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### CALIFORNIA STATE UNIVERSITY, SAN MARCOS

School Implementation of a Board-Adopted Inquiry Process to Improve Student

Learning

A Dissertation submitted in partial satisfaction of the requirement for the degree

Doctor of Education

in

Educational Leadership

by

Anisha D. Dalal

Committee in Charge:

University of California, San Diego

Professor Janet Chrispeels, Chair

San Diego State University

Professor Margaret Basom

California State University, San Marcos

Professor Jennifer Jeffries

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University of California, San Diego
San Diego State University
California State University, San Marcos
2008

#### **DEDICATION**

This dissertation is dedicated to my parents, Dhansukhlal and Madhuri Dalal, who have always supported me in my endeavors. They have always been there for me in this journey called life. I admire my parents for immigrating to the United States from their hometown of Surat, India in the 1960's to start a new chapter in life for themselves and their five children, Tushar, Sandhya, Anjana, Sona, and me. I also want to thank my siblings for making me a better person. I am especially grateful to my youngest sister, Sona, for the countless hours she spent editing my dissertation.

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#### **ACKNOWLEDGEMENT**

I would like to acknowledge Professor Janet Chrispeels for her support as the chair of my committee. Professor Chrispeels provided invaluable guidance and leadership throughout this process. She spent countless hours reviewing many drafts and providing feedback critical to the development of this dissertation. Her enthusiasm and encouragement allowed me to become the individual I am today.

I also want to acknowledge the committee in charge: Professor Margaret Basom, San Diego State University and Professor Jennifer Jeffries, California State University, San Marcos. Their leadership and support from the initial stages of this program has been tremendous. Professor Basom's inspiring words as my mentor during the Administrative Credential program led me to pursue doctoral study.

I also wish to acknowledge the staff members at Ocean Currents and Mountainside Elementary Schools who made this research possible. They dedicated time from their busy schedules to allow me to interview them and gather data for my study.

I further wish to acknowledge the staff members at ALBA Community Day School, especially Vice Principal, Elizabeth Larkin, and the staff members in San Diego Unified School District who supported my endeavors throughout this process.

I also wish to acknowledge the members of Cohort I (Class of 2008), the first graduating class of the Joint doctoral program in Educational leadership with UCSD, SDSU, and CSUSM whose moral support inspired me to continue my journey. I especially thank my colleagues, Dr. Francisco Escobedo and Dr. Brian Bristol who collaborated with me on this study.

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## **PUBLICATIONS**

"School Implementation of a Board-Adopted Inquiry Process to Improve Student Learning", April 2008

#### ABSTRACT OF THE DISSERTATION

School Implementation of a Board-Adopted Inquiry Process to Improve Student

Learning

by

#### Anisha D. Dalal

Doctor of Education in Educational Leadership

University of California, San Diego, 2008

San Diego State University, 2008

California State University, San Marcos, 2008

### Professor Janet Chrispeels, Chair

The purpose of this study was to explore how a district-initiated inquiry process, adopted by the board of education in 1998, affected principal and staff behaviors and whether it was still operative and influencing two schools' practice nine years after it adoption. The first school is designated "Program Improvement" (PI) for failing to meet Adequate Yearly Progress (AYP); and the second is in danger of becoming a PI school.

An exploratory and descriptive multiple case study design was used, drawing primarily on interviews of the principals and a purposeful selection of teachers from primary and upper grade level teams and school and district documents. The schools were matched by demographics. Although only one principal was formally trained in

the inquiry frame, both principals received support and professional development for themselves and their leadership teams, which enabled them to set in motion the district's student-centered inquiry process.

A major finding was that the board adopted inquiry decision-frame seemed to be inculcated into the district's culture. The first question in the inquiry frame, how will this decision improve student learning, seems to have become a core system value, embedded through systematic professional development provided to principals and leadership teams. The findings showed that the principals and teachers at both schools understood how to look at student work and achievement data, examine instructional practices, and improve student learning. Another major finding was that grade level teams use the inquiry to facilitate team learning.

The instructional leadership team (ILT) at one school was instrumental in making operational the inquiry process school-wide. The absence of a functioning ILT seemed to have limited the other school's ability to maintain shared goals and foster shared leadership. The findings also showed that both principals exhibited *high inquiry* with a strong understanding of the necessary decisions that improved student achievement, but one was more skillful in using the leadership team for whole school change and organizational learning. This study documents the importance of board policy supported by systematic professional development and the power of inquiry to promote organizational learning and shape principal leadership behaviors.

#### Chapter 1

#### Introduction

The purpose of this study was to explore how a district-initiated inquiry process, adopted by the board of education in 1998, affected principal and staff behaviors and was incorporated into school practice. In this study, I examined the phenomenon of inquiry as it was enacted in two elementary schools nine years after this board policy was adopted. The first is currently designated as a "Program Improvement" (PI) school for failing to meet Adequate Yearly Progress (AYP) goals for four years; and the second is in danger of becoming a PI school because it did not make AYP for one academic year. I explored the ways in which the inquiry process was enacted and how it is currently practiced. This study uniquely contributes to the body of literature by capturing how a district-initiated inquiry process was perceived, implemented and sustained by staff members at two schools, and how it promoted organizational learning and shaped principal leadership behaviors.

#### Case Study District Background

The district's historical context had a tremendous role in making operational the district-initiated inquiry model at the schools. Therefore, it is important to understand this context and how the different reform efforts emerged in this district. From 1993 to 2003, Dr. Robards led the Southern California elementary school district as superintendent. During the initial stages of her tenure as superintendent in the fall of 1993, she hired an external team of key educational professionals to conduct a curriculum management audit that consisted of a systematic review of policy documents, decision-making processes, and practices (Gil, 2001). This team

made a series of observations and conducted numerous interviews to determine the extent of resource-management alignment with instructional focus and student achievement. Their conclusions uncovered a paternalistic organizational model of "do as I say and I will take care of you" (p. 17). As a result, an extensive reorganization occurred at the district. From 1994 to mid 1995, Dr. Robards, as Superintendent, engaged in strategic planning, talked to all stakeholders, developed a shared vision and set of values with the school board, and set strategic goals.

She also introduced four major whole school reform models between the years 1996 and 1998. These were: (a) Comprehensive School reform models, (b) specialized programs with local corporations, (c) charter schools, and (d) magnet schools. The comprehensive school reform models included two Comer Development Schools, Four Accelerated Schools, and Edison schools. The specialized model technology projects involved local corporations including IBM, Cox Cable, Pacific Bell, and Apple. During her tenure, she opened six charters schools and magnet schools for science and visual and performing arts in her district. In addition, she supported specialized, federally funded programs such as Reading Recovery, Reading First for some schools, dual language programs, Even Start family literacy program, newcomers class for students in grades three through six who were new to the United States, Connections Emergency Immigrant Education Program, state-sponsored preschools, Young Scientists Program, city Nature Center and Teacher training centers at the local university. All of these initiatives allowed autonomy at the school level.

Because more autonomy was allowed at the school site level, the roles of the central office departments were redefined and resources were shifted to schools to meet student needs; nevertheless, the superintendent and board also set a clear direction for the district (Togneri & Anderson, 2003). In 1998, the school board formally adopted the inquiry model called, *Student-Based Decision-Making* to be used to guide all site and district decisions. The purpose of this board policy was to ensure that all decisions focused on student needs rather than adult or building needs. During this era of site-based decision making, this word shift from *site* to *student* seems to have been critical given the data that site-based decision making often had little effect on student learning (Leithwood & Menzies, 1998). When making decisions, all administrators at district and school levels were to guide their staff and stakeholders using four essential questions, which are displayed in Figure 1.1.

## **Student-Based Decision Making: Essential Questions**

Improving Student Learning, Ethical Responsibility, and Involving All Stakeholders are three principles we work with in the decision-making process. The following essential questions provide guidelines as we apply these principles.

#### HOW DOES THE DECISION IMPROVE STUDENT LEARNING?

- Rationale or evidence that it makes a difference for all children
- Support our vision statement

#### IS THE DECISION ILLEGAL, UNETHICAL, OR IMMORAL?

Support our values statement

#### IS THERE ADVERSE IMPACT ON OTHERS?

- Collaboration with staff, parents, community
- Data collection/research
- District included in problem-solving process
- Fiscal and personnel impact

#### HOW ARE INDIVIDUAL NEEDS BALANCED WITH GROUP NEEDS?

- Equity
  - -- Adopted by Board of Education, May 19, 1998

Figure 1.1. Student – Based Decision Making: Essential Questions

The model incorporated four specific questions that all teachers and principals at the school were to consider when making a decision, including (a) how does the decision improve student learning, (b) is the decision illegal, unethical, or immoral, (c) is there adverse impact on others, and (d) how are individual needs balanced with group needs? The first question allowed teachers, principals, and instructional

leadership teams to reflect on the vision for the school. They gathered evidence or data to support decision-making. The second question was value-laden and ensured decisions adhered to legal and moral constructs. The third question was the heart of the process where all critical stakeholders, including staff members, parents, community members, and district office personnel, collaborated. Decision-making involved data analysis and a consideration of fiscal and personnel impact. The final question considered student interests on both an individual and an aggregate level. Teachers, principals, and instructional leadership teams were not required to follow this inquiry process in a linear fashion although the elements in each question were supposed to be addressed throughout the decision-making process. A document with the four questions from the Student-Based Decision-Making model was posted in each school office.

To facilitate the operation of this decision-making model at the schools, the district formed a partnership with the Ball Foundation in the year 2000 (Ball Foundation, 2007). The Ball Foundation provided resources and support to schools to improve academic achievement for all students. Its premise was to help schools achieve high literacy achievement for all students by supporting and enhancing organizational learning and building sustainable organizational capacity. In the Ball approach, the foundation brought expertise from four domains including communities of practice, data-driven literacy instruction, family engagement, and leadership behavior. These four domains were combined with the school districts' existing assets. Throughout the phases of partnership, which included inquiry and

engagement, implementation of design, and transition to sustainability, the foundation served as coach, consultant, and critical ally to school districts.

During the middle of the 2000-01 school year, the school district and the Ball Foundation identified Focus on Results as a third partner. Focus on Results worked with districts to make measurable, lasting improvements in student performance, school leadership and decision-making and professional development (Focus on Results, 2005). The purpose of the work of the Ball Foundation and Focus on Results was to build system coherence in schools by training principals, teachers, and district central office leaders. School and district leaders were trained with concrete tools to target instructional improvement efforts that were data-driven. They received coaching to build their instructional leadership skills to support and monitor the implementation of promising instructional practices. Specifically, the superintendent and her cabinet were trained on building capacity to support the district's instructional agenda. Additionally, all principals in the cohort schools were trained to create SMART goals, evaluate student work, and support literacy instruction at their site. The Ball Foundation and Focus on Results mobilized the inquiry process at the school site level.

Five self-identified schools, known as Community of School (CoS), Cohort 1 in this Southern California school district were selected to work with the Ball Foundation and Focus on Results in 2001. The CoS created systems to support specific needs at each school site. The CoS focused on creating SMART goals, looking at student work, creating instructional leadership teams, and managing meetings at the schools. The results were so positive that the following year another

cohort (Cohort 2) of five schools was added. Each cohort of schools received three years of intensive training from Focus on Results. By the third year, 22 out of the 40 schools in the district engaged in this process. Eventually, the training was implemented in every school within the Southern California School District with excellent student achievement results (Targeted Leadership, 2008).

In 2004, the Ball Foundation separated from Focus on Results (Ball Foundation, 2007). The Ball Foundation hired a consultant to work on making the project sustainable. The consultant created eight Communities of Practice (CoP) in which schools partnered with other schools to give staff members an opportunity to share instructional practices that were sustainable over time. The Ball Foundation also taught school staff specific protocols such as the World Café process. Overall, these initiatives created a way for inquiry to be institutionalized.

As a result of the schools' work with the Ball Foundation and Focus on Results, certain practices such as instructional walkthroughs, looking at student data, and creating SMART goals became embedded in the teachers and administrators' work system-wide. The district ended its partnership with the Ball Foundation in 2007. Some of the consultants working for Focus on Results formed their own company, Targeted Leadership, which continues to provide coaching for principals and instructional leadership teams, helps learning community teams use student work and performance data to identify and implement evidence-based instructional practices, and support schools with goal setting.

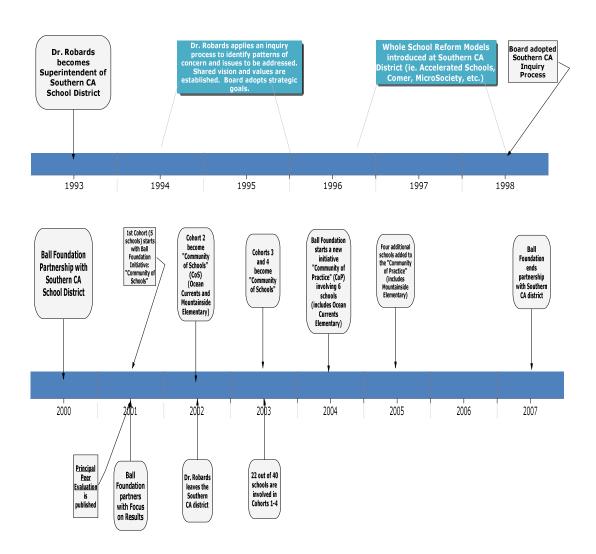


Figure 1.2. Timeline of events for Southern California District

Rationale for Present Study

Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner (2000) asserted our public school structures and organizational practices remained virtually unchanged since the Civil War era. Current educational institutions are designed to transmit culture, promote staff compliance with rules and regulations, maintain the status quo, impede reform efforts to innovate, question, and take risks; and at the same time, political leaders are demanding that all students reach higher levels of

achievement. Consequently, innovation is stifled in the schools that need it the most. The reality is that many educational systems cannot adapt to changing environments and are thus ill-equipped to meet the diverse needs of information-aged students. Senge et al. (2000) proposed redesigning schools to meet the increased demands for teaching diverse students. The inquiry process may therefore be one means for promoting greater innovation and redesign to better meet the needs of 21<sup>st</sup> century students.

Elmore (2000), while conducting a historical study of education, discovered the institution's tendency to divert and water down change. He claimed schools were not built to undergo any reform or innovation and that promoting sustainable change in our educational institutions was a daunting and often excruciating task. However, as an educator committed to enhancing the learning experience for all students, it is important to explore how a board-adopted inquiry model has been used as a reform strategy in one district that has received national recognition as both a responsive and a high-performing district (Togneri & Anderson, 2003).

*Table 1.1.* District Achievement Data

	2002	2003	2004	2005	2006	2007
District API	689	722	722	745	769	782
Percent students proficient or advanced in ELA	N/A	N/A	36	40	46	49
Percent students proficient or advanced Math	N/A	N/A	44	52	56	58

District reform. The most recent political response to improve student achievement for all students is the No Child Left Behind (NCLB) Act of 2001, which requires that all students reach proficiency in the areas of math and language arts by the year 2014. The result of this legislation was that it became increasingly difficult for schools to be innovative because of sanctions associated with failed achievement gains. As a result, public schools found themselves in the "age of accountability" (Datnow, 2007). Historically, the universal goal of educators has been assuring that all students derive the maximum educational benefit from school and enter adulthood as productive members of society. In the age of accountability, methods of accomplishing this historical goal has become the focus of researchers, politicians, policy makers, school administrators, and teachers. The NCLB act places the district at the forefront as federal and state accountability mandates hold districts increasingly responsible for improving teaching and learning in their schools.

Firestone (2008) refers to this as a district with an accountability culture. He describes three types of district cultures. They are *loosely coupled*, *accountability*, and *student learning* cultures. These three types of district cultures approach data use, curriculum improvement, and professional development in unique ways. A district that has a loosely coupled culture has little influence on school practices. A district with an accountability culture has greater coherence through centralized control of schools. A district with a student learning culture has a mixture of board and community support and the schools within it have their own vision for student learning built from the district vision. Firestone (2008) asserts that NCLB has pushed many districts in the direction of accountability, and that there are few districts that he

considers reflect a student learning culture. The board adopted *Student-Based*Decision-Making model of the district featured in this study could be considered as an example of a student learning focused district.

McLaughlin and Talbert (2003) underscore the importance of district leadership by stating "districts matter fundamentally to what goes on in schools and classrooms and that without effective district engagement, school-by-school reform efforts are bound to disappoint" (2003, p. 5). Furthermore, there is a growing body of research that shows school districts are important agents of change and units of instructional renewal (Elmore, 1999; Hightower, 2002; Hightower, Knapp, Marsh & McLaughlin, 2002; Marsh, 2000; Massell & Goertz, 2002). Recent studies demonstrate that specific practices at the district level can have a positive influence on student achievement and result in district wide improvements in teaching and learning (Elmore, 1999; Ragland, Asera, & Johnson, 1999; Skrla, Scheurich, & Johnson, 2000; Snipes, Doolittle, & Herlihy, 2002; Togneri & Anderson, 2002; Marzano & Waters, 2006).

Leadership is crucial. In addition to district level support, studies have shown that the principal's leadership is critical for shaping the instructional climate for improving student achievement at the school level (Cooley & Shen, 2000).

According to many researchers, the principal's leadership makes a difference (Reeves, 2006; Deal & Peterson 1990; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Marzano, McNulty, & Waters, 2005). When a principal collaborated with staff members, sustainability was enhanced. Studies by Sexton-Bryson (2004) suggested principal effectiveness stemmed from collaboration and developing relationships

among staff members. It is the principal's responsibility to create practices that support inquiry so staff members grow to trust each other as their needs and ideas are incorporated into joint solutions. These inquiry-based interactions foster individuality so that staff members feel more powerful, capable, efficacious, and connected to others. Therefore in this study, it was important to investigate the principal's role in developing relationships, creating opportunities for collaboration, and engaging in inquiry.

Organizational learning. Reform efforts require continuous learning about instructional pedagogy and curriculum implementation. This continuous learning is both an individual and a social activity (Shiu & Chrispeels, 2004). Therefore, collective learning demands an environment that guides and directs the acquisition of new knowledge about instruction. In this environment, principals must create conditions that value learning as both an individual and collective good. Site leaders must create environments in which individuals expect to have their personal ideas and practices subjected to the scrutiny of their colleagues, and in which grade level or department teams expect to share their conceptions of practice and collectively review their work (Elmore, 2000).

Some researchers have shown that professional learning communities are highly collaborative and are linked to long-term sustainability in educational reform efforts (Datnow, 2005; Fullan, 1999; Lambert, 2003; Sergiovanni, 2004). Other studies suggested the inquiry method enhanced the quality of professional learning communities that fostered decision-making and collaboration (Copland, 2003; Jones & Yonezawa, 2002; Copland, 2001; Dufour, & Eaker, 1998). Collaboration creates

cooperation and an understanding that learning evolves out of differences in expertise, not differences in formal authority. This study explored how instructional leadership and grade level team members at each of the schools used the inquiry process to foster a professional learning community.

Inquiry's role in creating change. Inquiry, the process of asking reflective and focused questions, occurs through collaboration with all stakeholders and may be a key component of organizational learning and improved school performance.

Because the inquiry process is highly dependent on the relationships and interactions developed with people, the inquiry model may be a tool to foster shared decision-making in a school system. Previous studies suggested that an inquiry process was the construct for quality decision-making practices that led schools toward sustainable change (Reeves, 2006; Copland, 2003).

#### Research Questions

Building on these constructs of district reform, leadership, organizational learning and inquiry, my research was directed at answering the following questions:

1) In what ways do principals and grade level team members perceive the implementation of the district's inquiry process in their schools, 2) how do principals and teachers perceive the effectiveness of the inquiry process on their own learning and the school's work, and 3) how do the principals and teachers perceive their principal's behaviors may have changed from participating in the district's initiation of an inquiry process?

#### Chapter 2

#### Review of Literature

This review presents a body of research on district reform, leadership, organizational learning, and inquiry. The review begins with an overview of district reform that set the context for this Southern California school district's shift from a *site-based decision making* to a *student-based decision making* model. It is followed by a discussion of leadership, which is critical for promoting organizational and student learning. Further, the review focuses on the ways in which principals' behaviors have been influenced and how they lead their schools in the implementation of the board's adoption of the *Student-Based Model for Decision-Making*. The review continues with a section on organizational learning to gain insight about how the board-adopted inquiry policy may affect the principal and teachers' own learning and the school's work. This review ends with inquiry as a potentially key component of organizational learning and improved performance. Each section is organized by a definition of the concept, an overview of significant or conceptual applications, and a synthesis of major empirical studies.

#### District Reform

District reform has evolved as a result of decades of promoting that all students have an equal opportunity to obtain education, originating from the Civil Right's era of 1960, which supported the notion of creating a society centered on equal opportunity for all of its citizens. Education was viewed as the primary government institution to offer students access to knowledge and a social network

necessary to enhance life's opportunities. During this time, glaring student achievement gaps among ethnic groups reflected the major inhibitor for achieving equity in our society.

