tier 1 content classes tremendously

support for kids, support for the classroom teacher

Tier 2 and 3 classes

Superb Interventions

all grade levels

gave kids extra skills

When students were below grade level

skills were built into interventions
tremendous progress made,  
+40 points  
another student  
+50 points  
when their learning ‘gaps’ are filled  
A support class  
not a pull-out  
*Cannot be a pull out*  
Not an elective, not a stigma  
students see it as a CORE  
two math courses  
Confidence is built  
**leading to success**  

--------------------------

**Flexible Schedule**

*In the Middle, It’s All About Schedule*  
Flexibility  
to change kids  
at any time  
we saw growth  
move them to each level  
take the kids in Tier 3  
move them to Tier 2  
as soon as they made their achievement  
All the tiered reading  
at the combined 2nd period  
can move them all the time
based on their data
Lots of schools don’t move kids
it isn’t grouping
it’s tracking
a life sentence
Our grouping isn’t that way
responsive
kids can move
we have the knowledge
of what is needed
other schools keep running into walls
every time they think of moving
it’s an entire schedule change
At CMS
kids move flexibly among classes
scheduling here is a commitment
to flexibility
a feat of the counselor
(laughter)
to structure the whole thing
Making a commitment
offer the additional class period
Tier 2 math in addition to grade-level math
rather than in a pull-out scenario
specific reading and math interventions
competent, committed interventionists
specialized instruction
algebraic thinking, successmaker
customized, flexible intervention
really makes a difference
in the lives of our children
in being able to catch up

So different
when you make that commitment
to build it into the schedule
it is different for the students
it is different for the teachers

_a sacrifice of time_

---

**A Snapshot: Tier 3 Reading**

**Intervention Reading Class**

enjoyed picking up
the Tier 3 intervention classes
can do
_amazing _amounts of work
with a small group of students
they walk in
we’re working all 53 minutes
can keep them engaged and on-task
on top of that
they are in two different groups
so it’s _very _individualized
can hit them where they’re at
and just keep going
that cannot be done
in a class of 30

93
have one Tier 2 class this year
and can see the difference
part of that is the technology piece
students really like having part of the class on the computer
it’s just kind of like that break in their day
built for them

**Intensive Reading**

**Theme 6: Importance of team.** Each group articulated an almost a reverential respect and appreciation for team. Although the atmosphere was warm and accepting, it was apparent that these teams both support each other and, in working together so effectively, also learn and improve performance together. Also of note, the understanding shared was that individuals work effectively in and *across* teams, small team, grade-level, large team, building leadership, among others; there was evidence of excellent coordination within and across teams. The researcher was surprised by the remembrances of the hiring process to join the CMS team. Importance of team is illustrated through the following poetic displays.

**Team**

**Investment**

get the norms, create consistency
for kids
everyone just did that
because we knew
it was *what was best for our kids*

**Everybody teaches**

not just their own subject area objectives
but across the board
a commitment
hiring teachers
that live up to their code
not just talking the walk
but walking the walk
Commitment
“I’m going to do RACE in science”
“I’m going to have kids show their work in math
no matter what subject I teach”
Practice
helped to truly enrich our kids
Commitment of every member on the team
One of my strongest lessons came with E. this year
best writing my kids have done
Team cohesiveness
time to plan and inquire, kid-talk time

Personal Commitment to Team

----------------------------------------

A Lot Like Middlers
Pride
Ownership
Celebration
Middler Teachers
are a lot like middlers
it’s not that easy to create the synergy

it’s PBS for the staff!
Strong collaboration in teams
the fact that we talk
to each other
informally, too,
about what we’re doing
share things
rather than just waiting
for
our formal Wednesday meetings
The way the building is set up
allows
for informal conversations to happen
In buildings that are *built* as middle schools
in ‘pods’
people don’t get to see each other as much
geographically
we do

*It's all about team*

--------------------------------------------

**Hiring Practices**

*Simply the Best*

Remember
the recruitment process
principal would have us go through
every summer
we didn’t just interview 2-3 candidates
we would interview 10 candidates
for every position
days and days
level of staff members
up to par
expected to improve
Assembling a ‘superstar team’
Staff makes systemic change possible
Synergy
Power in a group
Laser focus
We interview until
the right candidate shows

We had an eye for good people

Theme 7: School improvement process. Reflections across all four focus groups extended to remembrances of the process of school improvement; these recollections have been arranged more chronologically, each of the following poetic displays moves forward along the timeline as staff members recall the successive points along their journey to improve the school including the beginning, ongoing improvement, and the point at which they realized that their work was resulting in greater levels of success for the students and the school. The theme school improvement process is illustrated through the following poetic displays.

Vision, Focus

Having a focus
a vision
to start with

Remember back around that time
we had a vision
we had an idea

*now, we didn’t know how we were going to implement it right off the bat*

We were stuck
stuck
in the middle school role
the model of what a middle school *should* be
wanting all kids to succeed
trying to find a way to make it happen
but it wasn’t working
doing it *just* by grade level
implementing practices
in a true middle school model
Well, we were not necessarily *supposed* to be doing
a lot of the things we ended up doing
It’s proven to be successful
We had a vision
started working towards it
all of these other pieces
started falling into place

*Maintaining our focus*

------------------------------------

*Always Looking*

people were always looking
for different things to incorporate
not just the principal
PBS
was brought to the staff
had a chance to investigate
had a chance to make comments
see if it was a fit
the principal didn’t decide,
“This is a fit and we’re going to do this.”
We got to see if it was a fit
then there’s buy-in
a huge piece
We were methodical
always looking for things
that would work
We didn’t say, “Oh, let’s try this, let’s try this!”
It was methodical
made certain that we ensured the fidelity
all the programs we adopted
major
A lot of buildings say,
“We have it – but we kind of use it”
Not Here
fidelity was a big part
considered all the different aspects
is this going to work
is this what we want
a collaborative thing
there’s buy-in

We were always looking for things that might work

----------------------------------------
Success

Turning Point

There was a point
we took on
the identity
of a ‘winning’ school
became famous
we were O.K. with that
Getting results
we weren’t supposed to be getting
There was a point
where we became comfortable
with being good
being thought of as excellent
at what we did

Remember the year of the ‘trifecta’?
2007-2008
Some of us remember days
when CMS
wasn’t thought of that way
it felt good

---------------------------------

It’s An Attitude

School Improvement
structure of the team
strong leadership
commitment
steady, methodical approach
not knee-jerk reactions
a marathon pace
keep going forward
carefully, meaningfully
looking for solutions
always a work in progress
Systems – Culture – Identity
tricks of the trade
Themes for each year
retreats
We looked
at every single aspect
of our system
got very creative
put in all on paper
into one consistent aligned system
Always seeking what we can improve

What’s next?

Findings Research Question #2

In response to the question:

- What components of school improvement do educators believe contributed most directly to the sustained improved achievement?

Data in response to the second research question includes the written responses given by each of the 48 participants at the beginning of each focus group.

Matrix. The goal of the matrix format was to determine high-frequency answers from among the initial written responses given by staff members. These written responses
were collected at the beginning of the focus group session in response to the question:

*Please list any components of our process of implementation that you believe contributed to a positive difference in building capacity in our school and student achievement outcomes.*

The objective in collecting these written answers prior to discussion was, primarily, to stimulate individual thinking before initiating the group interaction. Participants were able to compare their individual thinking with the group dynamic as each person around the table contributed from his or her list. This portion of the protocol also provided an opportunity for the researcher to evaluate the unfiltered individual thinking in these written responses alongside the group thinking that subsequently emerged through discussion. This process served to highlight unique perceptions of the school improvement experience of these educators. It is interesting to observe the ways in which the individual responses both mirror and depart from the collective responses and the group discussion. Table 5 illustrates the patterns discovered within the written responses of educators.
The researcher classified the numerous variations of responses into categories, first within each focus group and then across all the respondents as represented in Table 5. Seven common response categories yielded frequencies of response significantly higher than any other categories listed; these were Positive Culture and Behavior, Team, Intervention Classes, Leadership, Use of Data, Response to Intervention, and Schoolwide Strategies. From this straightforward analysis, creating a positive culture and behavior are seen as the most important components that staff members believe contributed to successful school improvement. Respondents listed this answer in more than one way, for example, noting the ROCKS core values and the Positive Behavior Supports. Therefore, some groups have response rates greater than the number of participants in that group. This positive culture and behavior component rated 71 responses from among 48 participants overall.