The past five decades were indicative of the political arena intervening to enhance equity by focusing efforts to improve how students are educated. This political intervention started with the passage of the Federal Title I Act of 1965 which ensures that all children have a fair, equal, and significant opportunity to obtain a high-quality education. Similarly, the research community began investigating factors that benefit or hinder student achievement as a means to establish equity in education. The first landmark study was the Coleman Report in 1966 which linked poverty and achievement as the major predictors for student success. Using data from over 600,000 students and teachers across the country, the researchers found that academic achievement was less related to the quality of a student's school, and more related to the social composition of the school, the student's sense of control of his environment and future, the verbal skills of teachers, and the student's family background (Kiviat, 2000). However, recent studies investigating the effects of powerful classroom instructional strategies show that leadership behavior and district support are correlated with improved student performance (Marzano et al., 2005; Marzano & Waters, 2006).

After two decades of failed efforts of allocating money to help counteract demographic factors described in the Coleman Report, the 1990's reflected a greater focus on school quality. During this decade, Comprehensive school reform (CSR)

models were thought to be the answer for school improvement. CSR models called for a coordinated approach to elevate school performance.

To stimulate whole-school reform across the country, Congress appropriated funds in FY1998 for the U.S. Department of Education (ED) to start the Comprehensive School Reform Demonstration (CSRD) Program. ED allocated the funds on a formula basis to states, who made awards to support 1,840 mostly Title I schools "in need of substantially improving" their performance. Subsequent rounds of annual awards to support additional schools have continued through FY2003 (American Institutes for Research, 2003, p. 4).

These models incorporated research-based teaching strategies, a prescribed leadership construct, and an integrated curriculum. This reform strategy differed from piecemeal and fragmented efforts that, in the past, seemed to lead to short-lived changes (Datnow, 2005).

American Institutes for Research conducted a large scale study, comprising eighteen schools, to investigate the effectiveness of CSR efforts yielding mixed results on the overall effectiveness of the implementation of the school reform model. Based on a 47-point instrument reflecting the nine components of the CSRD approach, devised specifically for the Field-Focused Study, nine schools garnered 80 percent of the 47 points and could be labeled as *nearly fully* implementing CSRD. Another six schools garnered 65 percent of the 47 points and could be labeled as *partially* implementing CSRD. The remaining three schools all scored lower than 65% of the 47 points and were judged to be *poorly* implementing CSRD. Researchers concluded that student success depended upon how well the model was implemented (American Institutes for Research, 2003).

Datnow (2000) in her summary of major findings from diverse multi-year studies conducted by the Center for Research on the Education of Students Placed at Risk (CRESPAR) concluded from detailed quantitative and qualitative data gathered at sets of schools that some schools improve while others fall behind. They noted that schools using similar reforms have differing results with some schools showing dramatic improvement while others showing relatively little or no improvement. In addition, some schools failed to institutionalize reform models that demonstrated multi-year successes while other schools maintained successful reforms for ten years or longer. They argue that in order for reforms to be sustained, coordinated and systematic supports must come from multiple levels. Research has shown that the efficacy of the school in implementing the approach may have some basis in the role of the district office in improving teaching and learning, thus, those who criticize the approach for a school's failure must consider the district context (MacIver & Farley, 2003; Cuban, 1984; Purkey & Smith, 1985).

# The Advent of District Reform

No Child Left Behind (NCLB), the most recent political response to improve student achievement for students, requires that all students, especially those who have historically failed in the educational system, will reach proficiency in the areas of math and language arts by the year 2014. With the passage of NCLB in 2001, public schools found themselves in the age of accountability (Datnow, 2007). Historically, the universal goal of educators has been assuring that all students derive the maximum educational benefit from school and enter adulthood as productive members of society. In the age of accountability, methods of accomplishing this goal

have become the focus of researchers, politicians, policy makers, school administrators, and teachers. The NCLB act places the district at the forefront as federal and state accountability mandates hold districts increasingly responsible for improving teaching and learning in their schools. Under NCLB requirements, a district must provide support to a school in the first year after it does not meet its Adequate Yearly Progress (AYP) goal. If the school failed to achieve progress for two consecutive years, the school is identified as *a program improvement school* and the district must provide technical assistance. After a school has been labeled as program improvement for four years, school districts must take strong corrective action on the school to bring about meaningful change.

For many years, researchers have either ignored the role of the district or blamed districts for allowing ineffective schools to exist (Anderson, 2003). Elmore (1993) argues that there is little evidence to support that districts played a constructive role in instructional improvement. Others posit that school autonomy is the most effective pre-requisite for school effectiveness and that school reform was destined to fail with the existing public educational system since it inhibited the emergence of effective organizations and stifled student achievement (Chubb & Moe, 1990). Some scholars even question the need for school districts entirely (Finn, 1991 as cited in MacIver & Farley, 2003; Tyack, 2003).

In spite of the negative views on school districts and their roles, many policy makers, reform organizations, and foundations have a renewed confidence in the role of the central office in bringing about cohesiveness in a complex policy environment and for promoting an environment of equity across all schools in a system.

McLaughlin and Talbert (2003) underscore the importance of district leadership by stating "districts matter fundamentally to what goes on in schools and classrooms and that without effective district engagement, school-by-school reform efforts are bound to disappoint" (2003, p. 5). Furthermore, there is a growing body of research that shows school districts are important agents of change and units of instructional renewal (Elmore, 1999; Hightower, 2002; Hightower, Knapp, Marsh & McLaughlin, 2002; Marsh, 2000; Massell & Goertz, 2002). Recent studies demonstrate that specific practices at the district level can have a positive influence on student achievement and result in district wide improvements in teaching and learning (Elmore, 1999; Ragland et al., 1999; Skrla et al., 2000; Snipes, Doolittle, & Herlihy, 2002; Togneri & Anderson, 2002; Marzano & Waters, 2006).

Empirical studies. A recent national study of the impact of NCLB revealed that districts were allocating resources to increase the usage of student achievement data to inform instruction in schools identified as program improvement (Center on Education Policy, 2004). Studies of successful school districts show these districts invested heavily in data-driven decision-making (Cawelti & Protheroe, 2001; Doolittle, Herlily, & Snipes, 2002; Tognieri & Anderson, 2003). Summarizing findings across several major recent studies of school districts, Anderson (2003) wrote

Successful districts in the current era of standards, standardized testing, and demands for evidence of the quality of performance invest considerable human, financial and technical resources in developing their capacity to assess the performance of students, teachers and schools, and to utilize these assessments to inform decision-making about needs and strategies for improvement, and progress towards goals at the classroom, school, and district levels (p. 9).

A list of common elements or practices that characterize districts evidencing improvements in teaching and learning evolved from several studies. According to MacIver and Farley (2003), Murphy (1988) was among the first researchers who identified a group of high performing districts and their common characteristics. They examined overall level of student achievement across subjects and growth in student achievement over time. They also studied consistency of achievement across sub-groups over time. They subsequently developed a list of factors in those high performing districts and correlated it with districts that were instructionally effective. They found that district effectiveness was associated with (1) strong instructionally focused leadership from the superintendent and district level administrators, (2) an established instructional and curricular focus, (3) consistency of instructional activities, and (4) an emphasis on monitoring instruction and curriculum. These districts evidenced a balance between district control and school autonomy and collaboration with strong leadership.

Qualitative studies of high performing districts in Texas (Ragland, Asera, & Johnson, 1999; Skrla et al., 2000) examined factors at the district level that contributed to high academic achievement for all sub-groups. The researchers found important similarities among the successful districts and grouped them into themes similar to those identified by Murphy (1988). The themes that emerged included (1) a climate of urgency to improve achievement for all students, (2) a sense that student achievement was the responsibility of every staff member in the district, (3) a shared sense that the central office was a support and service organization for schools, (4)

coherent professional development based on research, and (5) alignment of curriculum, instruction, instructional practice and assessment.

Elmore (1999) also found in his case study of New York Public School's District 2 that districts "can be seen as an *existence proof* that it is possible for a local district to be agents of serious instructional improvement" (1999, p. 264).

Specifically, District 2 used extensive professional development and had a strong culture that placed value on instructional improvement to change instructional practices. This led to dramatic improvements in test scores over time for a diverse student population. Massell and Goertz (2002) conducted a three year study of standards-based reforms in 22 districts across eight states. They found three common strategies among these districts selected for their improvement and standards-based reform initiatives. These strategies were (1) increasing professional knowledge and skill, (2) strengthening and alignment of instructional guidance, and (3) the use of data to guide improvement in instruction.

District Reform in the Southern California School District.

From 1993 to 2003, Dr. Robards led the Southern California elementary school district as superintendent. During the initial stages of her tenure as superintendent in the fall of 1993, she hired an external team of key educational professionals to conduct a curriculum management audit that consisted of a systematic review of policy documents, decision-making processes, and practices (Gil, 2001). This team made a series of observations and conducted numerous interviews to determine the extent of resource-management alignment with instructional focus and student achievement. Their conclusions uncovered a

paternalistic organizational model of "do as I say and I will take care of you" (p. 17). As a result, an extensive reorganization occurred at the district. From 1994 to mid 1995, Dr. Robards, as Superintendent, engaged in strategic planning, talked to all stakeholders, developed a shared vision and set of values with the school board, and set strategic goals.

She also introduced four major whole school reform models between the years 1996 and 1998. These were: (a) Comprehensive School reform models, (b) specialized programs with local corporations, (c) charter schools, and (d) magnet schools. The comprehensive school reform models included two Comer Development Schools, Four Accelerated Schools, and Edison schools. The specialized model technology projects involved local corporations including IBM, Cox Cable, Pacific Bell, and Apple. During her tenure, she opened six charters schools and magnet schools for science and visual and performing arts in her district. In addition, she supported specialized, federally funded programs such as Reading Recovery, Reading First for some schools, dual language programs, Even Start family literacy program, newcomers class for students in grades three through six who were new to the United States, Connections Emergency Immigrant Education Program, state-sponsored preschools, Young Scientists Program, city Nature Center and Teacher training centers at the local university. All of these initiatives allowed autonomy at the school level.

Because more autonomy was allowed at the school site level, the roles of the central office departments were redefined and resources were shifted to schools to meet student needs; nevertheless, the superintendent and board also set a clear

direction for the district (Togneri & Anderson, 2003). In 1998, the school board formally adopted the inquiry model called, *Student-Based Decision-Making* to be used to guide all site and district decisions. The purpose of this board policy was to ensure that all decisions focused on student needs rather than adult or building needs. During this era of site-based decision making, this word shift from *site* to *student* seems to have been critical given the data that site-based decision making often had little effect on student learning (Leithwood & Menzies, 1998). When making decisions, all administrators at district and school levels were to guide their staff and stakeholders using four essential questions, which are displayed in Figure 1.1.

# **Student-Based Decision Making: Essential Questions**

Improving Student Learning, Ethical Responsibility, and Involving All Stakeholders are three principles we work with in the decision-making process. The following essential questions provide guidelines as we apply these principles.

### HOW DOES THE DECISION IMPROVE STUDENT LEARNING?

- Rationale or evidence that it makes a difference for all children
- Support our vision statement

### IS THE DECISION ILLEGAL, UNETHICAL, OR IMMORAL?

Support our values statement

#### IS THERE ADVERSE IMPACT ON OTHERS?

- Collaboration with staff, parents, community
- Data collection/research
- District included in problem-solving process
- Fiscal and personnel impact

### HOW ARE INDIVIDUAL NEEDS BALANCED WITH GROUP NEEDS?

- Equity
  - -- Adopted by Board of Education, May 19, 1998

Figure 1.1. Student – Based Decision Making: Essential Questions

The model incorporated four specific questions that all teachers and principals at the school were to consider when making a decision, including (a) how does the decision improve student learning, (b) is the decision illegal, unethical, or immoral, (c) is there adverse impact on others, and (d) how are individual needs balanced with group needs? The first question allowed teachers, principals, and instructional

leadership teams to reflect on the vision for the school. They gathered evidence or data to support decision-making. The second question was value-laden and ensured decisions adhered to legal and moral constructs. The third question was the heart of the process where all critical stakeholders, including staff members, parents, community members, and district office personnel, collaborated. Decision-making involved data analysis and a consideration of fiscal and personnel impact. The final question considered student interests on both an individual and an aggregate level. Teachers, principals, and instructional leadership teams were not required to follow this inquiry process in a linear fashion although the elements in each question were supposed to be addressed throughout the decision-making process. A document with the four questions from the Student-Based Decision-Making model was posted in each school office.

The Southern California case study district began collaborating with the Ball Foundation in 2000 and Focus on Results in 2001. The purpose of these partnerships was to accelerate the development of sustainable organizational capacity in schools by delivering professional development, coaching, consulting, and engaging in organizational learning (Ball Foundation, 2007). Five self-identified schools, known as Community of School (CoS), Cohort 1 in this Southern California school district were selected to work with the Ball Foundation and Focus on Results in 2001. As was described earlier, the CoS supported schools with creating SMART goals, looking at student work, creating instructional leadership teams, and managing meetings. By 2003, four cohorts of schools were established. Each cohort of schools received three years of intensive training from Focus on Results. In 2004-05, six

schools participated in Communities of Practice (CoP) with four more schools added in 2005-06. The CoP focused on building community within and across schools, introducing new literacy content, and dialoguing around how to implement independent reading practices.

Inquiry as the core process. The competing demands on teachers and administrators in public schools often created cultures of blame, fear, fragmentation and isolation. In such an environment, the vulnerability and exposure that was at the heart of shared inquiry and learning was difficult to call forth (Ricci & Rogers, 2006). The work of communities of practice rested on intentional, affirmative inquiry-based conversation. At the center of the work of a CoP was the assumption that the answers already existed somewhere in the community or could be found together.

Communities of practice began with the questions, "What's working and why?" In addition, attention was given to create conditions where people felt safe, developed trust over time, and experienced both immediate and long-term positive impact on their practice.

### *Summary*

Research provided persuasive evidence that specific factors at the district level had a positive impact on student achievement. Findings from studies of high performing districts addressed policies and practices in place that supported an ethical commitment to equity in student achievement. The effective schools research and research on successful districts also identified strong leadership as a critical component to improving teaching and learning. However, in this complex environment of high stakes testing and accountability, the research also indicated that

strong leadership has many dimensions and that effective leadership could no longer be the sole responsibility of a single individual. The Southern California School District in this study partnered with external organizations to promote best instructional practices by establishing an environment to stimulate collaboration and inquiry throughout the district. The following section outlines the research on school leadership and how inquiry is used to enhance leadership capacity.

### Leadership

An important point that resonated throughout the review of literature was the importance of leadership for promoting organizational and student learning. The research also suggested improving leadership was the key to large-scale school reform. Leithwood, Louis, Anderson and Wahlstrom (2004) stated leadership was second only to classroom instruction among all school-related factors that contributed to student learning. This section of the review explores leadership in schools, elaborates on the notion of transformational leadership, provides models of leadership for inquiry, and describes empirical studies surrounding the effects of leadership in schools.

# Definition

A critical factor in creating a school environment that fosters higher student academic performance was the principal's role as a leader (Andrews & Soder, 1987; Blank, 1987; Gallmeier, 1992; Sagor & Barnett, 1994). Murphy (2002) asserted that the role of the principal changed significantly in the 21st century from the Industrial Age to the Information Revolution of today. During the Industrial Age, the principals were viewed as technical experts whose effectiveness was measured by efficiency

and the quantity of work completed (Duke, 1987). From the 1920s through the 60s, the principal's primary role was the *administrative manager* who maintained the status quo. This changed somewhat in the mid-1970s where the principal's responsibilities moved from facilitating program and curriculum management towards facilitating school improvement and change. The principal's role was to manage an externally devised solution to an educational problem that centered on compliance, not on individual student or program results. In the 1980s, however, the notion of the principal as *instructional leader* evolved. As a result, the principal's responsibilities shifted to leading the school's instructional program by directing staff attention on student achievement (Hallinger & Murphy, 1992).

Murphy (2002) noted the post-Industrial society or Information Revolution of today is marked by the knowledge explosion, globalization and downsizing. The implication for the school principal was that he/she had to create or facilitate innovative customized responses to meet the needs of a diverse student population. The principal also had to participate in continuous learning opportunities to search for new information to solve problems. This change resulted in a more lateral organization where leadership was shared as interactions with others increased. Rules changed to allow for individualization of cases and innovation and creativity for assessment emerged. Principals were forced to redefine their roles to address the rapidly changing environment but acknowledged the expectation that schools were learning communities.

Rost (1991) described leadership in the Post-industrial Age as "an influence relationship among leaders and followers who intend real changes that reflect their

mutual purposes" (p.102). He referred to intended changes as those which were purposeful and futuristic. Therefore, the purpose of principal leadership evolved to significantly change and reform schools in substantive ways to improve teaching and learning for all students (Matthews & Crow, 2003).

Leithwood (2003) suggested schools and students benefited from the positive effects of strong school leadership. Copland (cited in Datnow and Murphy, 2003), stated "There's no substitute for the principal of a school showing that this [leadership] is what matters" (p. 159). Leithwood (2003) stated, "Scratch the surface of an excellent school and you are likely to find an excellent principal." Marzano (2003) posited the responsibility for instructional leadership lay with the principal who became a powerful force for reform. Studies on effective schools also showcased the principal as responsible for improving instruction and learning (Hoachlander, Alt, & Beltranena, 2001; Smith & Andrews, 1989).

Datnow and Castellano (2001) acknowledged the principal as critical to the success of school-wide reform efforts. Anderson and Shirley (1995) stated "...the likelihood of project success tends to rest with the principal" (p. 421). Berends, Bodilly and Kirby (cited in Datnow and Murphy, 2003) in a four-year longitudinal study of New American Schools found principal leadership was the single-most important predictor of reform implementation at the classroom and school levels. The New American Schools study examined leadership effects on student achievement in a large scale reform effort - the inquiry process - nitiated by the case study district.

# Transformational Leadership

The current literature on leadership referred to many different stylistic or methodological approaches for leadership (Leithwood et al., 2004). However, all of these forms of leadership aimed to help an organization set direction and influence members to move in those directions. One such style of leadership, transformational leadership, is the focus of this section. The emergence of a principal with transformational leadership behaviors resulted in more ambiguity and uncertainty in the principal's role (Hallinger & Murphy, 1992). The principal influenced school and classroom conditions to improve both teaching and learning (Leithwood et al., 2004). Thus, it was critical to define effective principal behaviors that reflected a transformational approach to leadership and impacted student learning. According to Leithwood et al. (2004), effective principal leadership behaviors were categorized into three areas: (a) setting directions, (b) developing people, and (c) redesigning the organization. These core leadership practices proved to be successful despite the organizational and social context of the school. This present study examined whether the two principals in the case study schools had a more transformational approach to leadership as a result of implementing the student-based model for inquiry.

Leithwood et al.'s (2004) categorization of principal leadership behaviors that reflected a transformational leadership style coupled with Marzano et al. (2003; 2005) and Cotton's (2003) research on effective principal behaviors are outlined in this section. Marzano et al. (2003; 2005) reported the results of a meta-analysis of research conducted by the Mid-Continent Research for Education and Learning (hereinafter, *McRel*). The findings included results from 69 out of over 5,000 studies

that were conducted over a 30-year period. The combined studies represented a sample size of 2,802 schools, approximately 14,000 teachers, and 1.4 million students. One major finding from the *McRel* study was the average effect size of leadership, expressed as a correlation of .25, on student achievement. This meant that a one standard deviation improvement in principal behavior was associated with a 10 percentile difference in student achievement on a norm-referenced standardized test. The other significant finding from this study was the identification of 66 practices principals used to fulfill 21 *leadership responsibilities* that impacted student achievement. These findings were culminated into the Balanced Leadership Framework. In addition to Marzano et al.'s (2003; 2005) research, Cotton (2003) conducted a qualitative analysis of studies and reports that focused on the impact of principal leadership style on student achievement or behavior outcomes. She incorporated the research findings from 81 articles written after 1985 and synthesized them into 26 principal behaviors that contributed to student achievement.

Setting directions. The first area to reflect a transformational approach to leadership was setting directions. This included helping organization members develop shared understandings about the organization, its activities and goals. The members created a common purpose or vision through this process using specific practices where they (1) identified and articulated a vision ("Effective leaders for today's schools: Synthesis of a policy forum on educational leadership", 1999; Fullan, 1992; Leithwood, 1994a; Corbally & Sergiovanni, 1984), (2) fostered acceptance of group goals, (3) created high performance expectations (Cotton, 2003; Leithwood, 1992; Leithwood et al., 2004), and (4) created a focus for the school

(Leithwood et al., 1999; Liontos, 1993; Corbally & Sergiovanni, 1984; Marzano et al., 2003). Interestingly, focus had an average correlation coefficient of .24 to increased student achievement in Marzano's Balanced Leadership Framework. A study by Bickman, Davis, and Hallinger (1990) determined that a principal who developed a school mission with an instructional focus for teachers throughout the school had a key role in creating a climate of high expectations and fostering student learning. This study examined how effective each of the principals in the case study schools was in setting directions with emphasis on creating a focus for the school.

Developing people. The second area to reflect a transformational approach to leadership was developing people. The principal developed people by influencing their capacities and motivations so they achieved the organization's purpose. These leadership practices included offering intellectual stimulation, giving individualized support, and providing appropriate models for best practices and beliefs fundamental to the organization. Communication and interaction, emotional and interpersonal support, visibility, accessibility, and parent/community outreach and involvement were behaviors noteworthy of a principal who helped develop people (Leithwood, 1992; Cotton, 2003; Marzano et al., 2003). A principal who developed people also built collaborative processes to foster participation in school decision-making (Cotton, 2003; Liontos, 1993). The principal who had a transformational approach to leadership embraced shared decision-making and teacher empowerment (Leithwood, 1994b; Liontos, 1993; Pepper & Thomas, 2002; Sagor, 1992). This principal also established strong input, a coefficient of .25 for increased academic achievement in the framework, through involvement of the teachers in the design and implementation of important decisions. This present study evaluated the extent to which the principals developed people and created opportunities for shared decision-making in their schools.

A principal who developed people also strongly exhibited situational awareness, in other words, an awareness of the details for managing the school and use of this information to address problems. Situational awareness had the most impact among the 21 leadership responsibilities, with a coefficient of .33 for increased student achievement in the Balanced Leadership Framework.

Communication and outreach, with a coefficient of .23, and advocacy for the school to all stakeholders, with coefficient of .27, were also important factors. Behaviors related to developing people such as (1) visibility with teachers and students, (2) relationship - the extent the principal demonstrated an awareness of the personal aspects of teachers and staff, and (3) affirmation - the extent to which the principal recognized and celebrated school accomplishments and acknowledged failures were less important. They had coefficients of .20, .18, and .19, respectively, in Marzano et al. (2005) leadership framework.

Since staff collaboration was a behavior associated with developing people, the results of a 1990 study by Friedkin and Slater (1994) were noteworthy. The purpose of the study was to determine the effect of a cohesive network among the teachers on school performance. The principals and 364 teachers from 17 elementary schools in California answered a questionnaire. The indicators for school performance included the four year averages of California Assessment Program (CAP) scores at grades 3 and 6 in reading, language, and mathematics. The scores

were adjusted to compensate for the effects of socioeconomic status. The findings showed that the teachers' *network cohesion*, simply stated, collaboration, was related to school performance only as a by-product of the principal's influence. There existed a relationship between the principals' *network centrality*, in other words, the informal communication network that allowed the principal to develop, maintain, and exercise interpersonal influence, and school performance.

These results were reinforced by a study by Huffman and Jacobson (2003) who found leaders who exhibited collaborative or transformational leadership behaviors were more successful in developing a professional learning community. In their study, they administered a questionnaire to a sample of 83 educators who enrolled in master's level courses in educational administration at a Texas University and used descriptive statistics to analyze the results. Murphy (2002) further asserted that schools with strong professional learning communities showed positive results for students and school professionals. To summarize, these studies reinforced the tremendous influence a principal had on teacher collaboration. The present study looked at the influence each of the principals had on teacher collaboration and developing professional learning communities.

While the above studies showed that leaders who exhibited collaborative or transformational leadership behaviors were more successful in developing professional learning communities, a study on staff motivation yielded different results. Gallmeier (1992) conducted a quantitative study to determine the effect of principal leadership style on staff motivation. 45 graduate students participated in a survey to determine if a correlation existed between administrative style and teacher

motivation at their school sites. The Gallmeier study showed that teachers who worked under democratic and transactional administrators did not have a significantly higher motivational level than those who worked under dictatorial administrators.

The Gallmeier study concluded that one best style of leadership behavior may not exist.

Equally important in the principal's responsibility to develop people was promoting instructional improvement (Heck & Marcoulides, 1993). A principal with a transformational approach to leadership influenced instructional behaviors among teachers. Teachers were more effective instructionally because they adapted to different learning styles (Leithwood, 1994b; Liontos, 1993; Pepper & Thomas, 2002). Cotton (2003) referred to these principal's leadership behaviors as discussing instructional issues, observing classrooms and giving feedback, supporting teacher autonomy, and protecting instructional time. Moreover, the Balanced Leadership Framework included the leadership responsibility of intellectual stimulation, the extent to which the principal ensured that staff members were aware of researchbased practices and regularly discussed them as part of the school's culture. Intellectual stimulation had a coefficient of .24 for increased student achievement in Marzano's framework. Consequently, a transformational leader promoted reflective inquiry among the staff, students, and themselves (Evans, 1996). The present study investigated the principals' role in promoting inquiry among teachers.

Other responsibilities included in supporting instructional improvement were discipline, the extent to which a principal protected teachers from issues and influences that detracted from their teaching focus having a coefficient of .27 and

knowledge of curriculum, instruction, and assessment, having a coefficient of .25. However, the extent to which the principal was directly involved in the design and implementation of curriculum, instruction, and assessment had a significantly lesser influence on instruction with a coefficient of only .20 (Marzano et al., 2005).

Redesigning the organization. The final area to reflect a transformational approach to leadership was redesigning the school organization so it was effective for teachers and students. The leadership behaviors associated with this were strengthening school culture (Fullan, 1992; Matthews & Crow, 2003) and modifying organizational structures. Culture, the extent to which the principal fostered shared beliefs and a sense of community and cooperation, had a coefficient of .25 for increased student achievement in the Balanced Leadership Framework. Cotton (2003) also included the principal behaviors of supporting risk-taking and incorporating the norm of continuous improvement. The Balanced Leadership Framework also referred to a principal who was a change agent and willing to actively challenge the status quo, which yielded a coefficient of .25 for increased student achievement (Marzano et al., 2005).

Redesigning the organization to make it more effective for teachers and students involved implementing *second-order changes*. A second-order change is one that is a break with the past, outside of existing paradigms, and conflicts with prevailing values and norms; it is complex and may require new knowledge and skills to implement. Leithwood (1992; 1993) noted that transformational leadership allowed school administrators to facilitate second-order changes in their schools. As is often the case, school leaders focus on *first-order changes* that include the technical

and instructional aspects of a school (Waters & Grubb, 2004). A change is first-order when it is perceived as an extension of the past and reinforces existing paradigms. In other words, it is consistent with prevailing values and norms. The change is incremental and implemented with existing knowledge and skills. Experts typically came into a school setting and implemented first-order changes. It should be noted that first-order changes do not sustain without significant second-order changes (Leithwood, 1992; Leithwood & Duke, 1993). Schools that attempted both first and second-order changes experienced greater success (Mulford, Silins, & Leithwood, 2004). This study reviewed whether the principals redesigned the school to make it more effective for all stakeholders.

### *Leadership for Inquiry*

Inquiry, the process of asking reflective and focused questions, is a catalyst to promote organizational learning. School leaders incorporated inquiry when they inspired vision, created trust, and fostered passion about the vision of the organization (Marzano et al., 2005; Leithwood and Louis, 1998; Mulford, Silins & Zarins, 2002a). Bolman and Deal (1997) asserted these conditions facilitated principal success when implementing the inquiry model in an organization. Copland (2001) stated principals who asked questions, explored data, and engaged faculty and the broader community in inquiry successfully transformed their schools. Leadership for inquiry is constructed on building relationships, developing personal mastery, and evoking distributed leadership.

*Building relationships*. Leithwood (2003) stated principals who use inquiry to develop people form the "basics" of successful leadership. Additionally,

Leithwood et al. (2004) asserted developing people is a core leadership practice for sustained change - the leader developed people by influencing their capacities and motivations so they achieved the organization's vision. Principals were expected to exhibit strong leadership by modeling their values and beliefs through their own actions (Deal & Peterson, 1990). As described in detail in the section above, these behaviors included offering intellectual stimulation, giving individualized support, and providing appropriate models for best practices and beliefs fundamental to the organization. Hoerr (2005) stated, "Good leaders change organizations; great leaders change people....Leadership is about relationships" (p. 7). Wheatley (1999) highlighted the importance of relationships, "power in organizations is the capacity generated in relationships" (p. 39). Wheatley (1999) found high quality organizations were those that had the capacity for healthy relationships. In essence, the principal's ability to develop people and create a culture of reflective practitioners had a positive effect on student achievement (Schön, 1982; Schön, 1987; Gil, 2001).

Developing personal mastery. A leader, whose goal was to transform the organization, focused on having employees develop personal mastery (Senge, 1996). The leader's role was to integrate organizational goals with staff members' personal goals to maximize output. Senge (1996) theorized personal mastery as being the source of energy that propels a learning organization. When employees expressed, reflected on, and reframed their experiences, they realized a disparity between reality and vision resulting in a feeling of tension or discomfort. Personal mastery is developed through this process of reflection and inquiry. This creative tension generated the energy to change and promoted the use of the inquiry process. Leaders

developed personal mastery through reflection and inquiry upon an action thus creating an internal feedback loop. People with high levels of personal mastery dedicate time, effort and creativity to transform the organization. The present study explores the degree of personal mastery achieved by the principals implementing the inquiry process in participating schools.

Evoking distributed leadership. Copland (cited in Datnow and Murphy, 2003) reported principals who used the inquiry process were a catalyst for creating distributed leadership which led to transformational changes at the school site. The inquiry model used in these schools (see Figure 1.1) moved away from individuals in traditional leadership roles (e.g., school administrators) and involved the broader school community (e.g., teachers, parents, and at the secondary level, students). Inquiry resulted in building a common vocabulary, maintaining the focus on one or two key issues, decision-making by consensus, and building leadership capacity at the school site. The principal created a culture and environment for reflective practices. Dufour and Eaker (1998) supported this notion where they advocated, "Principals of learning communities make conscience efforts to promote widespread participation in the decision-making processes at their schools. They understand they cannot do it alone" (p. 181). Copland (cited in Datnow and Murphy, 2003) stated "...the whole school community is both the site of inquiry and the focus of change" (p.169-170). Leaders of a professional learning community realized they needed a team of individuals or a guiding coalition who shared the same objectives to support the improvement initiative at the school site (Dufour et al. 2006). Therefore, a leader who embraced distributed leadership techniques and used the inquiry process led his

or her staff to better and higher quality discussions (Finnan, 2000). The present study explored and provided insight into the principal and teachers' perceptions of the nature of their instructional leadership and grade level team meetings.

Case Study District-Initiated Inquiry Model

This section discusses how teachers, principals, grade level teams and instructional leadership teams implemented the inquiry process in the case study district.

Student-based decision-making essential questions. In the case study district, there were four specific questions that all teachers, principals, grade level teams and instructional leadership teams considered when making a decision. These were: (a) how does the decision improve student learning, (b) is the decision illegal, unethical, or immoral, (c) is there adverse impact on others, and (d) how are individual needs balanced with group needs?. The initial question allowed teachers, principals, grade level teams and instructional leadership teams to reflect on the vision for the school. They were gathering evidence or data to support decision-making. The second question was value-laden and ensured decisions adhered to legal and moral constructs. The next question was the heart of the process where all crucial stakeholders - specifically, staff members, parents, community, and district office collaborated. Decision-making included data analysis and a consideration of fiscal and personnel impact. The final question considered student interests on both an individual and an aggregate level. Although the elements in each question were addressed throughout the decision-making process, stakeholders were not required to follow this inquiry process in a linear fashion.

Gil (2001) identified two critical principal behaviors for leading the district-initiated inquiry process was "to invite others to share their ideas and be avid listeners" (p. 17). She advocated leaders modeling the inquiry process. In order for inquiry to occur, site leadership was critical for creating an environment in which openness, trust and risk-taking were present.

The case study district-initiated inquiry model was incorporated in the principal evaluation tool. This model was converted into a rubric used annually to evaluate principals. This accountability model was based on a matrix that heavily involved the role of inquiry among all stakeholders. The process involved an ongoing peer and self evaluation based on seven specific principal standards (see Appendix A). Inquiry was incorporated under *Principal Standard No. 2, The Principal is* Accountable for Building Leadership Capacity, Element 2D – Develop a Culture of *Inquiry* (see Figure 2.1). A proficient principal, one who was using the inquiry model consistently, was categorized under the Applying cell. The principal created an opportunity for grade level and instructional leadership teams to examine student work and analyze data to reflect on instructional practices. The principal also asked questions to staff members that fostered dialogue and reflection on the data. In addition, the principal provided opportunities for stakeholders to develop a plan of action based on inquiry. Collaboratively, all stakeholders addressed areas of need based on the data, modified instructional practices and provided for a review of resources. The expectation, after three years of being a successful principal, was to be at the *Innovating* stage. At this stage, the principal used the inquiry process to view mistakes as learning tools and levers to the change process. The principal and

staff members sought input from community and *Critical Friends* (i.e. experts outside of the school site) to collaborate with them on supportive statements and critical questions. This extant data in the case study district regarding the principal's own engagement and the engagement of others provides a valuable data point with which to compare interview data.

Element	Emerging	Applying	Innovating
2D. Develop a culture of inquiry.	Principal examines student work and analyzes data. Principal asks questions of staff that foster dialogue and reflection on data.	Principal creates opportunity for staff to examine students work and analyze data. The principal creates opportunities for stakeholders to develop a plan of action based on inquiry. Principal asks questions of staff that foster dialog and reflection on data. Principal provides opportunities for examination of disaggregated data to reflect on instructional practices.	Through the inquiry process mistakes are viewed as learning tools and levers to the change process. Staff seeks input from community and "Critical Friends" i.e. experts outside of the school site to collaborate with them on supportive statements and critical questions.

Figure 2.1. Principal Evaluation Rubric for Case Study District – 2D – Develop a Culture of Inquiry

Empirical Studies on Leadership

Leadership affects student achievement. There were a number of studies conducted to determine the principal's influence on student achievement. The effect of the principal's role on student performance has yielded mixed results. Verona and

Young (2001) found limited empirical data to show the impact of principal leadership styles on student learning. Other studies indicated that the effects of principal leadership on student learning were indirect (Heck & Marcoulides, 1993; Hallinger & Leithwood, 1994; Pounder, 2003; Verona & Young, 2001). However, the recent works of Marzano et al. (2005) suggested a number of studies which showed direct and significant effects of principal leadership on student achievement. Their collective research identified the principal leadership behaviors that impacted student achievement.

One such study by Hallinger et al. (1990) determined the principal's effect on school reading achievement. He administered a questionnaire to principals and teachers from 87 elementary schools in Tennessee. A criterion-referenced reading test was given to third and sixth graders in the fall and spring semesters of the 1984-85 school years to measure student achievement. The results of the Hallinger study showed no direct effects of principal instructional leadership on student achievement. However, there is evidence that principals have an indirect effect on school effectiveness through actions that shape the school's learning climate (Hallinger et al., 1990; Heck & Marcoulides, 1993).

A study conducted over a two year period by Andrews and Soder (1987) determined if a relationship existed between principal leadership and student academic achievement. District staff participated in a survey administered during the spring semesters of 1984 and 1985. The gain in individual student scores on the California Achievement Test was used as a measure of academic performance.

According to the survey results, the 33 elementary schools were categorized as being led by *strong*, *average*, or *weak* leaders. The findings demonstrated that the scores of students in schools with strong leaders were significantly greater in both total reading and mathematics than those in schools led by average or weak leaders.

Marzano et al. (2005) meta-analysis distinguished principal leadership responsibilities which were essential for improving student achievement. The top three leadership responsibilities were: 1) situational awareness, the ability to understand informal groups comprised of staff members and to predict what could go wrong from day to day, 2) monitoring/evaluating, the ability to monitor and evaluate the effectiveness of curriculum, instruction and assessment, and 3) culture, the ability to share a vision and develop a purpose that promoted cohesion among staff members and students. A leader who promoted inquiry may have emphasized these leadership responsibilities.

The significant cross section of research spanning several decades in the area of school leadership is a point of strength in the Marzano et al. (2005) study. The sample size consisted of 2,802 schools, approximately 14,000 teachers, and 1.4 million students which is the largest sample for research on leadership practices. Although this sample size broadened the spectrum of research, Leithwood (2003) may have argued that school context mattered. School context included the size of the school (small versus large), geographic location (rural or urban setting), level of schooling (elementary, secondary), school/district size; and student population (diverse, economically disadvantaged, etc.) which were not taken into account in the

Marzano study. Another plausible limitation in the Marzano study is the unrealistic expectation for a leader to simultaneously implement all 21 leadership responsibilities or an ideal set of leadership practices. Furthermore, Marzano et al. (2005) emphasized leadership was a broader function shared by all; it was not the sole responsibility of the principal.

Mulford et al. (2002a) presented the findings from an Australian project, Leadership for Organizational Learning and Student Outcomes (LOLSO), which focused on the nature of leadership contributions to organizational learning. This study was a three-year, two-phase study funded by the Australian Research Council (ARC). It encompassed 96 secondary schools using a stratified random sample. Fifty of the schools came from the state of South Australia and the remaining 46 schools were selected from the state of Tasmania. In the first phase, the Organizational Leadership Questionnaire was administered to approximately 25 teachers who were selected randomly from a staff list. Survey data from 2,503 teachers and their principals from the schools provided information on the nature of organizational learning, sources of leadership, and leadership practices for the principal and management team. In the second phase of the project, the Participation and Engagement Questionnaire was administered to a sampling of students, identified by the school coordinators, who were seen to be representative of the general year's population. Survey data from 3,500 students yielded measures of student family educational environment, student views of teachers' work in the classroom, and student outcomes such as attendance, students' self-concept, and participation in and engagement with school. The data was analyzed by using the statistical software

package SPSS version 6.0.3. Reliability estimates for each scale from both questionnaires were calculated using Cronbach's alpha. All scales indicated a high reliability in the range of alpha = .74 to .92. The ARC study found positive relationships between leadership and organizational learning and leadership and student outcomes. The results revealed a t-score of .63 for leadership, second only to resources (t = .65) for having an overall effect on organizational learning. The ARC study also found that principals who practiced transformational leadership promoted organizational learning. These principal behaviors included: (a) having a clear vision and goals, (b) promoting a positive school culture, (c) supporting school structures, (d) encouraging intellectual stimulation, (e) providing individualized support, and (f) having high performance expectations for staff and students.

The strength of this empirical ARC study was that it found when teachers were encouraged by their principals to have an active leadership role at their schools, there were stronger tendencies towards greater leadership development. Mulford et al. (2002a) stated "...in these schools organizational learning is promoted in which staff communicate with each other in an open and supportive way and actively seek information to improve their work" (p. 634). This statement, therefore, largely supports the premise there is a relationship between leadership and organizational learning.

The methodology and sample size seem to justify valid and reliable statistics and the breadth of the ARC study. However, the ARC study focused on secondary schools in Australia and may not be applicable in its entirety to the schools in the present study since it is directed towards elementary schools.

### *Summary*

Leadership in education has evolved throughout the past century where the focus is on creating a culture that supports adult learning and improving student achievement. Since Leithwood, Louis, Anderson and Wahlstrom (2004) asserted leadership was second only to classroom instruction among all school-related factors that contributed to student learning, it is important to delineate the specific principal behaviors that have the most impact. The three core leadership practices that reflect an inquiry approach to leadership are building relationships, developing personal mastery, and evoking distributed leadership. This is very similar to the Leithwood et al. (2004) categorization of a transformational leader as one which: (a) sets directions, (b) develops people, and (c) redesigns the organization. The principal who incorporates these practices may influence school and classroom conditions to improve teaching and learning. Research suggests that principals need large repertoires of best leadership practices. Although there is no one set of ideal leadership behaviors, there is significant evidence that certain leadership behaviors have a greater impact on student achievement (Duke, 1987; Marzano et al., 2005).

# Organizational Learning

Evidence of the positive relationships between leadership and organizational learning (Mulford et al., 2002a) necessitates exploration of the research on organizational learning. This review begins with a definition of organization learning and is followed by four models which apply this concept. The review moves towards the notion of learning organizations, its application in a school setting and professional learning communities. The review concludes with empirical studies that

describe the historical research about the impact of organizational learning on schools.

### Definition

Argyris and Schon (1996) defined organizational learning as:

Organizational learning occurs when individuals within an organization experience a problematic situation and inquire into it on the organization's behalf. They experience a surprising mismatch between expected and actual results of action and respond to that mismatch through a process of thought and further action that leads them to modify their images of organization or their understandings of organizational phenomena and to restructure their activities so as to bring outcomes and expectations into line, thereby changing organizational theory-in-use (p. 16).

Argyris (1993) asserted that organizations came alive through the thoughts and actions of individuals. Conversely, Crossan, Lane, and White (1999) argued for organizations to endure, there must be rules and routines that are independent of any one individual. Crossan et al. (1999) further contended that organizational learning involved a tension between exploration of new learning and exploitation of what has already been learned. While new ideas and actions flowed from the individual to the group and organizational levels, previous learning fed back from the organization to the group and individual levels, thus affecting how people think and act, thereby linking cognition to action. Through systems, structures, strategies, and procedures, the learning became institutionalized. The following section provides models on how organizational learning is institutionalized.

Argyris and Schon (1996) defined organizational inquiry as individuals in an organization participating in an inquiry process resulting in a learning product.