<table>
<thead>
<tr>
<th>Group/Theme</th>
<th>Culture/ Behavior</th>
<th>Team</th>
<th>Intervention Classes</th>
<th>Leadership</th>
<th>Use of Data</th>
<th>Response to Intervention</th>
<th>Schoolwide Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Leadership (17)</td>
<td>26</td>
<td>29</td>
<td>11</td>
<td>22</td>
<td>10</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Literacy Team (10)</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Math Team (11)</td>
<td>11</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Mixed Team (10)</td>
<td>24</td>
<td>11</td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Combined CMS Focus Groups (48)</td>
<td><strong>71</strong></td>
<td><strong>55</strong></td>
<td><strong>35</strong></td>
<td><strong>32</strong></td>
<td><strong>34</strong></td>
<td><strong>19</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
The second most common response is Team; the variety of these responses all underscored an appreciation of team support, team work on improvement initiatives, regular meetings with the team, and team unity (55 responses from among 48 participants). The data branches by perspective after the top two answers and this illustrates different perspectives observed in groups. For example, the Building Leadership Team responded decisively that Leadership was a component that contributed to a positive difference in student achievement outcomes (29 responses from among 17 participants), while the two more specialized focus groups, Literacy and Math, as well as the mixed group, had only a total of 10 listings from these 31 responders. In contrast, the Literacy, Math, and Mixed teams had much stronger response rates (above 70%), on Intervention Classes and Use of Data. With regard to school wide strategies, the Literacy Team has strong representation (8 of 10) responses while the Math and the Mixed Team had only 4 listings of this component across their 2 groups. The literacy team reported their strong appreciation for the school wide short constructed response and writing strategies. While the math team does use a problem-solving acronym in the school, they didn’t report it as a top factor in the overall success. A confounding factor in this data set may have been that the groups of individuals assumed the ‘hat’ or the ‘role,’ for example, math or literacy, that the focus group represented.

**Summary**

Key findings within this data include themes highlighted in focus group discussions: how the school team defines success in their work with students, use of data to stimulate change, school wide academic strategies, positive culture, climate, and
behavior work, intervention classes and flexible schedule, appreciation for team, and the school improvement process. The written response data revealed the importance of positive culture and behavior, team, intervention classes, leadership, the use of data, Response to Intervention, and school wide academic strategies. The calendar of implementation and the student achievement data provide depth to the illustration of this school’s process and student achievement outcomes.

Conclusion

School improvement processes are people and problem-dense, and all-too-often, they are unsuccessful due to the very same people and processes that are designed to promote success. The success or failure of school improvement initiatives often hinge on a host of details over which, on most frenetic days in busy schools, school leaders feel overwhelmed to organize, mobilize, or control. When a school manages, somehow, to overcome the veritable odds stacked against effective change and realize sustained improvement all the while serving an increasingly at-risk population of students, it is wise to seek to uncover precisely what occurred in the hope of leveraging that understanding to support other schools and other students. This study sought that end.
Chapter Five: Discussion of the Findings

Introduction

At the macro level, the study pointed to the need for moving to an enhanced social technology for improvement as described in Otto Scharmer’s *Theory U* research; this approach to improvement emerges from systems theory as articulated in the *Five Disciplines* work of Peter Senge. The essence of systems thinking, Senge (2006) explains, lies in a, “shift of mind, seeing relationships rather than linear cause-effect chains, and seeing processes of change rather than snapshots” (p. 73). On the ground level, this case study sought to examine a single school’s improvement path to uncover the dynamics of a school improvement process from within. Fullan (2007) points out that in order to achieve greater meaning, “we must come to understand both the small and the big pictures” (p. 8). Exploring an individual school story framed against the collective understanding of school improvement research provides a unique opportunity for enhancing understanding of school and systems improvement.

This study attempted to discover a process of school improvement in the hope of better understanding:

- What were the reflections on the personal and shared experience of participant educators who worked in the school during the five years of a successful school improvement implementation? and
- What components of school improvement do educators believe contributed most directly to the sustained improved achievement?
The course of this case study included collecting written response data and conducting focus group discussions with four school teams, assembling a calendar of implementation summarizing the work in the school, and reviewing student achievement data over the years 2004-2009. A modified gateway approach was used to extract patterns from the response data and create excerpted narratives highlighting the reflections of staff members on the improvement process. This discussion includes an examination of global themes revealed in this research, discussion of the findings, and recommendations for further research and educational practice.

**Presentation of Global Themes: Listening, Learning, and Leading**

Three fundamental refrains resonate from within the two inquiries into school improvement. Listening, learning, and leading emerge as global themes articulating the insights gained from the review of school improvement research and the excursion into one school’s improvement process. Effective listening begins with entering an improvement process as a careful observer, becoming part of the picture one is seeing. Listening provides an opportunity to first use the senses to observe while setting aside any previously held mental models, to delve deeply into the current reality in seeking first to fully understand. Practicing generative listening (Scharmer, 2009) to perceive what is needed in the setting forms an initial step in the first phase of an effective improvement process. Hayashi (2010) describes the listening phase as paying attention in an unbiased way, “to watch and listen with full attention as we take learning journeys” (p. 2).

Learning involves discovering together in teams and across networks, exploring what is coming and developing individual and collective capacities to meet the challenge
of improvement. Senge (2006) describes team learning as the process of, “aligning and developing the capacity of a team to create the results its members truly desire” (p. 218). The literature distinguishes team learning from individual learning and spotlights the importance of tapping into the ‘collective wisdom’ of the group. Hayashi (2010) explains, “This approach asks us to trust that human beings individually and collectively have wisdom” (p. 3). As change agents, it is important to create situations where this collective wisdom can emerge and creative paths can open to the group. Finally, the importance of learning from the future as it emerges (Scharmer, 2009) is critical; the complexities of current challenges require that groups open new pathways toward resolutions, creating the future together, and refraining from recycling upgraded versions of the past.

Leadership becomes a shared endeavor as teams move to take action, to experience transformation, to realize improvement. When the listening and learning phases are explored deeply, leading becomes a rapid-fire, collective process as the group organizes to actualize the improvement. Scharmer (2009) points out that all people drive change, regardless of their title or role, and so the understanding is one of collective leadership. He states, “Leadership in this century means shifting the structure of collective attention – our listening – at all levels” (p. 19). Hargreaves (2009) adds that distributed leadership, “draws change out of staff, rather than driving reforms through them” (p. 35). The enhanced understanding of leadership involves a central shift from individual to collective with a posture of leaning forward toward emerging pathways to improvement.
Table 6

*Global Themes in School Improvement*

<table>
<thead>
<tr>
<th>Global Themes</th>
<th>Steps in an Improvement Process</th>
</tr>
</thead>
</table>
| **Listening** | - Beginning with careful observation of looking and listening  
                 - Observing the system directly as well as collective inquiry to understand many points of view regarding reality  
                 - Deep inquiry into mental models  
                 - Openness and a posture of anticipation, leaning forward  
                 - Integration between seer and what is seen  
                 - Achieving deeper levels of listening including generative listening  
                 - Listening to the highest future that wants to emerge |
| **Learning** | - Learning together, developing the collective ability to bring about positive change  
                 - Practicing effective dialogue and thinking together, participating in ‘conversations that matter’ (Brown, 2005)  
                 - Learning from the future as it emerges rather than learning from the experiences of the past (Scharmer, 2009) |
| **Leading** | - Distributed and collective leadership (Hargreaves, 2009)  
                 - Building a critical mass of leaders in the organization, a ‘constellation’ of leaders (Scharmer, 2010)  
                 - Leading from the future as it emerges (Scharmer, 2009) |

The findings in this research inform progress in school improvement work through listening, learning, and leading. Table 6 illustrates this approach to an authentic improvement process.