Individual inquiry fed into and shaped organizational inquiry which in turn shaped the

further inquiry carried out by individuals, thus defining a cyclical process. The learning products that resulted were (a) interpretations of past experiences of success or failure, (b) descriptions of the shifting organizational environment and its demands on future performance, (c) descriptions of conflicting views and interests that arise within the organization under conditions of complexity and uncertainty, (d) images of desirable futures and ways they may be achieved, and (e) critical reflections on organizational theories-in-use and proposals for their restructuring. These qualified as products of organizational learning when changes in behavior resulted in changes in organizational theory-in-use and the learning became embedded in images of the organization held by the individual.

Argyris, Putnam, and Smith (1985) described three propositions that contributed to organizational learning. They were: (a) participants will all make mistakes; (b) the consequences their actions yield are necessary, but unintended, and (c) errors are puzzles to be engaged or are the raw materials for learning to occur. The following section describes four models, including the 4I Framework, Single and Double Loop Learning, Model I and II, and the IRI inquiry model, which describe how these propositions are implemented in organizations.

### Organizational Learning Models

41 framework. Crossan et al. (1999) presented a 4I framework for organizational learning that included the four processes of intuiting, interpreting, integrating, and institutionalizing. The process of intuiting occurred at the individual level and involved recognizing a pattern or possibility. Interpreting, which occurred at the group level, was about the refinement and development of intuitive insights

primarily through conversation with others. Conversation facilitated a richer and robust interpretation. The process of integrating, which occurred at the group and organizational levels, was developing shared understanding and taking coordinated action by members of the workgroup. The last step of the process, institutionalization, occurred only at the organizational level when routines became embedded. Figure 2.2 depicts this framework. The present study explored the processes that were evident in the case study schools.

Level	Process	Inputs/Outcomes
Individual	I-4-/4/	Experiences
inaiviauai	Intuiting	Images Metaphors
	Interpreting	Language Cognitive map
		Conversation/dialogue
Group	Integrating	Shared understandings Mutual adjustment
		Interactive systems
Organization	Institutionalizing	Routines Diagnostic systems
		Rules and procedures

Figure 2.2. 4I Framework

Single and double loop learning. In our everyday world, there is a difference between the espoused theory and theory-in-use. Argyris et al. (1985) and Argyris and Schon (1996) defined the espoused theory as the attitudes, beliefs, and values that explained or justified a pattern of activity, while theory-in-use was constructed from the individual's behavior. An error occurred if there was a mismatch between values

and behaviors. Argyris et al. (1985) posited that for learning at the individual, group, and organizational level to occur, errors must be discovered and corrected. Argyris and Schon (1996) contended that one way to correct errors was to change behavior while still maintaining existing organizational values, thus resulting in single loop learning. Conversely, he argued that errors could also be corrected by questioning the organization's norms, rules and policies (theory-in-use), resulting in double-loop learning. Double-loop learning occurred through questioning, information-gathering, and reflection to address errors as seen in Figure 2.3. Therefore, Argyris and Schon (1996) argued that double loop learning allowed organizations to question the status quo by addressing the norms that govern its existing theories-in-use for long term effectiveness.

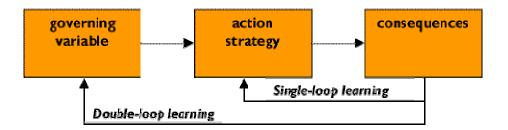


Figure 2.3. Single and Double Loop Learning

Interestingly, research showed schools engaged exclusively in single loop learning (Scott cited in Mulford, Silins, & Leithwood, 2004); Mulford et al. (2004) argued that there was limited research about the conditions influencing the phenomena of single loop learning in schools. The present study explores the conditions under which the district-initiated inquiry process may have promoted either single or double loop learning in the case study schools.

Model I and Model II. Argyris et al. (1985) described Model I and Model II as two levels of organizational learning that helped individuals in organizations reflect on their existing theories-in-use and learn alternate theories. An individual's theoryin-use was understood primarily through conversation and patterns of behaviors. Argyris (1993) described the four governing values of Model I as follows: (a) achieve the defined purpose, (b) maximize winning and minimize losing, (c) suppress negative feelings, and (d) behave according to what is considered rational. The resulting leader's behaviors were: (a) advocate your position, (b) evaluate the thoughts and actions of others as well as your own, and (c) attribute causes for what you are trying to understand. Argyris and Schon (1996) stated that when individuals dealt with issues that were embarrassing or threatening, their reasoning and action conformed to Model I behaviors. Leaders aligned to organizational norms craft their positions, evaluations, and attributions in ways that inhibited inquiries into them. The consequences of leaders using Model I strategies were defensiveness, misunderstanding, and self-fulfilling prophesies. As a result, the members of the organization were left with a feeling of minimal control to initiate change. Folkman (2005) argued that systemic defensive routines inherent in Model I significantly limited individual, group, and organizational learning and the ability to engage in productive problem-solving. He asserted this created an environment in which people felt helpless, cynical and pessimistic. A learning organization existed only when the cycle of defensive reasoning was broken and a collaborative environment was created. Furthermore, Argyris and Schon (1996) suggested that the outcomes of Model I inhibited double loop learning.

Argyris and Schon (1996) asserted an enduring learning organization must relinquish its Model I design and implement Model II actions. A leader who exhibited Model II behaviors allowed the exchange of valid information, promoted free and informed choice, and fostered internal commitment. The consequences of these leadership behaviors included minimally defensive interpersonal and group relationships, high freedom of choice, and increased risk-taking. Argyris and Schon (1996) insisted when Model II action strategies were implemented, double loop learning and effectiveness were likely to increase. All individuals in the organization learned a new theory-in-use that led to double loop learning. The present study examined if the teachers', principals', and leadership teams' behaviors in the case study schools were characteristic of Model I or Model II action strategies, or a combination of both.

IRI inquiry model. Wheatley and Kelner-Rogers (1998) reinforced the importance of inquiry as a factor for promoting organizational change. The Information, Relationships and Identity (IRI) model (Figure 2.4), assumed that organizations were organic and, therefore, self-organized. It viewed the organization as a living organism where change occurred through the myriad of relationships that make meaning out of the work. This was reinforced by Argyris (1993) who emphasized that organizations were highly dependent on the individuals.

The premise of the IRI model was the intricacies of relationships and meaning-making. This tangled web of relationships and meaning-making characterized all living systems including organizations (Wheatley & Kelner-Rogers, 1998). This model purported inquiry as a medium which individuals, through

relational bonds, created mutual meaning and planned further action on the organizational structure and system. The IRI model provides an understanding of how the inquiry process changes an organization. The organization is shaped by an identity, the relationships that exist within it, and the transfer of information that occurs. This creates meaning, trust, and action to move the organization forward. The learning then becomes institutionalized and the routines are embedded in the structures, processes, and systems within an organization. A focus of the present study was to determine how schools learned effective practices and incorporated these strategies as part of the processes, systems and structures in the overall organization. The present study also looked at how the principals may have employed the district-initiated inquiry model to change teacher behaviors and move the school forward.

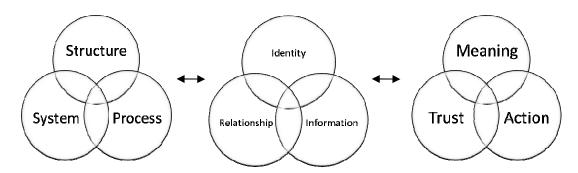


Figure 2.4. IRI Model

Reeves (2006) discovered the potential positive impact of the inquiry process on student achievement scores. When leaders promoted finding solutions to advance learning via instruction rather than blaming external variables, the organization was challenged to find the meaning behind why students failed to achieve. While the collaborative efforts of individual members of the organization such as teachers and

principals may represent the catalyst for accelerating student achievement, the IRI model seemed to lack the level of specificity required to understand how principals and teachers used inquiry for problem-solving at a school site. Nevertheless, the major concepts in this model may be useful analytical hooks to use in interpreting and making meaning of data collected for the present study.

# Learning Organizations

Argyris and Schön (1996) suggested an organization learned when it acquired information of any kind and by whatever means. They further asserted the schema of organizational learning included some informational content, a learning product, a learning process, and a learner. Senge (1990) defined learning organizations as:

organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together (p. 3).

The successful organizations discovered how to tap people's commitment and capacity to learn at all levels of an organization. Senge (1990) suggested the heart of a learning organization was a shift from being separated from the world to being connected to the world and from seeing problems as caused by someone or something to seeing how actions created the problems that were experienced. A learning organization was a place where people were continually discovering how to create their reality.

Senge (1990) suggested that learning organizations differed "from traditional, authoritarian controlling organizations" (p. 5) because they required mastery of five disciplines - systems thinking, building a shared vision, mental models, team learning and personal mastery. Lifelong learning required practicing and enhancing each of these disciplines. The constant effort of combining these disciplines created a synergistic effect.

Senge (1990) described the discipline of systems thinking as a conceptual framework, in other words a body of knowledge, and tools developed to make patterns of events and details clearer. It allows one to see the whole picture, to understand the interrelationships within a system, and to manage change effectively.

He also described the discipline of personal mastery as continually clarifying and deepening one's own personal vision. Mastery indicates a level of proficiency and begins with the individual clarifying what really matters and living to reach his or her highest aspirations. The level of personal mastery of members of a learning organization drives the organization's commitment to and capacity for learning.

Mental models are deeply ingrained assumptions, generalizations, pictures or images that influence how one understands the world and takes action. Many insights failed to be implemented into practice because they conflicted with powerful mental models. Strong mental models may cause individuals in organizations to revert to Model I behaviors. The discipline of working with mental models includes bringing one's images of the world to the surface, carrying on conversations that balance inquiry and advocacy, and making one's thinking open to the influence of others, possibly resulting in more Model II behaviors.

The discipline of building a shared vision is the ability to craft a picture of the future one seeks to build. Building a shared vision includes organizing people together around a set of principles and guiding practices. People excel and learn through genuine commitment with shared visions.

And finally, team learning begins with dialogue that undermines or accelerates learning. These teams are the fundamental units in organizations and the driving force for organizational learning to occur. Mastering all five disciplines to build a learning organization requires sustained effort and cultural shifts in the organization. Individuals and teams are working to improve themselves and move the organization forward. The present study examines whether the district-initiated inquiry process became a mental model for teachers and principals and promoted team learning and Model II behaviors.

Organizational Learning Applied to a School Setting

Earlier in the review, Crossan et al. (1999) suggested learning became institutionalized through systems, structures, strategies, and procedures. Systems and structures existed in the school setting to support organizational learning; however, Leithwood and Louis (1998) cautioned that the school setting was a complex social system. Mulford, Silins, and Zarins (2002b) defined organizational learning applied to school settings as the way the school staff, collaboratively and continuously learned and applied their learning. Organizational learning was promoted in schools in which staff members communicated with each other in an open and supportive way and actively sought information to improve their work. In these schools, staff

members were looking for opportunities to increase their knowledge, improve their skills and have access to sufficient resources and time to develop professionally.

Leithwood and Aitken (cited in Argyris & Schön, 1996) similarly defined a learning organization as "a group of people pursuing common and individual purposes with a collective commitment to regularly weighing the value of those purposes, modifying them when that makes sense, and continuously developing more effective and efficient ways of accomplishing those purposes" (p. 63). Leithwood also referred to organizational learning as learning that occurred in small groups or teams and across organizations as a whole. In a school system, productive learning occurred when staff members used both external and internal sources of information and paid attention to important assumptions about the school. The teachers both learned and thought about their roles in new ways. Factors such as district initiatives, school culture, and the principals' transformational leadership practices also contributed to organizational learning in schools. The present study explores how teachers and principals learn in systematic ways through the application of the district-initiated inquiry process.

Seven dimensions of a learning organization. Mulford et al.(2004) asserted that organizational learning occurred in stages which were characterized by seven dimensions that defined schools as learning organizations (Mulford et al, 2002b). They were:

- 1. Employ the processes of environmental scanning.
- 2. Develop shared goals.
- 3. Establish collaborative teaching and learning environments.

- 4. Encourage initiatives and risk taking.
- 5. Review regularly all aspects related to and influencing the work of the school.
- 6. Recognize and reinforce good work.
- 7. Provide opportunities for continuing professional development.

Environmental scanning refers to broadening the scope of information, policy, theory, and practice by looking closely at school activities. The process of environmental scanning informs the school's development and decision-making processes. Argyris and Schön (1996) earlier referred to the exchange of valid information as significant of Model II behaviors that helped individuals change their viewpoints. Mulford et al. (2002b) described the development of shared goals as making a commitment to a coherent sense of direction that guides the school's everyday actions and decisions and shapes long term planning. Mulford et al. (2002b) reinforced that a collaborative teaching and learning environment is established when there is a climate of openness and trust promoting collaboration, cooperation, support and involvement in the functioning of the school. The school staff members' ability to take initiatives and risks defines a level at which they are open to change and feel free to take professional risks toward personal and whole school improvement. Reviewing and reflecting on programs and practices leads to further evaluation and potential action. Valuing effort, initiative, and achievement is a crucial process for recognizing and reinforcing positive aspects of the organization. Continuing professional development encourages school staff members to obtain opportunities and resources to learn, develop, and implement the necessary knowledge and skills for improving the school's performance. The present study employed these seven dimensions as a

framework to show how the case study schools exhibited aspects of learning organizations.

Professional learning communities. Dufour and Eaker (1998) referred to the term professional learning community instead of learning organization. A professional learning community was one where "educators create an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone" (p. xii). Hord (2004) defined professional learning communities as communities of continuous inquiry and improvement. School staff members were continually engaged in reflection, inquiry, problem-solving, learning and teaching together. Senge (1990) used the term team learning and emphasized its importance because teams, not individuals, were the fundamental learning unit in modern organizations. Dufour and Eaker (1998) supported the idea that a professional learning community placed greater emphasis on relationships, shared ideals, a strong culture, and commitment.

Dufour, Dufour, Eaker, and Many (2006) stated that when a school functioned as a professional learning community, the educators embraced high levels of learning for all students as their primary purpose and the reason the school existed. To achieve this purpose, the members of a professional learning community were guided by a clear and compelling vision of what the organization must achieve to serve all students. They made collective commitments to clarify what each member would do to create such an organization and used results-oriented goals to mark their progress. Members worked together to clarify what each student learned, monitored each student's learning on a timely basis, provided systematic interventions that ensured

students received additional time and support for learning when they struggled, and extended and enriched learning when students mastered the intended outcomes.

Professional learning communities existed to ensure that all students learned essential knowledge, skills, and dispositions.

Dufour et al. (2006) discovered that a professional learning community (PLC) was composed of collaborative teams whose members worked interdependently to achieve common goals linked to the purpose of learning for all. The teams in a PLC engaged in collective inquiry about best practices in teaching and learning. The members of the team learned how to learn together and focused their collective inquiry on the right questions to improve student learning. The leader's role was to ask the right questions, facilitate the dialogue, and build shared knowledge. In a PLC, collaboration represented a systematic process in which teachers worked together interdependently in order to impact their classroom practice in ways that led to better results for their students, for their team, and for their school.

Dufour et al. (2006) contended that the members of a PLC were never satisfied with the status quo and looked for better ways to achieve goals and accomplish the purpose of the organization. The members of a PLC were engaged in an ongoing cycle of: (a) gathering evidence of current levels of student learning, (b) developing strategies and ideas to build on strengths and address weaknesses in that learning, (c) implementing those strategies and ideas, (d) analyzing the impact of the changes to discover what was effective and what was not, and (e) applying new knowledge in the next cycle of continuous improvement. The goal was not to learn a

new strategy but to create conditions for perpetual learning such as an environment which fostered innovation and experimentation.

Hord (2004) similarly described five characteristics of a professional learning community. They were: (a) shared leadership, (b) shared vision and values, (c) collective learning and its application, (d) supportive conditions, and (e) shared personal practices. The principal supported shared leadership by allowing staff members to give input and participate in decision-making at the school site. Shared values and vision referred to an unwavering commitment to student learning that is consistently articulated and referred to in the staff's work. School staff members engaged in collective learning, sought new knowledge, and applied their solutions to address students' needs. They were grounded in reflective dialogue or inquiry and applied new ideas and information to problem solving. Supportive conditions were physical conditions and human capacities that encouraged and sustained a collegial atmosphere and collective learning. Finally, shared personal practice involved the review of a teacher's behavior by colleagues and included feedback and assistance to support individual and community improvement.

Empirical Studies of Learning Organizations

Organizational learning. As described in detail above, Mulford et al. (2002a) presented the findings from an Australian project, named Leadership for Organizational Learning and Student Outcomes (LOLSO), and funded by the Australian research council (hereinafter, referred to as the "ARC study"). The ARC study was a collaborative research project spanning over four years, 1997-2001, to investigate the effects of leadership and organizational learning on student outcomes.

As part of the first phase of the ARC study, Mulford et al. (2002b) conducted a study where they surveyed 2,503 teachers and principals from 96 South Australian and Tasmanian secondary schools to determine their perceptions of schools as learning organizations, their views on school management, and the nature of principals' leadership. The Organizational Learning and Leadership questionnaire was constructed using the Mulford et al. (2002b) seven dimensions described earlier. Both teachers and principals responded to items representing the seven dimensions on a self-report using a five point Likert scale ranging from strongly agree to strongly disagree. The findings showed that organizational learning was a unidimensional concept with four factors that contributed to an understanding of how the learning organization construct was defined in secondary schools. The four factors were: (a) a trusting and collaborative climate, (b) taking initiatives and risks, (c) a shared and monitored mission, and (d) professional development. The findings also showed the following five variables were direct predictors of organizational learning: (a) school autonomy, (b) staff valued, (c) leader, (d) distributed leadership, and (e) school demographics, including the size of the school and the school area. Resources and leader emerged as two dominant factors that had an overall effect on organizational learning. A particular strength of this portion of the ARC study was that the data analysis provided evidence of validity for applying the learning organization construct to schools and also identified four factors that contributed to how this construct was defined in secondary schools. A weakness in this study was that it was limited to secondary schools. Although the study encompassed a large sample size,

the schools were located in South Australia and Tasmania; therefore, the results may not be directly applicable to schools in other geographic locations.

Organizational learning influences student outcomes. Also as mentioned above, in the second phase of the ARC study, the Participation and Engagement Questionnaire was administered to students, identified by the school coordinators, who were seen as representative of the general population. Survey data from 3,500 students yielded measures of student family educational environment, student views of teachers' work in the classroom, and student outcomes such as attendance, students' self-concept, and participation in and engagement with school. The purpose of the study was to investigate the effects of leadership and organizational learning on student outcomes. One finding from this study was organizational learning is the only direct predictor of the teachers' work. In other words, the level of organizational learning directly affected the teachers' work with students in their classrooms. Another finding that resulted from the study was the teachers' perceptions of the nature of principals' leadership as well as administrative teams' leadership was critical for promoting organizational learning and more student-centered classroom instruction. Therefore, organizational learning provided schools with a culture and a way of working that may have improved school outcomes for students while restructuring schools.

Learning organizations and professional learning communities. Giles and Hargreaves (2006) conducted a qualitative case study, entitled Change Over Time, over a four-year period to explore teacher and administrator perceptions of change over time in eight urban and suburban schools in the province of Ontario, Canada and

New York State. The data collection included semi-structured interviews, ethnographic observations, and document analysis. The data was triangulated, coded, and organized thematically. The findings showed that the learning organization and professional learning community models in these schools resisted the conventional processes resulting from change but also defaulted to the conventional patterns of schooling when faced with standardized reform. Because this study was limited to eight schools in Ontario, Canada, and New York State, it may not be directly applicable to other schools across the United States.

Overall patterns and themes emerged from the Change Over Time study that warranted a subsequent in-depth case study on one of these schools, Blue Mountain. The common theme that emerged from the study-at-large was the negative impact of standardized reform in three of the innovative schools configured as learning organizations and professional learning communities. Blue Mountain achieved success for renewing teacher cultures, distributing leadership, and involving the community in decision-making. However, the findings in the Blue Mountain study show that standardized reform encouraged regression toward the conventional curriculum and inhibited organizational learning across departmental boundaries. In addition, the positive professional culture at Blue Mountain changed to a climate of blame resulting in undermined relationships among and between teachers and students that hindered collaboration and teamwork. One particular strength in the Blue Mountain study is that it emerged from both the data analysis and a grounded theory from a larger qualitative case study. It should be noted that one particular weakness in this study is that it may not be broadly applicable to other schools

because it is an in-depth analysis of one school. Furthermore, a case study was conducted on two schools in addition to Blue Mountain; however, no attempt was made to conduct a cross-case analysis of all three schools to further support the findings from this study.

*Teacher inquiry and professional learning communities.* Snow-Gerono (2005) conducted a phenomenological case study of teacher-researchers from four United States elementary schools (grades K-5), who participated in a yearlong internship as part of a Professional Development School partnership between their school and a northeastern university. The purpose of the study was to examine the perceptions of six of its veteran or mentor teachers on teacher inquiry and professional learning communities. A purposeful sample of teachers who identified with the characteristics of reflective teaching was selected to participate in this study. The primary sources of data collection were interview transcripts and field observation in the classroom. The data analysis included triangulation of the field notes, interview transcripts, and the researcher's journal/participants' inquiry documents. In this program, the mentor-teacher and intern taught children together for an entire school year. The mentors worked closely with the intern-teachers to plan the intern-teacher education curriculum on an individual basis and engaged in inquiry with the teachers. The ancillary findings in this study are: (a) collaboration leading toward questioning and learning is an important aspect of professional learning communities, (b) community and accessibility to people is a necessary ingredient for cultivating inquiry, (c) inquiry becomes a collaborative experience with people who are supported and assisted with their questions, and (d) safety and a

community is needed for risk-taking. Although this study utilized a strong methodology, the sample size may be too small to generalize the findings to other settings.