**Listening in context.** Important to listening well is listening to and within the settings in which school improvement work is conducted; embracing and working within contextual realities in organizing effective school improvement processes. The chances of a significant school improvement transpiring from outside the setting of the school are minimal; support can be provided for the school team, but ultimately the work of school improvement is a hands-on, first-person proposition. It is said that the Balinese people, when greeting another on the road, ask two specific questions. The first is, “Where are
you going?” The second is, “Where are you coming from?” In asking these two questions, the Balinese are trying to, “get an orientation on you, trying to insert you into the grid for the purposes of security and comfort” (Gilbert, 2006, p. 228). This Balinese tradition is a positioning and orienting inquiry and would serve as a worthy starting point for school improvement processes. Despite what merit may have come from the accountability movement in directing national attention to the need for improving the quality of American schools, one unfortunate result of external mandates inserted into schools is that many school teams have lost their own way, have lost touch with their uniqueness - the students, families and the communities they serve. Effective listening involves reconnecting within the indigenous environment, to students, school and community. CMS staff members described what they heard when they listened closely:

We realize the kids we have

The kids we have

If they’re going to learn those skills,

They’re going to learn them from us

The kids we have

--------

A similar listening experience occurred when staff observed their school data deeply and reflectively:

_The data brought us to understand_

our demographics

our reality
What made us change was understanding our school demographics had changed. We couldn’t continue the way we were.

*We could not continue the way we were*

Developing the capacity in an organization to listen well means understanding that authentic improvement work begins within the home setting of the school and neighborhood; it involves grounding in truth and discovering direction in context, in terms of unique local realities. In this way, the listening process begins with using the senses to gain an orientation, achieve equilibrium, and attain a contextual, more integrated approach to creating meaningful change.

**Team learning.** Learning for effective school improvement is best situated by learning and thinking together in partnerships, teams, and across networks. Learning in this way unites teams around shared purpose. Hargreaves (2009) states, “What ultimately bears the weight of sustainable educational change is not an overarching set of government policies and interventions, but people working together as partners around shared and compelling purposes” (p. 22). In their responses, the CMS staff members overwhelmingly noted ‘team’ as an essential component in the success they achieved in school improvement; 55 responses referenced the importance of team recorded from 48 participants. They described the importance of team in this way:
Strong collaboration in teams

the fact that we talk
to each other
informally, too
about what we’re doing
share things
team cohesiveness
time to plan and inquire
kid-talk time

It’s all about team

Staff reflections demonstrate a strong belief in the value of team as playing a vital role in
their successful school improvement. This finding connects to an emerging body of
social network theory that informs the leverage teams can offer in systems change. Daly
(2010) states:

relationships within a system matter in enacting change. Change strategies, no
matter how well-thought-out or useful, are more likely to be adopted from a
trusted colleague than from an unfamiliar expert. This implies that successful
change requires not only attending to the important formal structures, but also to
the informal networks of social relations that create webs of understanding,
influence, and knowledge prior to, during, and after the implementation of a
change strategy (p. 2).

A strong informal teacher community benefits from the know-how shared among the
community members (Moolinar & Sleegers, 2010). Reeves (2006) states,

“Understanding, identifying, and deploying networks for positive results is the central
challenge of leaders who seek to transform the status quo. Rather than trying to contrive
networks through organizational charts or rigid hierarchies, school leaders should harness the power of the networks that they already have by listening to their key members – which is the greatest leadership technique of all” (p. 36). Learning in team structures lies at the heart of authentic school improvement processes.

**Leadership.** Creating school systems characterized by leadership is integral to moving school improvement forward; the power of leadership exists much more in the collective sense than in the solo acts of individuals. CMS staff members shared their reflections on leadership in this way:

**Leadership**

Leadership has been fostered

Everyone

leaders

in this building

from the custodian to the principal

from principal up to the ad building

with all the teachers

and the students

We’ve continued

to foster leadership

it’s what is different in our school.

Children learn to have an attitude of leadership
At every level of the system

Leaders were always valued

Scharmer (2009) describes leadership as the capacity of a system to co-create its future, stating, “Real leadership always takes place through collective, systemic, and distributed action” (p. 4). The shift in leadership is in moving from the building of individual skills to igniting inspired connection and action (Scharmer, 2009, 2010). Leadership provides a way to realize and sustain improvement in a school; it forms the ‘active ingredient’ in an effective school improvement process. In embracing the depth of complexity and challenge inherent in improving schools, effective leading must result from a collective enterprise engaging all members of the school team.

The transformative practices of effective listening, learning, and leading on school teams hold the potential to move school improvement initiatives forward in authentic and sustainable ways. Senge (2006) states:

most of the outstanding leaders I have had the privilege to know possess neither striking physical appearance nor forceful personality. What distinguishes them is the clarity and persuasiveness of their ideas, the depth of their commitment, and the extent of their openness to continually learning more. They do not ‘have the answer,’ but they seem to instill confidence in those around them that, together, ‘we can learn whatever we need to learn in order to achieve the results we truly desire’ (p. 339).

Improving schools forms an adaptive challenge as the process is not a one-sized deliverable but rather the result of integrated teamwork within each school. It is essential that the work be driven by the practitioners who work closely in the school. Fullan (2005) states, “adaptive challenges require the deep participation of the people with the problem; that is why it is more complex and why it requires more sophisticated leadership” (p. 53).
The transformative work of creating sustained improvement in schools requires that leadership skills and practices be imbedded into the structure and ongoing practice of the school.

**Considerations for Educational Practice**

From the experiences reported by school staff featured in this study, there emerge suggestions for educators seeking an enriched approach to school improvement; these considerations revolve around the way time and team are valued in the processes of the school. Invest in developing within and across school teams the posture and the practices to promote quality listening, learning, and leading. Ensure that the systems, schedules, and processes in the school promote and protect team time as sacred and support these purposes within that time. Sustain regular, ongoing opportunities for face-to-face open time - ‘transformative time,’ time to sit together, to ‘witness’ what is coming, to explore, to ask the ‘big’ questions, to examine, to challenge each other, to dream, to remind, to hold ideas; conduct a portion of team time with no predetermined outcomes. School leaders should work to free up tightly scheduled agendas so that teams have time to simply be together. CMS staff members referenced the retreats that the school participated in as valuable; creating time away from daily responsibilities for the whole group to spend creative intervals together proves a transformative practice. Continuing work in developing the capacity to think together, to relate to each other, hone skills in participating in meaningful dialogue, and build understanding of how to work through problems within and across teams are credible endeavors for school and system practitioners. In addition, school leaders working on systems change should consider
similar opportunities across schools and school systems to promote a network for team learning, strategically pairing and grouping schools with similar challenges so they may learn from each other, cross-pollinating successful school improvement practices.

**Importance of Social Networks and Relationship**

Changing schools to achieve improved outcomes requires a new social technology. Payne (2010) states that, “Reform after reform fails because of nothing more complicated than sheer inability of adults to cooperate with one another” (p. 6) and so it is significant that the data in this research points to the critical importance of teams and working together within and across teams in a school. The current progression in research highlights the value of social networks in affecting change, one based in an understanding of the living system of the organization. Moolenar and Sleegers (2010) refer to recent research that suggests, “dense social networks, in which knowledge and information are created and multiplied, support an innovation-oriented school climate. Interactions with others in dense social networks are associated with a positive attitude toward change, since these networks provide ample opportunity for new knowledge and new practices to develop in a safe environment that promotes risk-taking” (p. 99). Promoting vibrant networks within and across school teams proves a worthy direction in school and organizational improvement processes.

Effective listening, learning, and leading create a pathway to a more enlightened understanding of effective practice and realization of improved school outcomes. Fullan (2007) states, “Solutions must come through the development of shared meaning. The interface between individual and collective meaning and action in everyday situations is
where change stands or falls” (p.9). Senge (2006) states, “There are as many ways to
categorize the essence of this work as there are people doing it: it is a system of
management consistent with nature, human nature, and the nature of larger living
systems; it is working together in ways that realize our highest aspirations; it is being the
change we seek to create” (p. 376). Effective, authentic, and sustained school
improvement hinges on three essential shifts in understanding and practice. Listening to
understand context, empowering teams in learning together and distributing leadership as
a collective endeavor prove critical adjustments with the potential to offer a more
integrated and authentic approach to improving schools.