#### *Summary*

This section presented an extensive review of the research on organizational learning and how it becomes institutionalized in settings. While the research showed schools engaged exclusively in single loop learning (Scott cited in Mulford, Silins, & Leithwood, 2004), it will be interesting to examine if the principals in the present case study schools utilized Model II behaviors to help their schools engage in double loop learning. Another interesting dimension of the present study is to examine the work of principals and teachers to determine if the two schools in the case study district exhibit characteristics of learning organizations and professional learning communities.

#### Inquiry

Inquiry may be a key component of organizational learning and improved performance. This literature review covers the methods by which inquiry manifests in an organization through specific individual and organizational behaviors. The following section begins with a definition of inquiry and a description of three inquiry models: (1) Accelerated school model, (2) the inquiry model used in the Southern California district, and (3) the Bay Area School Reform Collaborative (BASRC). The review concludes with empirical studies about the impact of inquiry.

#### Definition

Inquiry, the process of asking reflective and focused questions, may be a catalyst that promotes organizational learning. Jones and Yonezawa (2002) defined inquiry as a sense-making process about an issue, problem, or experience. Inquiry groups in schools were unique in that they were semi-structured spaces for authentic dialogue about lived experiences in schools and classrooms. Hopfenberg, Levin, Chase, Christensen, Moore and Soler (1993) described inquiry as a way to recreate and transform schools into a vibrant community of learners. The inquiry process was used to work toward solutions for challenges identified by the school community. It was about educators, parents, children, and other community members asking questions, sharing perspectives, and working collaboratively toward a common vision. This review provides an exhaustive synthesis on inquiry as a problem solving model in schools.

## Inquiry Models

Three specific models are described in this review of literature. They are the Accelerated school model, the inquiry model used in the Southern California district, and the Bay Area School Reform Collaborative (BASRC). This review describes how the inquiry process applied pressure on organizations. These models assist us in understanding the present study's findings and creating plausible explanations for how the inquiry process may influence the case study schools in our investigation.

Accelerated schools model. The inquiry process earmarked in this investigation had its roots from Henry Levin's model for Accelerated Schools (Gil, 2001). It was modeled after scientific inquiry and was used to develop and test

hypotheses about observed phenomena. The Accelerated Schools Project used inquiry to explore alternative strategies to meet specific school problems. Levin (1998) stated that "inquiry has been found to be the most frustrating and yet the most liberating part of the change process." The process was frustrating because it worked in opposition to the traditional school practice of making quick decisions and because many school staff members had little or no experience with such a process.

Conversely, the process was liberating because it allowed planning teams to solve complex school problems. The school improvement team was integral in implementing the inquiry process. Its role was to (a) investigate the causes of the priority needs identified in the needs assessment, (b) research potential solutions that address those needs, (c) select improvement strategies that best fit the unique needs of the school, (d) implement the plan, and (e) evaluate and reassess those strategies. A focal research query in the present study was to investigate how the inquiry process was perceived and implemented at the school level by teachers and the principal.

The Accelerated School Project placed strong emphasis on school governance and decision-making in the hands of the staff members, parents, and students so they took responsibility for transforming the school's culture and practices (Levin, 1998). Hopfenberg et al. (1993) described inquiry as a framework for change that yielded systemic results. They suggested the guidelines of a creative strategy and allowed individuals to generate many creative, often more effective solutions, which were not possible otherwise. The present study examines how the principals at each elementary school used inquiry as a creative problem-solving process that involves all stakeholders.

Southern California case study district inquiry model. Based on information from the key informant, the superintendent of the case study district was trained under Henry Levin on the Accelerated Schools model. Subsequently, the Southern California district in this study underwent an extensive reorganization to incorporate an inquiry approach based on Levin's Accelerated School Model. Roles of the central office departments were redefined, resources were shifted to school to better meet student needs, and the model of site-based decision making was reframed to a student-based decision making model to become the new mode of operation (Gil, 2001). This decision-making model was refined to meet the needs of the school site by creating a more purposeful framework when the word student was substituted for the word *site*. The inquiry model of Student-Based Decision Making was the district's central focus when making site and district decisions. The focus of this study centered on the student-based inquiry model created at this district which used a series of four questions to guide discussions and deliberations. These questions were presented in Figure 1.1.

Bay area school reform collaborative (BASRC) model. This model came after the Accelerated Schools and Student-Based Decision-Making models. The Bay Area School Reform Collaborative (BASRC) offered a construct useful for describing how the inquiry process was used by teachers and principals. Copland (2003) investigated a sample of 118 schools in the Bay Area region over a period of five years. The BASRC model sought to "re-culture" schools in ways that supported whole school change. BASRC's theory of action held that the important work of reforming schools was done primarily by the schools themselves. Its overall strategy

for promoting school reform used a school-based cycle of inquiry that marshaled diverse forms of knowledge to support teachers' learning and improvement as seen in Figure 2.5 (Copland, 2003).

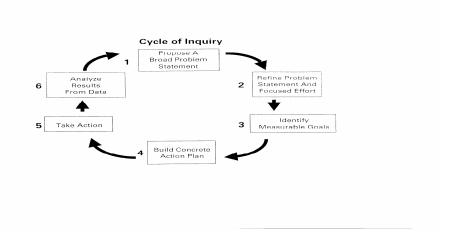


Figure 2.5. BASRC cycle of inquiry.

Copland (2003) described the six-step cycle of inquiry intended to help schools investigate and respond to questions about policies and practices. The first two steps included selecting and narrowing a question for investigation and identifying measurable goals. The third step recognized that setting specified targets is a measure for determining the success or failure of an action. The fourth and fifth steps included creating and implementing a particular action, in other words, making the connection between knowing and doing. The sixth and final step was collecting and analyzing results from data generated by the action taken. This model then cycled back to the first step as the problem statement was refined in light of new evidence. This model offered a conceptual framework for the study as a way to capture how teachers and principals implemented the inquiry process.

## Empirical Studies Surrounding Inquiry

After conducting an extensive review of studies about the inquiry process, four significant empirical studies supported the notion that the inquiry process is a method to frame problem-solving strategies. One such study, in the areas of cognitive science and linguistics, pointed to the paramount importance of framing. Deutschmann (2005) defined framing as the mental structures that shaped the way we saw the world. Lakoff (cited in Deutschmann, 2005) defined frames as part of the "cognitive unconscious" and that its derivation came from language. Argyris et al. (1985) stated that frames act as templates we attempt to "fit over" situations in order to make sense of them and give meaning to what we see. Deutschmann (2005) argued the challenge in trying to change how people think is that their minds rely on frames, not facts. Argyris et al. (1985) stated inquiry was built on a frame that regarded errors as the basis for further inquiry. This study examined if inquiry created the desired framing that allowed people's "voices" to be heard and shared.

Stephen Covey (2004) defined the epitome of leadership as the ability to find one's voice and inspire others to find their own.

They serve and inspire others. They apply principles that govern growth and prosperity in human beings and organizations-principles that draw the highest and best from a "whole person" body, mind, heart and spirit. Equally significant, they choose to influence and inspire others to find their voice through these principles as well (Covey, 2004, p. 26).

The Southern California district in the present study promoted inquiry as a means to expand leadership capacity at the site level. The present study thus investigated how inquiry tapped into teachers' and principals' "voices."

Inquiry affects student achievement. The act of asking focused questions has been linked to improved student achievement. Reeves' (2006) research study, consisting of over 300,000 linguistically and ethnically diverse students from rural, urban and suburban school settings, associated leadership inquiry practices with student achievement. Reeves' (2006) study linked SMARTE school plans, which incorporated goals that were specific, measurable, acceptable, realistic, within appropriate timeframes, and extended the organization to its highest capacity, with student achievement. The Reeves (2006) study included over 280 school plans, whereby the review of each plan was double-blinded with an inter-rater reliability greater than 80 percent. An evaluation rubric was used to analyze 24 external factors to student achievement. The analysis of planning, implementation, monitoring and its relationship to student achievement and educational equity were the rubric's fundamental features.

One of the central conclusions of the study was demographic characteristics were significant but not determinative of student achievement. The study's findings showed poverty, combined with the designation as an English Language Learner, had an overall 52% effect on achievement, while instructional practices, which included inquiry, had a 48% effect on achievement. Teachers and leaders with *high inquiry* believed instructional practices were the primary cause of student learning.

Conversely, educators with *low inquiry* believed external demographic factors were the cause of student learning.

The Reeves (2006) study supported the *Pygmalion Effect* where educators who believed all students can learn with appropriate instruction have a positive correlation to student achievement, concluding with the notion that leadership behavior was paramount to student success. As a result of his study, Reeves (2006) created a "Leadership for Learning Framework" to guide leaders to reflect on their practice (see Figure 2.6).



Figure 2.6. Leadership matrix

Reeves (2006) emphasized that leaders who sustained improvement over time were those who fell into the *Leading* and *Learning* categories. These leaders had a high understanding of the necessary decisions that improve student achievement. The leaders in the *Lucky* quadrant experienced high student achievement in their schools in spite of poor teaching practices. The schools led by these Lucky leaders chose the

path of least resistance and preferred popularity over effectiveness. Their learning environments typified excessive worksheets and fluffy projects. In the *Loser* quadrant, the leaders engaged in self-defeating behaviors by doing the same thing and expecting different results.

Although Reeves' (2006) study lacked the qualitative evidence on how leaders practiced *inquiry*, the data suggested that adult beliefs directly influenced student achievement. The present study compares student achievement trends after the Southern California district board's approval of the inquiry process as the district's problem-solving framework. The present study also investigates how school principals used the inquiry process in their schools and described their leadership ability.

Inquiry shapes the neural network. The outcome of the Pygmalion Effect may be supported by recent neurobiological experiments. Sensory experiences were thought to be heavily shaped by interactions between expectations and incoming (experienced) sensory information. The intensity of expected and experienced pain was captured through the use of combined psychophysical and functional MRI (fMRI) techniques. Koyama, McHaffie, Laurienti and Coghill (2005) conducted an experimental design where one to two days after training sessions, subjects underwent fMRI scans of 30 stimulus trials. Each trial lasted 120 seconds and consisted of a 30-second rest, followed by a variable rest period and a 30-second painful stimulation, and then another variable rest period. Ten adult subjects participated in this study (eight males and two females of which there were five whites, four Asians, and one African American). When the intensity of pain was increased, the subjects'

expectations of decreased pain powerfully reduced both the subjective experience of pain and activation of pain-related receptors in various brain regions. In experiments where subjects had an expectation of decreased pain, nearly 85% of the variability was accounted for by changes in the expectation magnitude of pain. Careful analysis of neocortical activity using intracellular recordings confirmed that mental perception of an impending sensory event can significantly shape neural processes that underlie the formulation of the actual sensory experience (Beck and Eccles, 2006; Koyama, et al. 2005, Schwartz, Stapp, & Bearegard, 2005). Although these studies were limited to pain sensation, it provided insight as to how positive expectations may cause the *Pygmalion Effect*. For example, if the teacher expects the students to do well, it is likely to affect his or her actions (e.g. more time for response to questions, more praise, providing more challenging work, etc.), which in turn creates a stimulus-response in the student that may actually cause physiological changes in the student's neural network.

Inquiry's effect on school reform. The Accelerated Schools project, which purported using inquiry as a problem-solving strategy, showed substantial increases in student achievement, parent participation, community projects, student research, and artistic endeavors. Bloom, Ham, Melton and O'Brien (2001) studied the model's effects in reading and mathematics achievement scores of third-grade cohorts in eight elementary schools during a five year period. The average third grade reading and math test scores experienced an overall 0.19 and 0.24 standard deviation above the respective baseline averages. These differences, which were statistically significant, were small to modest by the conventional standards of evaluation research.

In another study, Ross, Wang, Sanders, Wright and Stringfield (1999) examined the progress of 25 elementary schools in Memphis City that began restructuring since 1995 compared to schools that did not participate in restructuring in the district, two and three years after the restructuring began. Data analyzed in this study were derived from scores on the Terra Nova (a form of the CTBS-5), the statemandated achievement test, in five subjects (math, reading, language, science, and social studies) over a five-year period for grades four and five. These schools showed gains in student achievement of eight percentile points in a national evaluation and about 40 percentile points in an urban sample of six schools when compared with similar schools not undertaking reforms (Ross et al., 1999). Although the sample sizes in these studies were small and localized in a specific geographical area, the conclusion suggested that schools based on the Accelerated Model were superior to local traditional schools.

A study on the BASRC model identified how a region-wide reform effort promoted shared leadership within schools using the BASRC inquiry cycle. Researchers used principal and teacher surveys and selected 16 schools for closer study using observations of principal gatherings. These schools were not selected randomly, but instead were selected by recommendations from BASRC personnel or identified by members of the research team as potentially rich samples. Academic Performance Indicators (API) was used as part of the analysis to compare between a one year span (1999-2000) of BASRC implementation. Ninety-one percent of the principals surveyed suggested a change in teacher leadership while seventy-one percent indicated the BASRC work promoted teacher's input in school decision-

making. The survey responses from teachers and principals correlated significantly, while 15 out of 16 schools exceeded the targeted API growth. The rich data from surveys and observations gathered was tempered by the low teacher sample size (N=27) and the limitation of conducting this study in one district, impeding the breadth of this model as a framework to change school leadership. In the present study, site principals and teachers were interviewed to uncover their perceptions on behavioral change as a result of utilizing the Southern California district's inquiry framework.

## *Summary*

The Accelerated Schools and BASRC inquiry models presented in this review of literature provide an interesting basis for comparison to look at how schools solve problems. The principals and teachers perceptions of the case study district's decision-making frame will be examined to determine how they use it to solve problems and make decisions at the two schools in the present study. Reeves' (2006) research also provides some insight about how teachers and principals use inquiry to improve student achievement.

## Chapter 3

#### Method

#### Research Design

The present study explores how the district-initiated inquiry process can be incorporated into school practices and the effect it has on principal and staff behaviors. The present study employed an exploratory and descriptive multiple case study research design. A research design is a plan that guides the investigator in the process of collecting, analyzing, and interpreting observations. The five components of an exemplary case study research design are: (a) a study's questions, (b) propositions, if any, (c) unit(s) of analysis, (d) the logic linking the data to the propositions, and (e) the criteria for interpreting the findings (Yin, 2003).

Rationale for the case study. Yin (2003) asserted a case study methodology is preferred in examining contemporary events when the relevant behaviors cannot be manipulated. Stated differently, the case study is a form of empirical inquiry that is particularly useful when contextual conditions are relevant to the phenomena of study. Thus, when it was not clearly evident how a phenomenon, such as in the present case inquiry, was practiced in a school setting, it was essential to explore the process of inquiry in depth from the perspectives of the participants in the process. Yin (2003) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p.13). Yin (2003) further stated case studies are the preferred strategy when how or why questions are being posed, the investigator has little control over events, and when the

focus is on a contemporary phenomenon within some real-life context. The rationale for calling this an exploratory study focused mainly on *what* questions. This type of question is a justifiable rationale for conducting an exploratory study, the goal being to develop pertinent hypotheses and propositions for further inquiry. This present study is a descriptive case study since it traces the sequence of interpersonal events over time, describes a subculture that is not the topic of previous study, and discovers key phenomena. Merriam (1998) affirmed a descriptive case study has as its end product a rich, thick description, or a complete literal description of the phenomenon (incident or entity) under investigation.

The rationale for using a multiple case study design is that the evidence is considered more compelling and the overall study is broad. The cases in aggregate may provide more adequate support for the initial set of propositions and general phenomenon. In a multiple case design, each case, or school, as in the present study, must be carefully selected so it predicts similar results, referred to as a literal replication, or it predicts contrasting results but for predictable reasons, referred to as a theoretical replication (Yin, 2003). The present study anticipated a literal replication - that the context would result in some differences in the findings between the two cases, but that there would be more similarities than differences because the two schools selected for the study are from the same district and have similar demographics, characteristics and student outcomes.

Importance of theoretical framework in case study research. Yin (2003) stated the case study research design must account for construct validity, external validity, and reliability. To insure construct validity, multiple sources of evidence

must be used. For example, using common documents describing inquiry, such as the components of the principal's evaluation, school plan documents, interviews and surveys were used to promote construct validity. The uses of theory and replication logic in multiple-case studies, both of which were used in this study, increased the potential for external validity. By using multiple cases, the present study's findings may be generalizable, or broadly applicable. If the data collection procedures can be repeated with the same results, the case study research design is considered reliable.

Yin (2003) stated a case study must have a rich theoretical framework as a way to enhance its generalizability, which is often articulated in a proposition. The framework has to state the conditions under which particular phenomena are likely to be found - a literal replication, and the conditions when it is not likely to be found - a theoretical replication. The goal of a case study is to expand and generalize theories. Furthermore, when multiple cases are studied, an *analytic generalization* is made when a previously developed theory is used as a template to compare the empirical results of a case study. Replication can be claimed if two or more cases support the same theory. The theory is the main vehicle for generalizing the results of the case study. The theoretical concept explored in the present study was the relevance of the use of inquiry as a component of both organizational learning and shaping principal leadership behaviors.

#### Research Questions and Propositions

Unlike quantitative studies, specific research hypotheses are not generated for analysis in case studies. Yin (2003) argued that propositions, however, are key components to case study research design. Propositions are theoretically based and

used to focus instrument design and data analysis. Propositions reflect theory developed from a review of the literature and guide the researcher to seek relevant evidence. Without such propositions an investigator will be tempted to cover everything which is impossible to do. "The more the study contains specific propositions, the more it will stay within feasible limits" (Yin 2003, p. 23). The present study explores a series of propositions relevant to the research questions. These propositions listed below were used to both focus and anchor the findings of the present study.

Research question one. How do principals, teachers, and leadership team members perceive the implementation of the district's inquiry process in their schools?

Proposition 1A: Planning teams, such as grade level teams or instructional leadership teams, will use the inquiry process to solve complex problems and challenges faced by the school community.

Proposition 1B: The inquiry process will be used to engage staff members in collaborative efforts to find solutions to advance learning via instruction rather than blaming external variables.

Proposition 1C: The inquiry process will include the critical questions outlined in the district policy to guide student-centered decision-making.

Research question two. How do principals and teachers perceive the effectiveness of the inquiry process on their own learning and the school's work?

Proposition 2A: The inquiry process will enable the school community to focus on improving student learning.

Proposition 2B: The inquiry process will promote collective responsibility and higher trust.

Proposition 2C: The inquiry process will promote organizational learning and continuous improvement.

Research question three. How do the principals and teachers perceive a change in a principal's behavior from participating in the district's initiation of an inquiry process?

Proposition 3A: The inquiry process will serve as a tool to enable principals to (a) increase collaboration between principal and staff, (b) demonstrate leadership in facilitating professional learning communities, and (c) improve student achievement. *Context of the Study* 

District context. The Southern California School District chosen for the present study was established in 1892. It is the largest kindergarten through grade sixth school district in the state, with a population of 26,800 students in 43 schools. The district experienced growth in its eastern sector with a new school that opened in July 2007. Nine schools, or 22% of the schools in the district, are in Program Improvement, described above, under the No Child Left Behind Act.

Four major whole school reform models were introduced in the district between the years 1996 and 1998. These were: (a) Comprehensive School reform models, (b) specialized programs with local corporations, (c) charter schools, and (d) magnet schools. The comprehensive school reform models included two Comer Development Schools, Four Accelerated Schools, and Edison schools. The specialized model technology projects involved local corporations including IBM,

Cox Cable, Pacific Bell, and Apple. The district also has six charters schools and magnet schools for science and visual and performing arts. In addition, the district has initiatives including specialized, federally funded programs such as Reading Recovery, Reading First for some schools, dual language programs, Even Start family literacy program, newcomers class for students in grades three through six who were new to the United States, Connections Emergency Immigrant Education Program, state-sponsored preschools, Young Scientists Program, city Nature Center and Teacher training centers at the local university.

The schools in the district are enriched with a multicultural population comprised of approximately 64 % Hispanic, 14 % Caucasian, 9% Filipino, 5% African-American, 3% Asian, and 1% other nationalities. The most recent Language Census showed that approximately 45 languages were spoken in the District, while more than one-third of the student population consisted of English Language Learners (ELL). The district has approximately 37 % of students who receive free or reduced lunch.