**Recommendations for Further Research**

Recommendations for further research include additional inquiry into the themes
revealed in this study. While this research highlighted the voices of educators, research to
understand the voices of students involved in effective, sustained school improvement
processes promises rich discoveries to further enhance understandings of school
improvement.

Specifically, investigations into effective processes for team listening, enhancing
practice in how to think together, developing methods for promoting effective dialogue,
and building understanding of the importance of teamwork and shared leadership to
envision and create alternative futures will prove worthy endeavors. Research in
augmenting understanding of the value of school networks in affecting positive school
change is of merit. The recommended for further research include:

1. Inquiry into effective practices for listening in context within schools and
   school systems.
2. Investigation of team processes in successful schools.

3. Examination of the practices of creatively thinking together in teams and the potential of such practices to improve school outcomes.

4. Further inquiry into effective practices of dialogue, creative and productive conversation in teamwork and in school improvement practice.

5. Inquiry into creating networks of learning, connecting teams across schools in improvement processes.

6. Systems practices for promoting listening, learning, and leading to improve school and systems improvement.

Conclusion: A Story Told

Truth, naked and cold, had been turned away from every door in the village. Her nakedness frightened the people. When Parable found her she was huddled in a corner, shivering and hungry. Taking pity on her, Parable gathered her up and took her home. There, she dressed Truth in a story, warmed her and sent her out again. Clothed in story, Truth knocked again at the villagers’ doors and was readily welcomed into the people’s houses. They invited her to eat at their table and warm herself by their fire.

Jewish Teaching Story

"Clothing truth in story is a powerful way to get people to open the doors of their minds to you and the truth you carry" (Simmons, 2001, p. 28). The relating of the school improvement story of Colorado Middle School is truth told. As such, this rendition offers insights in sharing the reflections on the experience offered by staff members and the components the staff reported they believed contributed to transformation of the school. This story of one school embodies hope that the parable will hold truth for other school teams in opening to their own unique improvement stories.

The powerful levers of listening, learning, and leading hold promise beyond individual schools. As school systems, states, and the country grapple with the stark
realities of lagging achievement, a persistent achievement gap, and chronically
underperforming schools, these practices serve well at every level of the work. Teams
working to address the barriers to providing a quality education in America must embrace
an awareness of the complexities of the problem and the contexts in which it continues,
dedicate themselves to listening, learning, and leading together, and realize that a
cohesive network of authentic stories of school improvement will pave a pathway to
enhanced understanding and improved practices, procedures, and policies in schools and
across school systems.

Effective school improvement work is the result of a unique synergy where
outcomes become more than the sum of its parts. Achieving the systems thinking of
effective learning organizations (Senge, 2006) as a solid foundation for school
improvement and then animating those systems with improved social technology and
improvement process of listening, learning, and leading proves a robust approach to
more integrated school improvement work in schools. Inherent in this new process is a
‗shift‘ of mind that involves teams discovering how they create their own reality and how
they can change it (Senge, 2006). Essential to both an effective foundation enlivened by
dynamic process is the viewing of schools as living organizations.

This work majors in systems enlivened by people, participation and process; it
minors in prescription and product. It is much more about the collective and much less
about the individual. Effective school improvement work is abundant with the power of
leadership and yet this theory of leadership majors in the effective work of teams. Team
leadership becomes central as individual leaders recede into the background within this
picture of effective and sustained improvement. Senge (1999) states, “I have come to conclude that there is a deep hunger in the modern world for meaning and the core practices whereby human beings make meaning together. We may not go back to living in tribes. But we have an insatiable desire to live lives of dignity and meaning, and when we discover ways to do this, there is a quiet sigh of relief. We have found our way. Now we must move along it” (p.xx). Listening, learning, and leading form a pathway to improved outcomes for schools; effective work along this path is inspired by the children who occupy our days at school and the wisdom available only in the collective.
References


Appendix A

Colorado Middle School—Excerpted Narrative

Themes

Laying a Foundation
- Vision & Focus
- On Data & Change
- Leadership

Defining Success
- Performing Arts Focus
- Engaging and Challenging Exploratory Classes
  - ALL
- Focus on the Whole Child

Systems
- Systems Architecture
- Schoolwide Academic Strategies
- Choices
- Tiered Instructional Design & Problem-Solving Process
- Intervention and Support Classes
- A Snapshot: Tier 3 Reading
- On Kids Reading
- Kids and Data
- Consistency of ROCKS Core Values
- Life on the ‘other’ Side (of the Pyramid): Behavior
- Clear Expectations
- Flexible Schedule
- School as Community

Staff
- Data Digging
- Team
- Team 2
- Hiring Practices
- Healthy Adult Relationships
- Hard Work
- Teaching Staff

Success
- Always Looking: Reflections on the Improvement Process
- Turning Point
- Fame

A Requiem on School Improvement
- Transformation
- Find a Child
- It’s An Attitude
**Vision, Focus**

**Having a focus**

a vision
to start with

*Remember back around that time*

we had a vision
we had an idea

*now, we didn’t know how we were going to implement it right off the bat*

We were stuck
stuck
in the middle school role
the model of what a middle school should be
wanting all kids to succeed
trying to find a way to make it happen
but it wasn’t working
doing it just by grade level
implementing practices
in a true middle school model
Well, we were not necessarily supposed to be doing
a lot of the things we ended up doing
It’s proven to be successful
We had a vision
started working towards it
all of these other pieces
started falling into place

*Maintaining our focus*
On Data and Change

The data brought us to understand
our demographics
our reality
data provided a focus
we wouldn’t have had otherwise
What made us change
was understanding
our school demographics
had changed
We couldn’t continue the way we were
We could not continue the way we were
Had to look at new ideas
Without new ideas
we were stuck
not moving
Important piece
we were willing to change
have to be on board together
We had to be willing to change
Leadership

Across the system

There were a few reasons why our staff was so willing to change part of that was, truly, inspirational leadership.

Collaborative nature of making decisions

Everyone has had buy-in in this building from the custodian to the principal from principal up to the ad building always has, everyone invested collaborative decision-making principal would come to us with the beginnings of ideas we would embrace and run with it We were given the freedom to make decisions all around it collaboratively that’s where you get that widespread ownership that we’re talking about Leadership has been fostered in the building not only with the principal, assistant principals but also with all the teachers and the students
We continue to foster leadership
it’s what is different in our school
our school climate
our academic growth
Children learn to have an attitude of leadership
At every level of the system

*leaders were always valued*
Performing Arts Focus

Success comes in a lot of ways at CMS

Focus on the performing arts really helps students to achieve
In performing arts students can see success is possible
They might not be good students but they know how to sing they know how to play they can draw really well and by seeing in one aspect of their life they can do well they also see, “Maybe I can do well in other things” they’re more willing to work hard pride in their school it really makes a difference Kids know that they can succeed here It’s a way to keep kids engaged in school while they’re struggling If they’re successful in the performing arts it’s going to improve their math and science

Singing, Playing, Dancing, Creating
Engaging and Challenging Exploratory Classes

*Exploratory learning as a challenge*

A real shift
when
instead of home-ec and metals
implemented pre-engineering, *Gateway to Technology*
more academic focus
in exploratory classes
school year 2006-2007
the collaborative effort of students reading and writing
in exploratory classes
They’re not little,
“*Hey, let’s just go have a break*”
classes
pre-engineering – technology – piano lab - art
in art class, they do research, they write
they don’t just go to have fun
high levels of student engagement
students challenged
in exploratory classes
*exploratory learning*
challenging, engaging, fun
Focus on growth
struggling, mid and high-performing students
worked the other end of the spectrum
didn’t just ‘chase’
the partially proficient kid
All kids
emphasis on G/T
Tier 2 and 3 students with gaps
a commitment to both ends
and the middle
advanced progress is phenomenal
G/T teacher has classes
doesn’t pull out
actually has kids
With the advanced thing
increased the rigor all the way around
took a chance on the cusp kids
took a chance on a lot of kids
increased rigor and critical thinking
Goes back to schedule because you can take a chance on a kid
when, if they bomb, you know you can move ‘em
in the old traditional days
we were kind of stuck
ALL
kids growing
Focus on the Whole Child

Always very, very clear
we do have an achievement focus here
but it’s also very, very clear
that that’s not in any way
all we do
have never felt that sort of achievement pressure
it was more self-imposed
I think
than anything else,
wanting to be on a team
and contribute to the team
rather
than feeling pressured to do it

I do this because
it is something that I want to do
Systems Architecture

A systems approach
systems work
we go with what works
culture fits into the system
the right kinds of systems
the right attitudes
We are a machine
People learn how to work in the machine really quickly
A testament to what we have here

Systems
Schoolwide Academic Strategies

Connections across content areas

The most success we’ve had

is when

we do a schoolwide

implementation

“We’re all on the same page, and that page is positive, and that page is moving forward.”

RACE

very effective

making connections for kids

a building-wide constructed response format

no matter where they go at school

kids are going to have a reminder

of how we write responses here

everyone learned RACE

everyone expected RACE

writing essays

all subjects

science, language arts, history

reading and writing on CSAP

not just a Language Arts ‘burden’

it was embraced schoolwide

that’s unique

RACE, SOLVE, GLOBE, BEAKERS
Choices

*Middle schoolers need choices*

*Choice Boards*

several people in this room

use choice menus

kids write

when they have a choice

as to *how* they write

and

what they write

Choices

how students will show their learning

huge shift

in this school

offering choice

students having the choice

when it comes to reading and writing

helps with student ownership

more willing to own what they do

*if* they have a say in it

instead of being told what to do

*Kid-friendly Choices*
Tiered Instructional Design and Problem-Solving Process

*Everybody knowing the data*
open conversations
what the data looked like
Response to Intervention process
looking at how we move students
data supporting decisions
moving students
in and out
of intervention
Not just knowing the data
*using* the data
coming up with strategies
to address the issues
Having time to really work with the data
to get to the strategies right
look at those strategies
play around with them
‘tinker’
to get achievement growth
Knowing our strategies

*Knowing our data*
Intervention and Support Classes

*Adding Tier 2 & 3*

strategic and intensive classes

*feel* the support in Tier 1 content classes tremendously

support for kids, support for the classroom teacher

Tier 2 and 3 classes

Superb Interventions

all grade levels

gave kids extra skills

When students were below grade level

skills were built into interventions

tremendous progress made,

+40 points

another student

+50 points

when their learning ‘gaps’ are filled

A support class

not a pull-out

*Cannot be a pull out*

Not an elective, not a stigma

students see it as a CORE

two math courses

Confidence is built

*leading to success*
A Snapshot: Tier 3 Reading

Intervention Reading Class

enjoyed picking up
the Tier 3 intervention classes
can do
amazing amounts of work
with a small group of students
ey they walk in
we’re working all 53 minutes
can keep them engaged and on-task
on top of that
ey they are in two different groups
so it’s very individualized
can hit them where they’re at
and just keep going
that cannot be done
in a class of 30
have 1 Tier 2 class this year
and can see the difference
part of that is the technology piece
students really like having part of the class on the computer
it’s just kind of like that break in their day
built for them

Intensive Reading
On Kids Reading

Love
that we have books
in our library
wish we had more
the kids read
they want to read
most of them
multiple copies
of popular books
if you can get a group of kids reading a book
they will talk about it
at lunch
just love our library
Kids And Data

Our kids know where they are
in their achievement

MAP Testing
I like being able to check
throughout the year
not have to wait til August
to see how my 8th graders were doing
from the August before

Get the kids
on board with goals and their scores

“This is was your score in the fall,
this is where you should be about this time of year.”

Gives kids something to work for

“What’s your goal for this test going to be?”

Throwing it back to the kids

Like a physician
this is where you should be
let’s see if you’re really there

Just had a little boy
in J’s Tier 2 reading class
he went up like 20 points
when you can give them
that feedback
you can see how proud of themselves
they get
when they have a big growth
just show that to the kid
and they light up
I had a student that actually went to his next class he was so excited about his growth that the teacher let him call home I could tell he was excited He was in math class and he wanted to call home right at that moment and share that data And on the front end of that we have a climate of students taking accountability where they respond very well to being encouraged to set goals “This is what you got on CSAP, this is what you need to get to the next level you just need that much.” Working on a way to grade them on their growth rather than did you just do your homework

Attitude: “It’s fun being smart!”
Consistency of \textit{ROCKS} CORE Values

\textit{CMS ROCKS}

Consistency across the school

Developing the CORE values

ROCKS rubric

Consistency

not just in instruction

but in the way kids dress

in how the building is kept up

in the way the building looks

it was different here

all of those things

give the expectation

to our kids

we are here to learn

this is our home

we respect where we are

a lot of that came with PBS

a common language

developing the CORE values

ROCKS

how kids will treat each other

how adults will behave together

partner and parallel academic achievement

ROCKS lays a good foundation

every day

every class

every task

hope my students receive
internally
between stimulus and response
lies our greatest power
and that’s the freedom to choose
Middlers are very stimulus-oriented
if they can take that moment
to reflect
is my choice going to be
that
of an investor
or a gambler
then we can have more hope
for their academic progress
PBS
A tool to support academics
CORE value extends
student learning, effort, and inquiry
Assessments have improved
because of PBS system
We are now tied to good
effort-based data

*Respect, Ownership, Choices, Knowledge, Safety*
Life on the Other Side
(of the Pyramid)

Behavior
A big piece
of what we’ve learned
lies on the other side
of the pyramid
shifts made behaviorally
have a kid who is struggling
the teacher knows he can do better
try a different class
to improve their success rate
not strictly academic moves
sometimes just not a behavioral fit
look at that side of it as well
work the other side

We remember well
the names of four or so kiddos
who helped us explore
develop the behavior side
they drove our practice
our development
our growth
they ‘pushed’ us to develop our behavior interventions

(laughter)

We learned a lot
we learned how to quantify behavior that year
before, we worked a lot with stories
although the stories are fun(ny)
So grateful
for those kids
We learned so much from them
When we started our RtI process
we were really good
at the academic side
We were hitting roadblocks, though
when we started doing root cause
root cause
behavior, motivation
Dead End
Our system really took off
when we launched our behavior side
Now, it’s a more comprehensive system
look at our system now
aligned resources
We started to make
a shift
in understanding that behavior
plays such a large role
in academic success
Can’t really look just at a student
being academically successful
We’re looking at the ‘whole child’
We’re looking at every aspect
that we can help with
or do something with
We’re not just looking at reading, math, science
We’re looking at, “How is that student doing in art or in choir?”
Focus on the character of the students
little things such as the morning announcements
when we think no one is listening
when we’re talking about apologizing
Really understanding
root cause behavior
especially for middle school students
how can we understand their behaviors
to help them help themselves
Determination
we will not accept that a kid
is not going to be successful
Tools like the CSAP assessment rubric
teach tenacity in testing, developing a mindset
Important
because it’s going to help them down the road
when they start taking ACTs, SATs
‘We realize the kids we have’
The kids we have
do not learn how to test from their parents, typically
If they’re going to learn those skills,
they’re going to learn them from us

The kids we have
Clear Expectations

Clarity of expectations
consistency spans across grade levels
everything at CMS
we find the strength
in
clarity, consistency
whole team approach
The more we do as an entire team
rather than just a small team
or a grade level
Clarity of schoolwide expectations
easier to be consistent
the language we use
‘here’s what we do at CMS’
‘that’s not what we do’
‘this is how we behave at CMS’
this is the standard
for when you’re here
those little things
make a big difference
‘Let’s make it a great day at CMS,
the choice is yours!’