Dr. Robards, also mentioned earlier, served a nine-year tenure (1993-2002) as superintendent in this Southern California school district. She fostered the implementation of numerous partnerships and school change models. She was nationally recognized for her work in redesigning central office roles and functions to better support teaching and learning. During the initial stages of her tenure as superintendent in the fall of 1993, Dr. Robards hired an external team of key educational professionals to conduct a curriculum management audit that consisted of a systematic review of policy documents, decision-making processes, and practices

(Gil, 2001). This team made a series of observations and conducted numerous interviews to determine the extent of resource-management alignment with instructional focus and student achievement. Their conclusions uncovered a paternalistic organizational model of "do as I say and I will take care of you" (p. 17). As a result, the district was extensively reorganized. Because more autonomy was allowed at the school site level, the roles of the central office departments were redefined, resources were shifted to schools to meet student needs, and the model of site-based decision making was reframed to a student-based decision making model to become the new mode of operation. In 1998, the school board formally adopted the inquiry model called, Student-Based Decision-Making, to be used to guide all site and district decisions. The purpose of this board policy was to ensure that all decisions focused on student needs rather than adult or building needs. When making decisions, all administrators at district and school levels were to guide their staff and stakeholders using four essential questions, which are displayed in Figure 1.1. This document is posted in each school office.

Dr. Robards also brought in the Harris Interactive School Poll program which was administered at every school in the case study district since 1996. The purpose of the Harris Interactive School Poll program was to measure the overall satisfaction of students, parents, and staff members with their school and the district. Many of the questions on the survey also assessed the site principal's use of the inquiry process at the school level. This program consisted of four different surveys (student, parent, administrator, teacher), each one four pages in length, was anonymous, and took 15 to

20 minutes to complete. The survey employed a specific design which allowed Harris Interactive to use a powerful statistical model to analyze the data. Selection of Schools for Study

In a large elementary district, selecting schools for in depth study proved to be a difficult task. The present study was not designed to generalize, or be broadly applicable to all schools in the district; rather, two schools that were in program improvement or on the verge of being in program improvement were purposefully selected to explore how each implemented the inquiry process. The following two specific criteria were used to select each school: 1) whether the principal received formal training in the inquiry process and 2) school demographics. The key informant for this study helped with school selection. By selecting two schools that had similar characteristics in terms of program improvement status and demographics, it was assumed this enhanced the opportunity to conduct a replication case study (Yin, 2003). In particular, schools having both similar percentages of English Language Learners (ELL) and students on free/reduced lunch were the two demographic factors used in this study. The state of California denotes the number of students receiving free/reduced lunch to reflect the school poverty index. ELL refers to students whose native language is other than English and do not meet the criteria for English Language Proficiency.

Ocean Currents Elementary. Ocean Currents Elementary (hereinafter, also referred to as "OCE") is located in the west side of this Southern California School District and is in a socio-economically poor neighborhood. OCE has an average of 653 students (06-07 SARC) but serves a significantly lower socioeconomic student

population than the district average. OCE reflects the diversity represented in the present case study district. The staff is comprised of 36 teachers. OCE went into its first year of program improvement in 2003-04. During the 2006-07 school year, the school was in program improvement year five and was being reconstituted with a new principal and staff members for the 2007-08 school year.

Mountainside Elementary. Mountainside Elementary (hereinafter, also referred to as "ME") also reflects the diversity represented in the case study district. ME has 551 students with an ethnic distribution similar to Ocean Currents Elementary. While the school is *not* in Program Improvement, if it does not make Adequate Yearly Progress (AYP) targets for the 2007-08 school year in English language arts and mathematics, then it will be placed into program improvement for the following school year. Table 3.1 compares Ocean Currents Elementary with Mountainside Elementary in terms of key demographic variables and shows how these two schools compare to the district.

*Table 3.1.* Comparison of Student Demographics for Ocean Currents Elementary, Mountainside Elementary and Southern California School District

Student	District	Ocean	Mountainside	
Demographics		Currents	Elementary	
		Elementary		
Ethnicity				
White, non	8%	5%	9%	
Hispanic	870	370	9%	
Hispanic	38%	87%	75%	
African-	6%	5%	4%	
American	0%	3%	4%	
Native	N/A	Less than 2%	Loss than 20%	
American	IN/A	Less than 2%	Less than 3%	
Filipino	38%	1%	6%	
Asian	4%	Less than 2%	Less than 3%	
Pacific	0.5%	Less than 2%	Less than 3%	
Islander	0.570	Less than 270	Less than 570	
Other	4%	N/A	N/A	
English	More than	57%	42%	
Learners	1/3	3170	4270	
Students with	N/A	13%	13%	
disabilities	IN/A	13%	13%	
Free/Reduced-	270/	020/	58%	
Lunch	37%	92%		
Mobility	N/A	30%	N/A	

# Study Participants

The primary participants in this study were the two principals from each school and teachers serving in grade level teams from each school. A former principal in this district served as a key informant who provided access to the schools as well as needed background knowledge and a historical perspective of the district and its reform efforts since 1993.

*Principal selection*. A focal point of the present study is examining how the inquiry process has been implemented in each of the two schools and how it has

influenced principal behaviors. For the present study, it was assumed that if the principal received some type of training in the district's inquiry frame it might affect the level of implementation, and subsequently, this was factored into the school selection process.

A pilot study, conducted in the spring of 2006 by myself and two other researchers, revealed that any training program there may have been on the district's inquiry frame ended after the departure of the superintendent in 2003, thus indicating that formal training was not offered to principals new to the system or position since then. Therefore, in considering school selection, I looked for 1) a principal who became an administrator in the district prior to 2003 and received some type of training in the district's inquiry frame and 2) a principal who received no training on the district's inquiry frame. By selecting two different principals, having different levels of training with respect to the district inquiry frame, the present study could make a comparison on whether there is a difference in leadership behaviors between a principal who received some type of training and one who did not. Furthermore, exploring the level of training and support for principals may point to areas for further research in terms of reform sustainability.

Ocean Currents Elementary principal. Mr. Alba was first hired as an administrator in the case study district in July 2000, and more specifically, served as an Academy Director at one of the district's charter schools. He worked under the direction of a principal who was formally trained in the district's inquiry frame. The responsibilities of an Academy Director were comparable to those of an associate principal. This charter school used a detailed inquiry process that involved teachers

assessing student performance every six weeks and developing action plans. After one year, Mr. Alba became principal at Ocean Currents Elementary school during the 2001-02 school year, serving until the end of the 2006-07 school year. Thus, Mr. Alba was not formally trained in the inquiry process as most principals were during its first year of adoption. However, as an associate principal at a district charter school during the 2000-01 school year, Mr. Alba met with the assistant superintendent once per month and learned how to use the inquiry process from observing and interacting with his colleagues. Mr. Alba also participated in several training opportunities through the Ball Foundation and Focus on Results while he was principal at Ocean Currents Elementary.

Mountainside Elementary principal. Mr. Lang taught for seven years, was a technology coordinator for two years in another district, and is currently serving his fourth year as principal at Mountainside Elementary. He began as principal at ME during the 2004-05 school year. Because Mr. Lang entered this district from another district and became a principal after 2003, he did not receive any formal training in the district's inquiry process. During the 2005-2006 school year, ME became a Communities of Practice school. Thus, Mr. Lang participated in several professional development meetings designed by district practitioners and Ball Foundation staff about building community within and across schools, literacy content, and independent reading practices.

Grade level team selection. Grade level team members are teachers, lead teachers, and/or other teachers selected as grade level or content area experts. A purposeful selection of a primary team (grades kindergarten through third) and an

upper level (grades four through sixth) team was selected from each school to participate in the present study. To obtain a primary and upper grade level perspective, specifically, teachers from a second grade level team and fourth grade level team participated in the focus groups at each school.

Key informant. In addition to principals, teachers, and instructional leadership team members, a key informant participated in this study and was instrumental in principal selection. He served as a site principal in this Southern California School District for a period of six years from 2000-2006, and was well-versed with the espoused inquiry model of Student-Based Decision Making and the district's reform efforts during its partnerships with the Ball Foundation and Focus on Results.

#### Data Sources and Collection Plan

Yin (2003) posited that data for a case study design came from many sources of evidence. Therefore, the present study relied on a variety of documents, archival records, physical artifacts and interviews as data sources. In addition, extant surveys conducted in this district by an outside agency, Harris Interactive, were used to gain a longitudinal perspective of teacher's perceptions of principal behavior in the case study schools.

Documents and archival records. Merriam (1998) asserted using documentary material as data was not different from using interviews or observations. Similarly, Yin (2003) described the strengths and weaknesses of using documents and archival records. For example, the strengths of documents and archival records include that they could be reviewed repeatedly, were unobtrusive, were exact, and included a broad coverage of time and events. The weaknesses in using documents

and archival records include reporting biases, low retrievability, and study selection bias.

The documents collected in the present study included: (a) school plans, (b) school accountability report cards (SARC), (c) California Department of Education data sources, (d) Harris surveys, (e) Peer Evaluation, a published book describing the district's principal peer evaluation and (f) Working Differently: The professional development imperative, a video highlighting the Ball Foundation's district reform effort, and (g) a principal evaluation tool (see Figure 2.1). The present study employed a focused sampling of documents and archival records from the past three years (2004-2007). Table 3.2 outlines the document and archival record collection strategy.

Table 3.2. Document and archival record collection strategy

Document	Retrieved From	Purpose
School Accountability Report Card (SARC)	District website	Obtain student achievement data and school mission
California Department of Education data sources	CDE website on Internet	Obtain school and district achievement data
School plans	Site principals	Verify schools' focus, goals and objectives; Obtain student achievement data
Harris surveys	District office or site principal	Verify teacher's perspectives on school leadership and decision-making model
Peer Evaluation	District office or library	Verify district's focus and objectives
Elements from the case study district's principal evaluation tool	Key informant	Detailed information about how principals are rated in their use of the inquiry process
Video: "Working differently: The professional development imperative"	Key informant	Verify district's reform efforts with Ball Foundation

Extant Survey: Harris Interactive Poll. The Harris Interactive Survey program was administered at every school in the case study district since 1996. The purpose of the Harris Interactive School Poll program was to measure the overall satisfaction of students, parents, and staff members with their school and the district. Many of the questions on the survey also assessed the site principal's use of the inquiry process at the school level. This program consisted of four different surveys

(student, parent, administrator, teacher), each one four pages in length, was anonymous, and took 15 to 20 minutes to complete. The survey was specifically designed to allow Harris Interactive to use a powerful statistical model to analyze the data.

The Harris Interactive surveys included three principal standards about the use of inquiry relevant to the present study. The principal standards included *Standard 1C*, namely, Implementation Change Process; *Standard 2D*, namely, Develop a culture of inquiry; and *Standard 4B*, namely, Shared Decision Making. The Harris survey question used to measure Standard 1C was "Teacher/Staff rating: Are you an important part of your school?" The Harris Interactive survey questions used to measure Standard 2D included "Teacher/Staff: Are you challenged to continually improve?" and "Teacher/Staff - involvement in decision-making (A-F)?" Finally, the Harris survey questions that addressed Standard 4B included "Do Teachers/Staff have a say in school policies that affect them?", "Do Teachers/Staff Demonstrate Collaboration/Team Work?", and "Teacher/Staff rating: Does Principal ask for your suggestions/opinions?" The Harris Interactive survey questions are illustrated in Table 3.3.

*Table 3.3.* Standards and Harris Interactive Survey Benchmarks

Standard Title	Harris Interactive Survey		
Standard Title	Benchmark		
1C Implementation Change	Teacher/Staff rating are you an		
1C. Implementation Change Process	important part of your school?		
Process	(% Problems)		
	Teacher/Staff-Are you challenged to		
2D. Develop a culture of inquiry.	continually improve?		
Inquiry reflected in School	(% Problem)		
Site Plan and Professional	• Teacher/Staff involvement in decision-		
Development Plan	making?		
	(A-F)		
	Do Teachers/Staff have a say in school		
	policies that affect them?		
	(% Problem)		
4B. Shared Decision Making	<ul> <li>Do Teachers/Staff Demonstrate</li> </ul>		
	Collaboration/Team Work?		
	(% Problem)		
	• Teacher/Staff rating: Does Principal ask		
	for your suggestions/opinions?		
	(% Problems)		

Interviews. Kvale (1996) posited that knowledge was constructed through partners conversing in an interview setting. He further asserted that the research interview was based on conversations of daily life but was also professional conversation. Spradley (1979) reinforced language was a tool for constructing reality. Kvale (1996) stated the purpose of the semi-structured interview was to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena. The phenomenon described in the present study is the district-initiated inquiry process.

Kvale (1996), Spradley (1979), and Patton (1990) all asserted a qualitative interview had a structure and purpose. Qualitative interviewing began with the assumption that the perspective of others was meaningful, discoverable, and made

explicit. The research interview was theme-oriented; the present study focuses the interview on the themes surrounding the inquiry process.

Patton (1990) stated the quality of information obtained was highly dependent on the interviewer. He espoused a more structured interview approach where the interviewer used disciplined and rigorous inquiry based on both skill and technique. Patton stated that issues of legitimacy and credibility are minimized by carefully collecting the same information from everyone who was interviewed. He described good interview questions as open-ended, neutral, singular, and clear. Patton emphasized the interviewer must maintain control of the interview and believed that asking focused questions in an appropriate style to get relevant answers for further understanding of the world was the purpose of interviewing. The present study adopts what Patton described as a standardized open-ended interview which has a specific wording and sequencing of questions. Although an interview conventionally has structure and purpose, Kvale (1996) advised that in this type of interview, many decisions were made on the spot during the interview itself.

There are both strengths and weaknesses in using interviews for data collection. Yin (2003) asserts that a particular strength of interviews is that they focus directly on the case study topic, in other words, they are targeted. In the present study, the case study topic was the district-initiated inquiry process, and thus, the interviews were targeted for this topic. Yin also stated the interviews were insightful. Kvale (1996) asserted the interview was the raw material for developing meaningful analysis. The quality of the interview is decisive for the quality of the later analysis, verification, and reporting. Yin (2003) outlined the weaknesses of interviews as

including (1) response bias, (2) poor recall of information by the interviewee, (3) bias due to poorly constructed questions, and (4) reflexivity, a process via which the interviewee answers questions according to what they think the interviewer may want to hear.

To minimize some of these challenges, a pilot study was conducted prior to undertaking the full dissertation study. In the spring of 2006, I, along with two colleagues, one of whom is the key informant for the present study, conducted a pilot study to test potential interview questions for this study. We interviewed two principals in the case study district who would not be involved in the study. These interviews helped us to develop our interviewing and probing skills. In addition, this pilot suggested a need to revise the interview questions. As a result of the pilot study, the questions were revised using Price's (2004) laddering approach, which helped to develop trust and a closer relationship with the interviewee so he/she was more candid with his/her responses, and thus created useful data to analyze. This laddering or dilation of interview questions, as Price (2004) stated, allowed the researchers to be sensitive to the interviewee's sense of intrusion. By volleying between low-sense intrusive questions (events and facts) and high-sense-intrusive questions (feelings and thoughts), the researchers in the present study received more poignant responses.

*Principal interviews*. Each principal was interviewed once for approximately two hours. During the interview, each principal was asked a semi-structured set of questions to help determine how they were implementing the inquiry process and if their leadership behaviors changed as a result of using this process (Appendix B).

Each interview was digitally recorded and transcribed verbatim. By interviewing principals from the two different schools, the present study provided insight about whether receiving some type of training made a difference in the implementation of the district's inquiry frame.

Focus group interviews. Focus groups were used as a way to supplement the initial findings and add to the understanding of the inquiry process (Krueger, 2000; Morgan, 1997). The focus group interview allowed multiple people to interact with each other and created a more relaxed environment for answering interview questions. Focus group interviews were conducted with grade level teams at the two elementary schools. The interviews included open-ended questions and assumed a conversational nature. The purpose of the focus group interview is largely to corroborate certain facts that may have been established (Yin, 2003). A primary grade level team (Grade 2) and an upper grade level team (Grade 4) comprised of at least three teachers each were asked to share their perspectives on how the inquiry process was implemented at their schools and how it affected their own learning and the school's work (Appendix C). The interview lasted approximately one to two hours, was digitally recorded and transcribed verbatim.

*Timeline*. There were two major data sources for the data collection plan (see Table 3.4). The present study included collecting similar documents from each site as well as principal or focus group interviews.

Table 3.4. Data Collection Timeline

D-/	D 1	D-4-'1	T:
Data	Research	Details	Timeframe
Sources	Questions		
Documents	I) In what ways do principals, teachers, and the site's leadership team perceive the implementation of the district's inquiry process in their schools?  (II) How do principals and teachers perceive the effectiveness of the inquiry process on their own learning and the school's work?  (III) How do the principals and teachers perceive their principals and teachers perceive their principal's behaviors have changed from participating in the district's initiation of an inquiry process?	(a) school plans, (b) school accountability report cards (SARC), (c) California Department of Education data sources, (d) Harris surveys, (e) Peer Evaluation, a published book describing the district's principal peer evaluation and (f) Video: "Working differently: The professional development imperative", a video highlighting the Ball Foundation's district reform effort, and (g) principal evaluation tool (see Figure 2.1)  (a) One-two hour interviews with two focus groups at each site (b) One, two hour interview session with each site principal	February 2007 to December 2007  March 2007 – December 2007

# Data Analysis

Yin (2003) stated data analysis consisted primarily of examining, categorizing, tabulating, and testing qualitative evidence to address the initial

propositions of a case study. Merriam (1998) asserted data collection and analysis occurred simultaneously. Huberman and Miles (1994) described data analysis in three concurrent pipelines: (a) data reduction, (b) data displays during the collection, and (c) conclusion drawing to explain the findings. According to Huberman and Miles, data reduction encompasses transforming the collective data into a conceptual framework and data displays entail compressing the information to draw preliminary conclusions. Once the data is mined in the first two steps, the third step involves drawing conclusions and verifying the data based on confirmable evidence. The overall goal of qualitative data analysis is to understand, provide evidence, and suggest inferences based on the data to make sense of a given situation.

Huberman and Miles (1994) stated coding was the key component for data analysis. They defined codes as tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study. Codes were used to retrieve and organize chunks of information so the researcher could quickly find, pull out, and cluster the segments relating to a particular research question, construct, or theme. The present study codes the documents and interview transcripts, accordingly. Lincoln and Guba (cited in Huberman & Miles, 1994) suggested "coding and recoding are over when the analysis itself appears to have run its course – when all the incidents can be readily classified, categories are saturated, and sufficient numbers of regularities emerge" (p. 62).

*Interview analysis*. Kvale (1996) described five main steps for interview analysis: (a) the subjects describe their lived world during the interview, (b) the subjects discover new relationships during the interview, (c) the researcher condenses

and interprets the meaning of the interviewee's responses and conveys the meaning back to the interviewee during the interview, (d) the researcher interprets the transcribed interview, and (e) the researcher re-interviews to clarify information.

Patton (1990) further emphasized that analysis of the raw interview data allows important themes to emerge, rather than being imposed or assigned themes prior to data collection.

Kvale (1996) described meaning condensation as a means of interpreting the transcribed interview by condensing it into a more succinct form. This process consists of the following five steps: (a) the interview is read through in its entirety to get a sense of the whole, (b) natural meaning units, as expressed by the subjects, are determined by the researcher, (c) the theme that dominates a natural meaning unit is stated as simply as possible, (d) meaning units are analyzed in terms of the specific purpose of the study, and (e) the themes are tied together into a descriptive statement. After the text is condensed, the natural meaning units of the subject's answers are placed in the left hand column and central themes are presented in the right hand column. This empirical phenomenological method serves to analyze extensive and often complex interview text by looking for natural meaning units and explicating their main themes (Kvale, 1996).

Kvale (1996) used meaning categorization as a way to analyze qualitative data to quantify the categories created by the coding process or developed in advance. This process emphasizes quantification of facts and serves several purposes, including, (a) to test hypotheses, (b) to quantify behaviors, and (c) to investigate differences in behavior among different groups. The present study employs the

process of meaning condensation, as described by Kvale (1996), to interpret the transcribed interview. Each principal was interviewed for approximately two hours, using a semi-structured interview protocol. A total of four focus groups were interviewed in one to two hour interviews. Dragon SpeakEasy® software was used in conjunction with Microsoft Word® to transcribe the interviews while NVivo® software was used to assist with coding and theme identification. NVivo® is a qualitative data analysis software package used for coding text files, presenting data as collected (in raw form), and analyzing and integrating cases from multiple study files. The process of meaning condensation was enhanced through the use of NVivo®. The NVivo® software allowed researchers of the present study to objectively code and create themes. The present study also used triangulation techniques to examine principal interview data with focus group interview data for each school. For example, if the principal asserted he involved teachers in shared decision-making, this information was substantiated and/or correlated with the teachers' assertion about their role in shared decision-making from the focus group interview.

Document analysis. In the present study, each document gathered in the data collection was analyzed. Merriam (1998) emphasized content analysis as a systematic procedure for describing the content of communication. Yin (2003) maintained the most important use of documents was to corroborate and augment evidence from other sources. Further, Yin (2003) shared that as a result of document review, new evidence may emerge that was contradictory to the original findings. Yin (2003) suggested further inquiry into the topic to resolve the problem. In the

present study, documents were used to corroborate and augment findings from analysis of the interview transcripts. For example, if teachers asserted they were meeting regularly in grade level meetings, this information was correlated with relevant information in the school plan. Table 3.4 is a listing of assembled documents from each case study school.