Clarity and Consistency
Schedule Flexibility

*In middle school, it’s all about schedule*

Flexibility
to change kids
at any time
we saw growth
move them to each level
take the kids in Tier 3
move them to Tier 2
as soon as they made their achievement
All the tiered reading
at the combined 2nd period
can move them all the time
based on their data
Lots of schools *don’t* move kids
it isn’t grouping
it’s tracking
a life sentence
Our grouping isn’t that way
responsive
kids can move
we have the knowledge
of what is needed
other schools keep running into walls
every time they think of moving
it’s an entire schedule change

At CMS
kids move flexibly among classes
scheduling here is a commitment
to flexibility
a feat of the counselor
(laughter)
to structure the whole thing
Making a commitment
offer the additional class period
Tier 2 math in addition to grade-level math
rather than in a pull-out scenario
specific reading and math interventions
competent, committed interventionists
specialized instruction
algebraic thinking, successmaker
customized, flexible intervention
really makes a difference
in the lives of our children
in being able to catch up
So different
when you make that commitment
to build it into the schedule
it is different for the students
it is different for the teachers

*a sacrifice of time*
School As Community

_Not just the school in the community_

_but the school as a community_

we’ve got to throw the community in there

our school

drilling in community resources

Junior Achievement to Air Force Brass

use all kinds

of different community resources

creating a sense of community

in the school

Inviting

people in

performances, demonstrations, open house,

parent night, fitness night, art shows

social studies, APXD showcase, science fair

Veterans’ Day Honor

With a diverse population

created

a real _community connection_

all these things where the community comes into the school

We are a community

_CMS as Community_
Data Digging

Made a big difference

presentation of the data

when we come back in August

hear what the CSAP scores are

that could just be devastating

for teachers

if you’re that grade level that’s this year

‘dipped down’

If that were presented differently

you could just want to go home

call it ‘done’ for the year

but the way it was always presented

it was so positive

if there was a dip

immediately

thinking about all the factors

that may have contributed

so careful to have

not even

an iota of blame

when the data was presented

we weren’t so terrified to come in

see the data

set the goals
Team

Investment of the team
get the norms, create consistency
for kids
everyone just did that
because we knew
it was what was best for our kids
Everybody teaches
not just their own subject area objectives
but across the board
a commitment
hiring teachers
that live up to their code
not just talking the walk
but walking the walk
Commitment
“I’m going to do RACE in science”
“I’m going to have kids show their work in math
no matter what subject I teach”
Practice
helped to truly enrich our kids
Commitment of every member on the team
One of my strongest lessons came with E. this year
best writing my kids have done
Team cohesiveness
time to plan and inquire, kid-talk time

Personal Commitment to Team
Team 2
Pride
Ownership
Celebration
Middler Teachers
are a lot like middlers
it’s not that easy to create the synergy
it’s PBS for the staff!
Strong collaboration in teams
the fact that we talk
to each other
informally, too,
about what we’re doing
share things
rather than just waiting
for
our formal Wednesday meetings
The way the building is set up
allows
for informal conversations to happen
In buildings that are built as middle schools
in ‘pods’
people don’t get to see each other as much
geographically
we do
It’s all about team
Hiring Practices

Simply the Best

Remember the recruitment process principal would have us go through every summer we didn’t just interview 2-3 candidates we would interview 10 candidates for every position days and days level of staff members up to par expected to improve Assembling a ‘superstar team’ Staff makes systemic change possible Synergy Power in a group Laser focus We interview until the right candidate shows

We had an eye for good people
Healthy Adult Relationships

*Everybody had great ideas*

this school runs
like a healthy family
When you have a healthy family
you work well together
you make decisions
you support one another
you’re excited about coming here
*I just love it!*

Unity
has existed for many years
even having the directory
being very intentional
trying to meet people’s needs
where they are
just like you do in a family
some of that is intentional and systematic
the rest is because people are caring and invested
*it just goes from there*
Hard Work

Staff

hard workers
in at 7 AM
stay late
commitment
people say, 

“Gosh, these people work really hard in this building”

Committed
working hard
it’s constant
a strong staff
expect excellence from all kids
always willing
to make sure they are successful
If they want to learn
bend over backwards
teach them in the classroom
and offer extra time
before school, at lunch, after school
If they don’t want to learn
we’re going to get at
attitudinal, motivational
behavioral pieces

Never stops
Teaching Staff

A nice melding in this building

of the veteran teachers
and new teachers
that’s important
don’t have two camps
work really well together
high expectations
everybody
here
it’s buy-in
a culture of welcoming
if somebody’s new
10 people are saying
How can I help you?

How can I make this easy for you?
That’s what helps make this culture
You can tell how successful a school is
when you have a new person in the building
our new teachers adapt so very quickly

they just learn it
Reflections on the Improvement Process

*Always Looking*

people were always looking
for different things to incorporate
not just the principal

PBS
was brought to the staff
had a chance to investigate
had a chance to make comments
see if it was a fit
the principal didn’t decide,

“This is a fit and we’re going to do this.”

We got to see if it was a fit
then there’s buy-in

a huge piece

We were methodical
always looking for things

that would work

We didn’t say, “Oh, let’s try this, let’s try this!”

It was methodical
made certain that we ensured the fidelity

all the programs we adopted

major

A lot of buildings say,

“We have it – but we kind of use it”

Not Here

fidelity was a big part

considered all the different aspects

is this going to work
is this what we want

a collaborative thing

there’s buy-in

*We were always looking for things that might work*
Success

Turning Point

There was a point
we took on
the identity
of a ‘winning’ school
became famous
we were O.K. with that
Getting results
we weren’t supposed to be getting
There was a point
where we became comfortable
with being good
being thought of as excellent
at what we did
Remember the year of the ‘trifecta’?
2007-2008
Some of us remember days
when CMS
wasn’t thought of that way
it felt good
Fame

attaining ‘fame’
or whatever you want to call it,
did have some part
that we did have success
kids were proud of our school
teachers were proud of our school
so they would step up
Sometimes we were like,
“Are we really this kind of school?”
but they all stepped up

Sign-Posts of School Improvement
Transformation

we have a lot of information
but
how do we go from
inform to transform
the definition
to inspire
means to breathe
blow upon
into
as if to infuse life
influence
have an animating effect upon
stimulate to some creative or effective effort
to cause,
to guide or communicate or motivate
as if by divine or supernatural influence
this is what has happened

Inspiration
Find a child

Helping Kids
What is Impressive about this staff is when they find a child who has a need they work they find the resources they help the child Always find resources Never give up Do what we need to do to

Make the kid successful
It’s An Attitude

School Improvement
structure of the team
strong leadership
commitment
steady, methodical approach
not knee-jerk reactions
a marathon pace
keep going forward
carefully, meaningfully
looking for solutions
always a work in progress
Systems – Culture – Identity
tricks of the trade
Themes for each year
retreats
We looked
at every single aspect
of our system
got very creative
put in all on paper
into one consistent aligned system
Always seeking what we can improve

What’s next?
Appendix B

INFORMED CONSENT FORM

ATTACHMENT B

DISSEPTION RESEARCH
EMPOWERING THE WONDER YEARS: IMPROVING SCHOOLS TO CLOSE THE ACHIEVEMENT GAP

You are invited to participate in a focus group study that will examine teacher responses to the Russell Middle School improvement process. This study is being conducted in partial fulfillment of the requirements of dissertation research for the Morgridge College of Education at The University of Denver. The study is conducted by Jeanice Kerr Swift. Results will be used to contribute to a better understanding of improvement processes in schools and to complete dissertation research.

Jeanice Kerr Swift can be reached at swiftjg@d11.org or at (719) 963-1407.

This project is supervised by:
Kent Seidel, Ph.D., Associate Professor and Chair, P-20 Education Programs . . . Leading, Teaching, and Learning, Morgridge College of Education, University of Denver, 306 Wesley Hall, 2135 E. Wesley Ave. Denver, CO 80208, (303)871.2496.

Participation in this study should take about 80 minutes of your time including approximately 20 minutes to preview information and approximately 60 minutes of participation in a focus group discussion activity. Participation will involve responding to (3) questions about your reflections on the school improvement process you’ve experienced at Colorado Middle School. Participation in this project is strictly voluntary. There are no known risks associated with participation in this research. If, however, you experience discomfort you may discontinue participation in the focus group at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled.

Your responses will be identified by code number only and will be kept separate from information that could identify you. This is done to protect the confidentiality of your responses. Only the researcher will have access to your individual data and any reports generated as a result of this study will protect your identity. However, should any information contained in this study be the subject of a court order or lawful subpoena, the University of Denver might not be able to avoid compliance with the order or subpoena. Although no questions in this interview address it, we are required by law to tell you that if information is revealed concerning suicide, homicide, or child abuse and neglect, it is required by law that this be reported to the proper authorities.