Cross case synthesis. Yin (2003) stated a cross case synthesis is likely to have more breadth and is an excellent example of the important research that emerges by having multiple case studies. A major strength in the present study is that two other researchers were investigating the implementation of the inquiry process at four other elementary schools in the case study district. The three studies in totality represented a cross-section of the case study district in terms of two particular demographic factors, namely, percentage of English Language Learners and students on free or reduced lunch. The three researchers collected data independently, however, met periodically during the analysis phase to compare and contrast findings. During these meetings it was also possible for the researchers to probe the key informant to ensure that as outside researchers they understood the district's history and context. It also provided the outside researchers an opportunity to push the inside researcher to reveal and explain assumptions.

The use of cross-case synthesis for the present study thus allowed the aggregation of findings from all six schools and strengthened each separate case study. These concurrent studies probe whether different groups of cases appear to share some similarities and deserve to be considered instances of the same *type* of general case. This raised the possibility of a typology of individual cases that can be

highly insightful. Cross-case synthesis can be more complex and cover broader issues than simply analyzing single features (Yin, 2003).

*Positionality of the Researcher* 

As principal researcher in the present study, I was not familiar with the Southern California case study district prior to my study, since I currently work as a principal in another district. As an outside researcher, I relied extensively on the key informant to help me with school and principal selection and to help me understand the district's history and context. The key informant helped me gain access to information that I would not have otherwise had access. However, my position as an outside researcher of the case study district proved advantageous for the following reasons: (1) I did not have any assumptions coming into this study and (2) I was free to analyze the data without bias. I also worked closely with the key informant to understand and clearly articulate the district history and context since it was an integral part of the present study.

*Limitations of the Study* 

As Yin (2003) and Merriam (1998) both pointed out, there are many cautions in conducting a multiple case study. Yin stated the preparation of the research questions and the case study design was critical. The standardization of the interview protocols used for both schools insured that the present study is reliable and valid. However, while conducting the focus group interviews with grade level teachers, it was difficult to discern if the assertions made represented the general sentiment of the group or came from a potential outlier. Further, one or two teachers may have responded more frequently to the questions, thus limiting the responses of the other

teachers. The data analysis included using a standard approach to coding the interview transcripts to support the reliability and validity of the present study. While, the use of multiple data sources increases a study's reliability, it is not possible to eliminate all potential bias, given the subjective nature of the inquiry. The scope of this study was limited to two out of 44 schools in the case study district and therefore, the findings may not be generalizable or broadly applicable across the district as a whole or to other districts. Furthermore, it is important to note that school context is relevant, especially since the two schools studied were in program improvement or on the verge of being placed in program improvement. Despite the lack of generalizability across the district, the present study allows for theoretical generalizations about how inquiry supports organizational learning and leadership behaviors. Two other researchers studied a total of four additional elementary schools in this case district, which also served to strengthen the overall study.

### Chapter 4

## Findings

The present chapter details the findings of the study for the two schools – Ocean Currents and Mountainside Elementary – taking each school in turn. Each school section outlines a description of the school, the school's mission statement, school goals and plans, achievement data, and improvement efforts. A brief background of each school's principal and his definition of inquiry, based on the interview data, is also provided, followed by the principal's description of how the inquiry model is applied at the school. In addition to the principal's perceptions of the inquiry process, the teachers' definition and application of inquiry, based on the focus group interviews, are also described in this chapter. The principal and teachers at each school describe, in the present chapter, the supports and barriers to the inquiry process and their perceptions of how inquiry influenced their own learning, the school's work, and the principal's leadership behaviors. After the findings for each school are presented, the chapter concludes with a comparison and contrast of the two schools.

#### Ocean Currents Elementary

Ocean Currents Elementary (hereinafter, also referred to as "OCE") is located in the west side of the case study Southern California School District and is in a socio-economically poor neighborhood. OCE has 653 students (2006-07 SARC, California Department of Education) but serves a significantly lower socioeconomic student population than the district average. Ocean Currents Elementary reflects the diversity represented in the present case study district.

The student population is comprised of 87% Hispanic, 5% White, 5%African-American, 1% Filipino and less than 2% Asian, American Indian, or Pacific Islander. Approximately 57% of the total student population is designated as English Language Learners (ELL), 92% is eligible for free or reduced lunch, and 13% is students with disabilities. Of the 57% who are English Language Learners, there is a significant population of newcomers who have little to no fluency in English. The student mobility is over 30 percent. These students are served by a staff of 36 teachers.

Ocean Currents Elementary is a Program Improvement (also referred to as "PI") school. Eight additional schools in the district are classified program improvement, comprising 22% of the total schools in the district. OCE's first year in PI was 2002-03. By 2006-07 the school was classified as year five in PI, meaning that during the year of the present study, the school was anticipating a major restructuring; in 2007-08 a new principal and staff members would constitute OCE.

#### Mission

OCE's school mission is to create generations of life-long, independent, successful learners who celebrate the diversity of the school community and are prepared to meet the challenges of the future. The school vision is to provide standards-based education for all students regardless of language, culture, gender or economic hardship. Staff, students and parents work collaboratively to establish a learning environment with emphasis on academic achievement, social responsibility, and safety.

#### School Plan

A review of the school plan showed that, during the 2006-07 school year, OCE had established the following goals in language arts and mathematics. In language arts, the goal was to increase the percentage of students achieving proficiency or better on the California Standards Test in English language arts from 23.8% to 36% (+55 students) by June 2007. Since June 2007, only 30% of the students were proficient or advanced in English language arts; the school did not meet this goal. The goal for English Learners (ELL students) was to increase the percentage of students reaching proficiency or better from 15.7% to 36% (+54 students). Only 14% of ELL students reached proficiency or better; therefore, the school did not meet this goal.

In mathematics, the goal was to increase the percentage of students reaching proficiency or better on the California Standards Test in mathematics from 33.7% to 40% (+28 students). The school came significantly closer to meeting the goal for mathematics since 38% of the students scored proficient or higher. For ELL students, the goal was to increase the percentage of students reaching proficiency or better from 29.9% to 40% (+26 students). The school did not meet this goal for English Learners since only 31.7% of the students scored proficient or higher. These goals reflect SMART goals as taught by Focus on Results, which the Instructional Leadership Team (ILT) had learned through its participation in Cohort 2 training.

To accomplish its goals, the school plan also showed that OCE staff participated in site-based professional development and planning based on standards, reviewing assessments and student performance, and differentiating instruction in

both mathematics and language arts. The staff met with administrators and reading coaches as a group, in grade level teams, and individually to discuss methods for implementing effective instructional practices, meeting the needs of children who were not performing at grade level, and methods for assessing students. In addition, the staff participated in trainings, workshops, and professional development sessions aimed at meeting the needs of students and planning effective instruction based on state standards.

For language arts, the school plan showed there was training in AB466, GLAD, RESULTS, writing assessment, best practices, and data analysis to drive instruction. Specifically, the professional development included:

- All staff had the opportunity to participate in the AB466 language arts
  training. K-3 teacher training was paid for by the Reading First Grant.
  Training for teachers in grades 4-6 was paid for by Title 1 funds. 29 of the 37
  teachers opted to participate in this training.
- Teachers in grades 3-6 were required to attend the district writing workshops to learn standards-based writing strategies, use of rubrics, and examination of student work.
- All teachers attended biweekly grade level collaborations. Thus, every two
  weeks, teachers had approximately two hours to work together as a team
  during the school day. The team spent time analyzing classroom data, creating
  instructional plans for intervention, sharing best practices, and examining
  student work.

- All teachers attended Friday minimum days (whole staff, grade level, and vertical professional development). In addition, 1-2 times per month, teachers met in lateral or vertical teams to discuss instructional issues, create school intervention plans, or learn instructional strategies specific to the needs of the students.
- The teachers participated in Community of Practice (CoP) meetings
  approximately four times per year to improve instructional practices for
  students.

For support in mathematics, a math leadership team of six teachers were paid from Title 1 funds to enroll in the AB466 math training during the summer. The same group participated in a follow-up math training session to guide their grade level teams. This included collaboration every six weeks, planning by grade level, and working with the district math resource teacher during collaboration and staff meeting times.

According to the school plan, there were additional interventions available in language arts and mathematics at OCE. For example, there were three language art support teachers designated for students enrolled in grades 4-6, for providing targeted instruction for students below level. In addition, students most at need had a smaller student-to-teacher ratio for their language arts block and English Language

Development instruction. Students in grades 4-6 who were new to the school and had little or no English literacy were clustered in a Newcomers class for beginning English instruction during the literacy block.

Similarly, in mathematics, the students most at need had a smaller student-to-teacher ratio. In grades 4-6, there was an extra support teacher for math instruction during the regular afternoon math session. Additionally, students in grades 4-6 who were new to the school and had little or no English literacy were offered instructional mathematics materials and preview/review sessions in Spanish. There were also instructional materials available to meet the needs of students below level; teachers were paid to work with students before and after school.

The school plan described the barriers to student achievement which included a mobility rate of over 30%, lack of available health care for students and their families, a school population comprised of 60% English learners, and the inexperience and lack of focus on the child's education in the preschool years and after school hours. Thus, the staff was provided with continued training in differentiation, instructional practices, and curriculum to meet the demands of a challenging student population. Several identified limitations at Ocean Currents Elementary included:

- The lack of professional development offered for all teachers in mathematics instruction.
- The varying levels of expertise in the area of standards, assessment, and
   differentiating the curriculum and instruction to meet the needs of at-risk students.
- Differing levels of consistency in explicit instruction for students in specific areas of need.

• The implementation of engaging instruction and activities that tapped the critical thinking and problem solving skills of all students to make them successful on achieving higher level standards and skills.

## Achievement Data

Table 4.1. School Academic Performance Index from 1999-2007

Year	API	Statewide Rank	Similar Schools
1999	452	2	3
2000	505	2	3
2001	573	2	6
2002	572	2	7
2003	605	1	4
2004	587	1	2
2005	618	1	1
2006	652	1	3
2007	685	N/A	N/A

Table 4.2. Number of students who are Proficient or Advanced in California Standards Test, English Language Arts

Grades	2003	2004	2005	2006	2007
2	9	16	25	21	20
3	9	9	7	20	13
4	20	12	28	28	61
5	13	22	16	19	19
6	20	15	24	24	36
Overall	14	15	20	22	30
District	36	36	40	46	49

*Table 4.3.* Number of students who are Proficient or Advanced in California Standards Test, Mathematics

Grades	2003	2004	2005	2006	2007
2	34	27	47	42	50
3	27	28	35	53	35
4	15	13	26	28	58
5	1	7	15	26	26
6	27	8	21	15	22
Overall	22	17	29	33	38
District	42	44	52	56	58

Table 4.4. Number of students who are Proficient or Advanced in California Standards Test, 2007 by Significant Subgroups

Subgroup	ELA	Math
Hispanic or Latino	27.1%	38.1%
Lower Socio-Economic	30.1%	39.3%
English Learners (ELL)	14.1%	31.7%
Overall	30%	38%

## School Improvement Efforts

Comprehensive school reform grant. OCE received \$146,000 from the Comprehensive School Reform (CSR) Grant from 2004-05 through 2006-07. The purpose of the CSR grant was to promote school improvement through long-term professional development which included providing support for staff, materials, additional instructional time for students, and educational opportunities for parents. OCE underwent a Coordinated Compliance Review audit; the results showed that placing certain ELL students in a core reading program was not meeting their needs especially since they could not read the materials. The administration used the finding from the audit as a leverage point to convey to staff members the need to form

a support class to address student needs. As a result, OCE staff members used the funds from the CSR grant to pay for teachers to support the language arts classes in the upper grade levels. In addition to this grant, the school received \$198,000 in Title 1 funds to support at-risk students.

Accelerated school. Ocean Currents Elementary was modeled around the Accelerated School concept in the mid 1990's as a comprehensive school reform model. The goal of Accelerated Schools is to create powerful learning opportunities for all students. By building on the strengths of each student, the school uses the best of its instructional knowledge and methods to accelerate the learning of all students. The guiding principle of Accelerated Schools is to accelerate, not remediate (Levin, 1998).

Reading first. The case study district also received state support to implement early reading instruction in classrooms. The purpose of the Reading First program was to ensure that all children learned to read well by the end of third grade. In particular, OCE received funding in 2004 to implement research-based reading programs for students enrolled in kindergarten through grade three. The funds also supported professional development to ensure that teachers had the skills they needed to teach these programs effectively. The Reading First program used screening and diagnostic tools and classroom-based instructional reading assessments to measure how well students were reading and to monitor their progress. The teachers administered the OARS formative assessment every six weeks to measure student progress in reading.

Ball foundation cohort 2 partnership school. In 2002, OCE became a Cohort 2 partnership school with the Ball Foundation, described in detail in a previous section. As a Cohort 2 partnership school, administrators and teachers from the instructional leadership team attended professional development meetings during the school day. The case study Southern California Elementary District and the school also contracted with Focus on Results to train the instructional leadership team to work together more effectively to meet student needs. Focus on Results provided coaching and training for instructional leadership teams and facilitated the creation of literacy academies for all principals. Each cohort of schools received three years of intensive training from Focus on Results.

Communities of practice. During the 2004-05 school year, Ocean Currents Elementary became a part of Communities of Practice, an initiative sponsored by the Ball Foundation to build sustainability of the reforms, which has already been described in detail. Briefly, teachers and principals from each cohort participated in several meetings designed by district practitioners and Ball Foundation staff members to help them learn promising instructional, organizational and leadership practices that supported increased student achievement. Specifically, the focus of these meetings was building community within and across schools, introducing new literacy content, and dialoguing about how to implement independent reading practices.

Mr. Alba was first hired as an administrator in the case study district in July 2000. More specifically, he served as an Academy Director at one of the district's charter schools. The responsibilities of an Academy Director were comparable to those of an associate principal. He worked under the direction of a principal who was formally trained in the district's inquiry frame. This charter school used a detailed inquiry process that involved teachers assessing student performance every six weeks and developing action plans. After one year, Mr. Alba became principal at Ocean Currents Elementary school during the 2001-02 school year, serving until the end of the 2006-07 school year. Mr. Alba has since been placed at another elementary school for the 2007-08 school year due to OCE's restructuring efforts in its fifth year of program improvement status.

Mr. Alba was not formally trained in the inquiry process as most principals were during its first year of adoption. However, as an associate principal at a district charter school during the 2000-01 school year, Mr. Alba met with the assistant superintendent once per month where the assistant superintendent reviewed the administrator's manual and district philosophy with the associate principals in the group. At district meetings, the group was provided with student achievement data. Since the district office staff members and principals engaged in a process of reviewing the data and asking many questions, Mr. Alba learned how to use the inquiry process from observing and interacting with his colleagues. However, according to Mr. Alba, they didn't name the process the "inquiry model for student

based decision-making" nor explicitly demonstrate how the district's decision-making frame was to be specifically used. He shared that the level of experience with principals in the inquiry process varied across the district. For example, he stated some principals were better at getting input from all stakeholders and asking the types of questions outlined in the inquiry model. Others had a traditionalist mentality and tended to tell people what to do. He stated,

I think some people have that ability, want input from others, and are asking the right questions. Others tend to be "this is what we need to do" and "this is how we're going to do it." We tend to hire people in our district who have that skill for involving stakeholders. There are a few people who have more of the traditionalist mentality.

The data shows that Mr. Alba internalized the model from early experiences and observing colleagues.

During the same 2000-01 school year, Mr. Alba received formal training through the City Mediation Center. This training focused on working with parents, listening and mediation techniques, asking the questions outlined in the inquiry model and addressing deeper issues. At the time, all principals were required to attend this training, which was offered once more during the following school year.

As a first year principal in 2001-02, Mr. Alba shared that he did not participate in monthly meetings with the assistant superintendent because he participated during the previous year when he served as Academy Director. He did, however, attend an orientation meeting for new principals. During the 2001-02 school year, the principals met in peer groups with other principals. Mr. Alba shared

that the group created their own meeting agenda based on their needs and also reviewed their goals for the school year. They participated in walkthroughs together to look at the instructional focus at each school. This was a practice brought to the district through their work with Focus on Results. This practice continued into the 2006-07 school year. For example, Mr. Alba participated in a walkthrough at one school site, discussed teacher evaluations with other principals, and met off-campus once to review budgets and single site plans.

## *OCE Principal's Definition of Inquiry*

The next sections present the findings to address the first research question in the present study, specifically, how do principals and the grade level team members perceive the implementation of the district's inquiry process in their schools?

Mr. Alba was familiar with the inquiry model. He stated that the four questions were posted in all school main offices. Mr. Alba defined inquiry as a group of individuals collaborating to examine student work, analyze data, and develop a plan. For example, he stated "instead of asking teachers if he uses the inquiry process, it's better to ask if he gives them opportunities to examine student work, analyze data, develop a plan, and collaboratively work together" since the teachers were not familiar with the term *inquiry*.

As evidenced by his definition, the inquiry process for Mr. Alba went beyond the initial decision-making framework and encompassed the way the inquiry process was set into motion by the collaborative efforts of the Ball Foundation and Focus on Results. As the data from the principal interview shows, there are aspects of the inquiry model that are most prominent in Mr. Alba's school. For example, question

(4) of the inquiry model, that asks how individual needs are balanced with group needs, is constantly on the forefront of decision-making because Mr. Alba's school is in a socio-economically poor neighborhood and has 92% of its students eligible for free or reduced lunch. With respect to question (3), which asks if there is adverse impact on others, the data shows that teachers are occasionally involved in the decision-making process and there is little or no focus on involving other stakeholders such as parents, community members, and classified staff members in decision-making.

In his interview, Mr. Alba referred to question (1), which specifically asks how the decision improves student learning, many times. For example, he stated things like "I know that's always a question in the back of my mind. Is this good for kids? Is this going to change the way we service children?" or "It's allowed me to change whatever I need to based on student data. What's right for students?" *OCE Principal Sets into Motion Inquiry Model* 

In the interview, Mr. Alba described *big* and *small* inquiry processes that occurred at his school. He defined *small* inquiry processes as occurring over the duration of one week or less and *big* inquiry processes as occurring over several weeks. For example, he described a time when the staff members engaged in a *big* inquiry process when deciding whether to purchase SuccessMaker® Enterprise, created by Pearsons Learning, school-wide. SuccessMaker® Enterprise is a suite of computer programs that has standards-based reading/language arts, mathematics, and English language development/ESL curriculum to support student learning. The program individualizes instruction to the specific needs of each student and includes

data to help teachers identify each student's area of difficulty and help them effectively target instruction. The staff members reviewed the purpose for the program at the school and evaluated its results. Mr. Alba visited two different schools with two or three groups of teachers to observe how the software was used at these sites. According to the principal, the teachers discussed their observations with the other staff members. He indicated that he compiled a list of all the software that was currently being used at the site to support the staffs' decision-making. This process took place over a three- to four-month period.

Mr. Alba's description of the inquiry process used at the school in the above example is akin to the Accelerated Schools model for decision-making. This is not surprising since OCE had its roots as an Accelerated School. As mentioned above, in an Accelerated Schools model, the staff members (a) investigate the causes of the priority needs identified in the needs assessment, (b) research potential solutions that will address the needs, (c) select improvement strategies that will best fit the unique needs of the school, (d) implement the plan, and (e) evaluate and reassess those strategies (Levin, 1998). For example, at OCE, one priority need that was identified was supporting reading and math so that the students who were not currently meeting Adequate Yearly progress goals could meet those goals. They researched a potential solution, in this case, purchasing SuccessMaker® Enterprise, to help students with remedial skills in language and math. Teams of teachers visited other schools to determine the success of the program, and performed a cost-benefit analysis to compare SuccessMaker® Enterprise to similar programs.

In Mr. Alba's example of a big inquiry process, he addressed some of the four essential questions from the student-based model for decision-making in the case study district. For example, he explicitly addressed question 1, or how the decision improves student learning and question 3, whether there is adverse impact on others. There is evidence of collaboration and using data to determine fiscal impact. However, the only stakeholder group that provided input was the staff members, primarily teachers.

A second example Mr. Alba provided of staff implementation of a big inquiry process was the Grade 4 team's reorganization of the master schedule to meet the needs of all students the following school year. The Grade 4 team looked at data, discussed changing the structure of the master schedule, and reviewed how student needs were currently addressed. In particular, they identified the challenges associated with having both *newcomer* and *gifted* students in the same classroom. Thus, the Grade 4 team decided to group the students into language arts and mathematics classes based on their CST scores and use the extra support teacher to teach language arts and mathematics as well. This model enabled each teacher to have homogenous groups based on ability level of 15 or 20 students rather than having one teacher support 31 students who were heterogeneously grouped. Through the application of a big inquiry process, the team analyzed the data and asked questions. The master schedule was finalized in June 2006 and students were scheduled into classrooms for the 2006-07 school year. This was a significant accomplishment for the Grade 4 team because in the previous year, the master schedule was finalized in September, after the school year started.