If you have any concerns or complaints about how you were treated during the focus group, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.
You will be provided a copy of this page for your records. Please sign below if you understand and agree to the above. If you do not understand any part of the above statement, please ask the researcher any questions you have.

I have read and understood the foregoing descriptions of the study called Empowering the Wonder Years: Improving Schools to Close the Achievement Gap. I have asked for and received a satisfactory explanation of any language that I did not fully understand. I agree to participate in this study, and I understand that I may withdraw my consent at any time. I have received a copy of this consent form.

___ I agree to be audiotaped. ___ I do not agree to be audiotaped.

___ I agree to be videotaped. ___ I do not agree to videotaped.

Name (Please print):_________________________ Signature: _______________________________
Date: ______________

I would like a summary of the results of this study to be mailed to me at the following postal or e-mail address:

Focus Group Identification:__________
Using a focus group approach in this research project serves to better understand the experience, knowledge, and reflections of practitioners – teachers - regarding the five-year implementation of a three-tiered instructional design and other improvement initiatives in a large middle school setting. The list of questions is short, in order to allow adequate time to discuss each question in depth. The focus group interview will be videotaped or audiotaped. Participants will discuss each of the focus group questions outlined below.

Description:

- Focus groups will be conducted with groups of teachers at Colorado Middle School of the Performing Arts and Science.
- Groups will be organized by subject area (Language Arts & Reading and Math), with teachers who have served 1 or more years on the staff invited to attend. There will also be a focus group conducted with a group of Team Leaders, from across subject areas in the building.
- Teachers will receive a packet of information a few days in advance of the focus group discussion.
- This Participant Information Packet will include: a participant welcome letter, brief introduction to the research project, an overview of the focus group protocol, a calendar of school improvement implementation, and a summary of student achievement data over the five years of the study.
- Focus group times will run approximately 1 hour, either before or after school, beginning at 7:15 AM and/or at 4:00 PM.
- The groups will likely range in size from 4 to 12 teachers each, with teacher participation voluntary.
- Focus groups will be conducted at the school during May, 2010.

Focus Groups Include:

**Team Leaders Group**  
**Language Arts/Reading Group**  
**Math Group**
Focus Group Questions:
Participants have reviewed an overview of the study, the calendar of implementation and a summary of achievement data prior to participating in the focus group.

Preliminary Question/Clarification:
If you should recall any pieces that I’ve left off the “Calendar of Implementation,” please briefly note them on a sticky note during this time that we’re together or email them to me. Our goal is to create a comprehensive list of the actions we took in facilitating school improvement during this time, 2004-2009.

Question1:
Think back over the time you were involved, as a teacher, in our school improvement process at Colorado Middle School (specifically, during school years 2004-2009).
Please list any components of our process of implementation that you believe contributed to a positive difference in building capacity in our school and student achievement outcomes.
Please list your answers (as many as you want) on the piece of paper provided, and, in a moment, we’ll share these with each other.
Participants share answers and discuss.
If you had to pick 3 items from this list that you feel proved most important to our school improvement, which would they be? Why did you choose these?

Question2:
What patterns do we observe in our various responses?
What do we believe happened at Russell Middle School during this five year school improvement process?

Question3:
What do you believe this process has meant for our staff, students, and our school?

Question4:
Any additional thoughts?

Focus Group Follow-Up:
A follow-up email will be sent thanking participants and reminding them that if any additional thoughts come up, they are welcome to forward them by email.
Focus Group Written Response

Empowering the Wonder Years: Improving Schools to Close the Achievement Gap
Colorado Middle School Improvement Process (2004-2009)
Focus Group Discussion

May, 2010

Name ____________________ Number of years at RMS ______ Focus Group
ID: ________

List components of our process of school improvement implementation that you believe contributed to a positive difference in building capacity in our school and contributed to positive student achievement outcomes:

____________________________________
____________________________________
____________________________________
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# Appendix C

Focus Group Matrix
Written Responses

<table>
<thead>
<tr>
<th>Narrators</th>
<th>Written Responses</th>
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<tbody>
<tr>
<td>Themes</td>
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Appendix D

Colorado Middle School
Colorado School District
Math Achievement Data Analysis
2004-2009

Colorado Middle School
6th Grade Math CSAP Proficient & Advanced
2004-2009

CMS 6th Grade Math Achievement Summary 2004-2009
(2009 CMS n = 282)

Math Achievement for ALL is improved = from 50% P&A to 67% P&A  +17 points
All subgroups are improved in percentage of P+A achievement
Overall gap in math performance of subgroups is increased slightly
37 pts 2004 to 38 pts 2009  +1 pt.

Advanced achievement is increased from 12% to 26%
Unsatisfactory achievement is reduced from 16% to 10%

Subgroup Gains:
~Black = +17 points  ~White = + 28 points  ~Hispanic = +24 points
~ Male = + 9 points  ~ Female = +25 points
6th Grade Math Proficient & Advanced
ALL Students
Colorado Middle School/Colorado School District/Colorado Comparisons
2004-2009

6th Grade ALL Math Achievement Summary 2004-2009
(2009 CMS n=282 / Co District n=2,042 / CO n=57,889)

- CMS Math Achievement for ALL is improved from 50% P&A to 67% P&A +17 points
- Colorado District Math Achievement for ALL is improved from 49% P&A to 61% P&A +12 points
- Colorado Math Achievement for ALL is improved = from 53% to 63% +10 points
6th Grade Math CSAP P+A Achievement
CMS/CO District/Colorado Comparison
Black Subgroup Students
2004-2009

6th Grade Math
Black Subgroup Performance – Points Gained
(2009 CMS n=37 / CO District n=221 / CO n=3,324)

CMS +17 pts.    CO District +6 pts.    CO +13 pts.
6th Grade Math P+A CSAP Achievement
CMS/CO District/Colorado Comparison
Subgroup Hispanic Students
2004-2009

Hispanic Students Subgroup Performance – Points Gained
(2009 CMS n=50 / CO District n=483 / CO n=16,391)

6th Grade Math Proficient & Advanced Achievement
CMS/CO District /CO Comparison
Subgroup White Students
2004 - 2009

White Subgroup Performance – Points Gained
(2009 CMS n=176 / CO District n=1,238 / CO n=35,317)

CMS +18 pts.
CO District +15 pts.
CO + 8 pts.
6th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Female Performance

2004-2009

6th Grade Math
Female Subgroup Performance – Points Gained
(2009 CMS n=144 / CO District n=1001 / CO n=28,359)
6th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Male Performance
2004-2009

6th Grade Math Male Subgroup Performance – Points Gained
(2009 CMS n=138 / CO District n=1,041 / CO n=29,529)

CMS = + 8
CO District = + 9
Colorado = + 9

182
6th Grade Math
Advanced CSAP Performance
CMS/CO District/Colorado Comparison

CMS + 14 pts.  CO District +12 pts.  CO + 9 pts.
6th Grade Math
Unsatisfactory CSAP Performance
CMS/D-11/Colorado Comparison

Unsatisfactory Performance – Points Reduced

CMS - 6 pts.  CO District -6 pts.  CO -5 pts.
Colorado School District
6th Grade CSAP Math Proficient & Advanced
Data Analysis
2004-2009

Math Achievement for ALL is improved = from 49% P&A to 61% P&A
+12 points
Overall gap in math performance is increased 29 points in ’04 to 37 points in ’09
+ 8 points
All subgroups are improved in percentage of P+A achievement
Advanced achievement is up from 13% to 25%
Unsat achievement is reduced from 18% to 12%

Subgroup Gains:
~Black = + 6 points  ~White = + 14 points  ~Hispanic = +15 points
~ Male = + 9 points  ~ Female = +15 points
Math Achievement for ALL is improved = from 53% P&A to 63% P&A
+10 points

Overall gap in math performance reduced from 36 pts in ‘05 to 30 pts in ‘09
-6 pts

All subgroups are improved in percentage of P+A achievement

Advanced achievement is up from 18% to 27%

Unsat achievement is reduced from 17% to 12%

Subgroup Gains:

~Black = +13 points  ~White = + 8 points  ~Hispanic = +14 points
~ Male = +10 points  ~ Female = +10 points
Colorado Middle School
7th Grade Math CSAP Proficient & Advanced
2004-2009

CMS 7th Grade Math Achievement Summary 2004 – 2009 (2009 CMS n = 275)

- Math Achievement for ALL is improved = from 33% P&A to 54% P&A
  +21 points
- Overall gap in math performance reduced from 40 pts in ’05 to 34 pts in ’09
  -6 points
- All subgroups are improved in percentage of P+A achievement
- Advanced achievement is improved from 6% to 16%
- Unsatisfactory achievement is reduced from 19% to 13%

Subgroup Gains:
~Black = +29 points  ~Hispanic = +14 points  ~White = +23 points
~ Male = + 22 points  ~ Female = +20 points
7th Grade Math CSAP Proficient & Advanced
ALL Students
Colorado Middle School/Colorado District/Colorado Comparisons
2004-2009

7th Grade ALL Math Achievement Summary
2004-2009

~ CMS Math Achievement for ALL is improved = from 33% P&A to 54% P&A
   +21 points

~ Colorado District Math Achievement for ALL is improved
   = from 37% P&A to 55% P&A
   +18 points

~ Colorado Math Achievement for ALL is improved = from 41% to 54%
   +13 points
7th Grade Math CSAP P+A Achievement
CMS/CO District/Colorado Comparison
Subgroup Black Students
2004-2009

7th Grade Math
Black Subgroup Performance – Points Gained
(2009 CMS n= 34)

CMS +29pts. CO District +16 pts. CO +15 pts.
7th Grade Math P+A CSAP Achievement
CMS/CO District/Colorado Comparison
Subgroup Hispanic Students
2004-2009

Hispanic Students Subgroup Performance
(2009 CMS n=53 / CO District n=452 / CO n=15,916)

CMS + 5pts.   CO District + 5 pts.   CO - 8 pts.
7th Grade Math Proficient & Advanced Achievement
CMS/CO District / CO Comparison
Subgroup White Students
2004 – 2009

White Subgroup Performance – Points Gained
(2009 CMS n=177 / CO District n=1,242 / CO n=35,587)

CMS +23 pts.  CO District +18 pts.  CO +14 pts.
7th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Female Performance

2004-2009

7th Grade Math
Female Subgroup Performance – Points Gained
(2009 CMS n=142 / CO District n=1038 / CO n=26,244)

CMS +20    CO District +18    CO +14
7th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Male Performance
2004-2009

7th Grade Math Male Subgroup Performance – Pts. Gained
(2009 CMS n=133 / CO District n=985 / CO n=29,512)

CMS = + 22  CO District = + 17  Colorado = + 13
7th Grade Math
Advanced CSAP Performance
CMS/CO District/Colorado Comparison

7th Grade Math
Advanced CSAP Performance – Points Gained

CMS + 10 pts.
CO District +11 pts.
CO + 9 pts.
Math Achievement for ALL is improved = from 37% P&A to 55% P&A +18 points

Overall gap in math performance is increased
29 points in 2004 to 31 points in 2009 = +2 points

All subgroups are improved in percentage of P+A achievement
Advanced achievement is up from 12% to 23%
Unsatisfactory achievement is reduced from 23% to 13%

Subgroup Gains:
~Black = +16 points  ~White = + 18 points  ~Hispanic = +20 points
~ Male = +17 points  ~ Female = +18 points
Math Achievement for ALL is improved = from 41% P&A to 54% P&A
+13 points

Overall gap in math performance reduced slightly from 33 pts in 2004 to 32 pts in 2009 -1 pt

All subgroups are improved in percentage of P+A achievement
Advanced achievement is increased from 6% to 16%
Unsat achievement is reduced from 22% to 13%

Subgroup Gains:
~Black = +15 points     ~White = +14 points     ~Hispanic = +15 points
~Male = +13 points      ~Female = +13 points
Colorado Middle School
8th Grade Math CSAP Proficient & Advanced
2004-2009

8th Grade Math Achievement Summary 2004-2009
(2009 CMS n=257)

Math Achievement for ALL is improved from 46% P&A to 61% P&A +15 pts

Overall gap in math performance is narrowed
from 26 points in 2004 to 19 points in 2009 -7 pts

All subgroups are improved in P+A achievement
Advanced achievement is improved from 15% to 22%
Unsatisfactory achievement is reduced from 19% to 9%.

Subgroup Gains:
~Black = +17 points
~Hispanic = +20 points
~White = +13 points
~Male = +11 points
~Female = +20 points
8th Grade Math Proficient & Advanced
ALL Students
Colorado Middle School/Colorado School District/Colorado Comparisons
2004-2009

8th Grade ALL Math Achievement Summary
2004-2009

- CMS Math Achievement for ALL is improved from 46% P&A to 61% P&A +15 points
- Colorado District Math Achievement for ALL is improved from 41% P&A to 53% P&A +12 points
- Colorado Math Achievement for ALL is improved from 41% to 50% +9 points
8th Grade Math CSAP P+A Achievement
CMS/CO District/Colorado Comparison
Subgroup Black Students
2004-2009

8th Grade Math
Black Subgroup Performance
(2009 CMS n=17 / CO District n=201 / CO n=3,435)

Black Subgroup Performance

Colorado
CO District
CMS

CMS +16 pts.  CO District + 9 pts.  CO +13 pts.
8th Grade Math P+A CSAP Achievement
CMS/CO District/Colorado Comparison
Subgroup Hispanic Students
2004-2009

Hispanic Subgroup Performance – Points Gained
(2009 CMS n=48 / CO District n=425 / CO n=15,362)

8th Grade Math Proficient & Advanced Achievement
CMS/CO District /CO Comparison
Subgroup White Students
2004 - 2009

53
55
57

47

CMS

CO

District

CO

51

56

58

62

66

69

51

56

58

62

66

69

8th Grade Math
White Subgroup Performance – Points Gained
(2009 CMS n=180 / CO District n=1,242 / CO n=36,008)

CMS +13 pts.
CO District +15 pts.
CO + 9 pts.
8th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Female Performance

2004-2009

8th Grade Math
Female Subgroup Performance – Points Gained
(2009 CMS n=128 / CO District n=932 / CO n=27,984)
8th Grade Math Proficient & Advanced Achievement
CMS/CO District/CO Comparison
Subgroup Male Performance
2004-2009

8th Grade Math Male Subgroup Performance
(2009 CMS n=129 / CO District n=1,037 / CO n=29,575)

CMS = + 11  CO District = + 8  Colorado = + 9
8th Grade Math
Unsatisfactory CSAP Performance
CMS/CO District/Colorado Comparison

8th Grade Math
Unsatisfactory Performance – Points Reduced

CMS - 10 pts.    CO District - 9 pts.    CO -9 pts.
Colorado School District
8th Grade Math Proficient & Advanced
2004-2009

Math Achievement for ALL is improved
from 41% P&A to 53% P&A +12 points

Overall gap in math performance is widened
from 26 points in 2004 to 32 points in 2009 + 6 points

All subgroups are improved in percentage of P+A achievement
Advanced achievement increased from 16% to 20% +4 points
Unsatisfactory achievement reduced from 27% to 14% -13 points

Subgroup Gains:
~Black = +9 points  ~White = + 15 points  ~Hispanic = +12 points
~ Male = + 8 points  ~ Female = +18 points
Math Achievement for ALL is improved from 41% P&A to 50% P&A + 9 points

Overall gap in math performance is reduced from 35 pts in ‘04 to 31 pts ‘09 -4 points

All subgroups are improved in percentage of P+A achievement
Advanced achievement is up slightly from 16% to 19% +3 points
Unsatisfactory achievement is decreased from 28% to 19% -9 points

Subgroup Gains:
~Black + 13 points   ~White + 9 points   ~Hispanic +11 points

~ Male = + 9 points   ~ Female = + 9 points
Colorado Middle School

6th, 7th, & 8th Grade Math Advanced Performance (Percentage) 2004-2009

Advanced Math Performance is increased from average of 11% ‘04 to 21% ‘09

Colorado Middle School

6th, 7th, & 8th Grade Math Unsatisfactory Performance (Percentage) 2004-2009

Unsatisfactory Math Performance is decreased from average of 18% ‘04 to 11% ‘09