A third and final example of the staff members' implementation of a big inquiry process was the development of a common classroom management plan for the sixth grade level. The teachers noticed that some students behaved differently when they changed classroom teachers. The team decided the current system was not working to best serve students because the students did not receive consistent messages with the change in teachers. They collaborated, analyzed what was working and not working, and devised a common classroom management plan. The teachers shared their plan with Mr. Alba and began to implement the plan.

Mr. Alba also referred to *little* or *small* inquiry processes that lasted for a week. The *small* inquiry process included a quick progress check of the school and whether a program or initiative that originated at the district should be implemented. The purpose of a *small* inquiry process was to get feedback and thus was more informational in nature. Mr. Alba stated "you just knew those were the efforts of the district and they wanted you to implement a particular program or initiative. Sometimes, decisions were just made for you at the district level and it's more about getting feedback."

For example, in January 2007, OCE applied for a Quality Education Initiative Act grant (QEIA). Nine schools in the case study Southern California Elementary School district were eligible to apply for the QEIA grant. Mr. Alba presented the application requirements for the grant and asked for input from his Instructional Leadership Team and School Site Council. The teachers provided their input and agreed the grant would be beneficial to the school.

OCE Principal's Rating of School on Use of Inquiry

When Mr. Alba was shown the Principal Evaluation Rubric for the Case

Study District – 2D – Develop a Culture of Inquiry (see Figure 2.1), he placed
himself at *Applying*. Principals who rate themselves as Applying are considered to be
proficient principals. Mr. Alba said that one of his strengths was that he always and
looked for data and emphasized data analysis. He shared that he also provided staff
members with opportunities to analyze data and asked them lots of questions about
the data. He stressed that he needed to improve at including parents as stakeholders;
that the parents have many good things to share but staff members do not always
realize it since they don't interact with parents in the English Language Advisory

Committee (ELAC). Mr. Alba stated the parents have valuable input when it comes
to what their children should be learning in school.

Mr. Alba also described himself as *Innovating* because the staff members were provided with input from *critical friends* which included district administrators, other principals, Reading First administrators, and teachers through walkthroughs conducted at his school. However, when staff members were given feedback, some were not receptive to the feedback. Mr. Alba observed that "they get defensive or take it personally instead of saying 'this is not about me but it's about what they see." He shared that the teachers were not always open to someone coming in and giving them feedback about their instructional practices.

#### *OCE Teachers' Definition of Inquiry*

When the teachers were shown a chart with the four questions from the inquiry frame, only a few teachers exhibited awareness of the chart. The majority of

teachers felt the inquiry model on paper was foreign and isolated. For example, one teacher stated "[the inquiry process] seems foreign to me. It does not seem to be what I noticed." Another teacher stated the following:

This document does seem foreign and isolated. It's hung on a wall in the office. There is not really an investment of teachers. There's a motto in the district that things are whole child or student-based. I think that's essentially how teachers teach. They look at data and take into account the whole child. I feel like it (the inquiry process) is foreign and from an administrative perspective down.

One teacher also commented the inquiry model led to decentralization among school sites. She stated:

I think site-based decision-making is really good on paper but it creates 43 different methods to do something. You need to be careful because it can create inequities. That is what I see now as I get more involved in the district and gain more knowledge about other schools...It becomes too decentralized. I think the pendulum has to swing back to the middle a little bit where the district has some kind of guiding force so you are not creating 43 different models.

These findings suggest that the teachers perceived they were addressing some of the four questions in the decision-making frame to guide the school's work but were not as familiar with the actual inquiry document.

OCE Teachers Set Into Motion Inquiry Model

There were many examples of some sort of inquiry process occurring in the school. The evidence suggests that the inquiry process being used was shaped by the school's designation as an Accelerated School as well as the school's work with the

Ball Foundation and Focus on Results. Inquiry in the grade level teams seemed to incorporate two key elements: collaboration and the use of data to focus on student learning.

Collaboration. Every teacher interviewed indicated that collaboration among colleagues was a strong feature of their grade level team meetings. One teacher stated:

As a grade level, when we have met, the collaboration has been so rich. Whether it's been formal collaboration with a reading coach or with the whole team together, it's been so rich and rewarding. There are so many ideas that are shared. Each one of us feels free to share ideas, make comments, or suggestions without being criticized or put down. We value each other as a team player, a team member. This experience alone, through the relationships we developed among the five of us, makes one a better teacher because you are not teaching alone. You feel like there are four people standing with you. For me, I always felt I could do this alone until I came to this school. I've always been a very independent teacher until I came to this school and realized the power of collaboration. It just opened up my mind to a whole new world of being able to talk with colleagues and get their input and see there are other ways and ideas. That has been most beneficial to me.

Another teacher described how the collaboration improved student achievement:

With all of our collaboration meetings this year, we have seen our students' scores move up with the OARs data. I feel like my students have done better in math this year. I think part of it is because of sharing ideas. I know I use so many ideas from teachers in this group. For myself, I really benefit from that in a positive way.

The teachers used test data to determine which teachers experienced success with their students. One teacher stated "We're finding where our students have needs, finding somebody who is better at that, and we use their strategies." Although every teacher indicated that collaboration among colleagues was a strong feature of their grade level team meetings, one of the teachers raised concerns. While he appreciated the collaboration meetings, he said he would have liked to strengthen the outcomes of those meetings. He felt there was a need to review the school's mission statement, identify the gaps in student learning, and use data to inform their work. He implied that the team identified concerns centered on student data but did not have the professional expertise to identify a solution and create an action plan. He stated that the team was advised to create an action plan but it was more like a list of things they were supposed to accomplish that did not seem connected to their work. He felt there was little follow through. It seems that his perception of the inquiry model was more akin to the Accelerated Schools model where the team identifies a problem and then looks for solutions.

Last school year (2005-06), the teachers collaborated in grade level teams every week. This school year (2006-07), the collaboration meetings took place every two weeks. One teacher stated "I think it's better to have the collaboration meetings weekly because there is so much to talk about. You don't have to wait two weeks to look at some data and say 'what could I do now?' It gets dealt with right away."

Use of data to focus on student learning. The grade level team meetings allowed teachers to focus on student learning and review data. For example, when the grade level teams noticed that the reading comprehension scores of students in their grade level were lower, they brainstormed about methods to raise the scores. In another example, the teachers looked at their OARS reading comprehension data and came up with solutions for addressing vocabulary needs of their students, especially

with input from one of the teachers who had experience with successful strategies to meet the needs of the English Language Learners. In yet another example, the Grade 2 team used data from the California Standards test to inform the sequence in which they taught mathematical concepts. From analyzing the data, they realized that if a particular mathematical concept, such as place value, was emphasized on the standardized test in mathematics, pulling together the sections that dealt with the concept gave the students an opportunity to master the concept. One teacher emphasized how they used data at the school:

At this school, they do use data to better drive instruction. That is not true in other schools. So, I would not say that is a district measure. I would say that's dependent on the school you are at. It appears that this school is more focused on student outcomes because most teachers rely on their data. That is not the case in other schools. In fact, my experience is that some teachers do not collect data at all. I think it's been the focus of schools, especially those in the improvement phase such as schools labeled as Title 1, high poverty or anything with No Child Left Behind, which has made teachers dig a little deeper and focus on the hard data.

One teacher described how they used data to strategically group students and how that allowed her to focus on student learning, by stating:

I think our decision to group the children the way we did this year has impacted student learning, and we were free to do that. That's real important. We grouped the children based on their CST scores. For example, we grouped students in language arts into a proficient/advanced group, a basic group, a below basic group, and a far below basic group. It allowed the teacher to focus on the same level of learning and not have to differentiate quite as much. Your focus can be on all the students because they are all at about the same level. You can prepare lessons that are aimed at that group. We also did the same groupings based on math CST scores. I personally have had a lot of success with that grouping in my last two years in my last placement. Having the freedom to do that is an example of when the system is working. You can experiment, think outside the box and do something different. I shared my success with that model before I got here. I worked in a school with very similar demographics. I shared the success of what happened for us. We started the year with about 33% of our students in

proficient or advanced and at the end of the year, we had 66% proficient or advanced. The way we were organizing instruction had an impact on student learning. The team was willing to give that a shot.

Collaboration and the use of data to improve student learning represent key aspects of the inquiry process. These findings indicate that the teachers have internalized question (1) of the district's inquiry process, which asks how the decision improves student learning. The teachers also addressed question (3) which asks if the decision has adverse impact on others through collaboration and the use of data.

Because teachers are also trying to find methods to raise the achievement of *all* students at their school, they also addressed question (4) of the inquiry process, which asks how individual needs are balanced with group needs, highlighting issues of equity.

# Instructional Leadership Team

As a result of work done with the Ball Foundation, each site created an Instructional Leadership Team (ILT), as mentioned above. The ILT is an example of how an inquiry process was mobilized school-wide. One teacher shared that although the ILT met earlier in the school year, it was not meeting anymore because OCE was undergoing restructuring due to its fifth year in program improvement. Another teacher shared that it also could be attributed, in part, to the meetings being held after school, making it difficult for staff members to attend. According to a teacher at this school, the ILT was open to any staff member who wanted to attend.

However, one teacher expressed that since staff members had to use their personal time to participate on the team, participation was limited to those staff members who were available. As a result, only the opinions of available staff

members who were available were heard. When the team did meet, they discussed ways to improve the school as a whole with respect to instruction, budget concerns, and school-wide decisions. He shared there was some follow up of ideas in subsequent meetings but it was inconsistent.

One teacher shared an example of what he perceived *should* happen in the ILT meetings. He shared that if there was a clear focus and it was applied, the teachers could discuss that focus area every week, visit classrooms to observe instruction related to that focus area, and have a more successful experience with improving student achievement. These findings show that the school had a structure in place to engage staff members in the inquiry process on a school-wide level, but because the ILT meetings did not continue throughout the school year, there was little follow-through with its implementation.

## Supports Inquiry Process

Both Mr. Alba and the teachers described conditions that supported the implementation of the district's inquiry frame. Mr. Alba created a collaborative environment, gathered input from all stakeholders, used inquiry for problem solving, and focused on improving student achievement. Most of the teachers also concurred with Mr. Alba that input from all stakeholders was critical for supporting the inquiry process.

Principal created a collaborative environment. In order to further promote the use of the inquiry model, Mr. Alba allowed teachers to engage in a collaborative environment at the school site, during grade level meetings. The organizational structure for grade level team meetings is listed in Table 4.5.

Table 4.5. Organizational structure for Ocean Currents Elementary

Timeline	Organizational Structure	
2001-02	Grade level teams met one or	
2001-02	two times per year	
2002-03	Grade level teams met once per	
2002-03	month for ½ day or entire day	
2003-04	Data not available	
2004-05	Data not available	
2005-06	Grade level teams met weekly	
2003-00	for two hours	
	Grade level teams (K-3) met	
2006-07	every other week or every three	
	weeks; Grades 4-6 met weekly;	
	Entire staff meeting every	
	Friday	

During Mr. Alba's first year as principal in 2001-02, the grade level teams met once or twice per year. The frequency increased to a full day or half days every month during his second year, 2002-03. Collaborative efforts increased in frequency when the school received the CSR and Ball foundation grants. For example, during the 2005-06 school year, the grade level teams met weekly for two hours each meeting. In 2006-07, the grade level teams in the lower grades (K-3) met every other week or every three weeks whereas the upper grade levels (4-6) met weekly because they wanted the additional time to address the needs of their English Language Learner student population who were not making progress. Typically, at these collaboration meetings, the teachers created their own agendas and discussed grade level issues. In addition to the grade level meetings, the entire staff met every Friday.

As indicated earlier, at these grade level team meetings, the teachers addressed the first question in the district's inquiry model, specifically, how the decision improves student learning. Through collaboration and the use of data,

teachers also incorporated elements from question (3) (see Figure 1.1). The teachers used these meetings to analyze data before making a decision. Mr. Alba stated "looking at data, asking questions and looking at all possibilities came out through the inquiry process." Mr. Alba emphatically stated:

Over a period of three or four years, one of my most resistant teachers said "teaming is an expectation here and that's what we do." It was interesting to see that paradigm shift from *not having opportunities* to *collaboration is the expectation*. I provide that time through release time.

Input from all stakeholders. An important aspect of the inquiry model is collaboration with all stakeholders. Mr. Alba described that input from stakeholders allows other voices to be heard. He stated "It's really about everybody putting their two cents in and saying here's how we need to improve it." Mr. Alba shared:

The teachers gave a lot of feedback. Some of it was in the form of complaints. They said "Mr. Alba, this is not working or we need this." They would come together in a grade level collaboration and ask how they could serve the needs of this child. They looked at their student groupings and figured out what's working and what's not working.

Mr. Alba also shared that this contributed to the teachers' feeling collective responsibility for student learning. Mr. Alba stated "it is about breaking away from the traditional *my kids, my students* and moving towards *we all share this.*"

Question (3) of the student-based model for inquiry specifically asks if there is an adverse impact on others, and requires that there is input from crucial stakeholders, specifically, staff members, parents, community, and district office personnel. Mr.

Alba emphasized in his interview that the district expectation was to get input from all stakeholders. He expressed "it is expected that you get input from all stakeholders. The district personnel do not monitor it until something goes wrong." According to the interview data, input was gathered primarily from the teachers through grade level and staff meetings and from parents through the School Site Council (SSC) or English Learner Advisor Committee (ELAC) meetings. This example of getting input from stakeholders illustrates how deeply the district's decision-making frame was embedded in the principal's practices for leading the school.

The teachers confirmed Mr. Alba's perceptions that input from all stakeholders was a critical component of the inquiry process. One teacher, in particular, stated:

I think it's moving more towards everybody is a stakeholder where you are just as accountable as I am. It levels the playing field and makes you feel like you are a part of the solution. I think it tends to get staff members who are really focused on school improvement. It gets people talking in new ways, not just complaining about what's happening. It gets them talking about how to benefit students, get results, and allow students to progress at a higher rate. I think without this kind of conversation, it does not always happen. You get isolated in your room....We are all together and I think that is really changing education.

However, two teachers felt the inquiry process did not truly involve all stakeholders, especially the parents. They stated:

I think each site is different. It looks good on paper but if you are saying student-led or student-based, I imagine that involves parents. At this particular school, we have always struggled with that type of participation.

One teacher felt that teachers were not always involved as stakeholders and stated "it does seem like we are asked as teachers for input but I don't really see it playing out. I see it left to higher powers." Therefore, her perception is that the administration or district office is making the decisions.

Problem solving. Since OCE had its roots as an Accelerated school, the need to solve problems further promoted the use of the inquiry model. Mr. Alba shared an example of a time when he had fifth and sixth graders in the same geographic location on the school campus. The staff determined there were some disruptions to student learning with this set-up and came up with solutions to address it. Mr. Alba applied their solution and relocated some classrooms to try to keep all the sixth and fifth-graders separated.

The student-based model for inquiry in the case study district is a framework that requires all possibilities to be explored. Mr. Alba strongly stated:

Sometimes, the district personnel want you to go in a certain direction but they may not have considered something. It's better to go through this inquiry because you are bringing up things for them (district personnel) to consider. You say "as we're going down that path, here are some issues and roadblocks to consider." Even though it's a done deal, you brought up things to address as you go through it.

One of the four specific questions in the student-based model for inquiry that Mr. Alba considered when making a decision in his school was how the decision improves student learning. Mr. Alba emphatically stated "What you always have to come back to and how I justify everything I do is by asking if this is in the best

interest of kids." Thus, a collaborative environment, input from all stakeholders, the need to solve problems and the focus on improving student learning supported the use of the district's decision-making frame.

### Barriers to the Inquiry Process

The principal, Mr. Alba, and teachers described several factors that were inhibiting inquiry, including the shared factors of lack of time and a top-down decision-making approach. The teachers, in particular, emphatically believed lack of consistency, sustainability and focus by the principal inhibited inquiry. Other factors shared by teachers included district expectations conflicting with site needs and lack of funds.

Lack of time. One teacher felt time was an issue that inhibited inquiry. The teacher emphasized the large number of staff members at the site may have made it difficult to find a collective time to meet. Another teacher cited that sometimes teachers were expected to use the inquiry model before they had an opportunity to implement the innovation. He stated:

I think sometimes we inquire before we have enough stuff to inquire with. At this school, that particularly hit me. It seems like you want me to evaluate something before I had a chance to implement it. You need time to inquire. When it doesn't work, the reason is that the time was not devoted to doing the pre-work such as gathering the data or a step did not take place after the evaluation of the data, for example, 'What did you try? What was your intervention?' If you are not given time to follow the whole thing through, then it is worthless going through the inquiry process.

Mr. Alba also concurred with the teachers that time inhibited inquiry when he stated "Sometimes, people don't want to spend the time. They get tired of looking at some of the issues. They said 'why don't you make that decision?"

Another teacher described the lack of opportunity for collaboration. For example, he commented that the teachers attended an in-service about preparing the students for the standardized testing shortly before it was administered to students. The teachers were told they had an opportunity to collaborate as a grade level team in order to determine next steps but this never happened. The teacher suggested he would have experienced more success with preparing the students for the tests if given the opportunity to collaborate in his grade level. Another teacher shared the sentiment by emphasizing "I think it's better to have the collaboration every week because there is so much to talk about," referring to the reduction in the number of collaborations from weekly to every two weeks.

Top down decision-making. Another reason cited as an inhibitory factor in the inquiry process was top down decision-making. For example, two teachers said "I still think decisions are made mainly at the front office, the district office, and administration. I think teachers have a voice but I don't think it's a voice that is clear and always affects the outcome." Interestingly, Mr. Alba also noticed that some staff members' perception that the principal made all the important decisions may have inhibited the use of the district's decision-making frame. Mr. Alba shared "if I start asking them (the teachers) questions, one teacher told me 'when I come to you, I want you to tell me the answer. I don't want more questions." Mr. Alba said he changed his leadership behavior by asking questions to his staff members yet some of them expected him to make the decisions. He emphasized teachers felt frustrated and didn't come to him because they didn't want him to ask questions.

Another teacher expressed that the principal did not seem to engage staff at the whole staff meetings and spent the entire hour talking to the staff. He also shared the agenda topics for the grade level collaborations were determined by the principal without input from the teachers. One teacher stated "the principal decided the topics for the mandatory collaborations with the reading coach. We would like to have more decision-making on what those topics would be. Sometimes, we are talking about something and that's not most critical to us at that moment."

*District expectations*. One teacher indicated that the district expectations possibly conflicted with site needs, thus inhibiting inquiry; he shared:

My impression is there is the mission of the school and things the district office wants the administrator to accomplish. I feel the administration is grappling with what our site needs to do and what the district office wants them to do because it (the focus) changed so often.

During his interview, Mr. Alba expressed the same sentiment when he shared that top down decision-making occurred at the district level without site input. He said "Decisions are just made for you. You know those are the efforts of the district, and they want you to go into this." Another teacher described that the district staff members who walked through classrooms to observe instruction may have inhibited inquiry at the school. For example, she stated "it wasn't anything inquiry-based. They came into your classroom, observed instruction and told you what to do. That was a totally different structure." Based on this finding, it seemed that some of the teachers perceived this was contrary to their work in grade level collaboration meetings where they discussed ways to improve student learning.

Lack of training, support, or funding in the inquiry process. There seemed to be a lack of training, support, or funding in the inquiry process. Although teachers seemed to internalize the district's decision-making frame, one stated "this document (the student-based model for decision-making) seems foreign and isolated like hung on a wall in the office. There is not really an investment of teachers." The lack of funding may have also inhibited inquiry. For example, one teacher indicated there were not as many collaboration meetings because it was a budgetary issue. She stated that last year more money was used to fund substitute teachers to release teachers. This year, they did not have money from the Ball Foundation grants to release teachers. Another reason cited by teachers as a factor that inhibited inquiry was the lack of training provided by the administrator. One teacher stated:

I have only been here one year. The administration is not very strong in modeling the inquiry process. I don't think it's been modeled consistently. I think the teachers on this grade level team have that ability. In my one year of experience here, I find I lead myself through it rather than the administrators taking the lead on it.

Lack of consistency, sustainability, and focus by the principal. Two teachers stated there was not a consistent focus during the school year. One of the teachers stated that the administrator decided the focus for the school year and may have grappled with what the district office expected and school needs. The teacher conveyed her frustration by stating:

It was not consistent. We started something and then we did not know what happened to it. I wish we had a clear focus for the school and we didn't work

on more than two things at one time so that everybody knows what's happening.

One teacher felt that teachers were expected to do too many things, floundered in different directions and that in grade level teams, teachers initiated the inquiry process at times but the meetings lacked facilitation. For example, he described his experience at a grade level team collaboration meeting. He shared the team lost track of the meeting even though they had an agenda and a focus, possibly due to the lack of a facilitator. According to him, the team members were not clear about the outcomes of decisions. He also shared the subsequent grade level meetings tended to have a different focus:

I don't feel there is a clear focus. You feel like you are working on twenty things and you can't do them all well. We are all spread too thin. Then, you start dropping things in order to survive and you feel like you are always trying to catch up. I think it contributes to the amount of stress the teachers have and it adversely affects instruction.

Another teacher cited the lack of a formative assessment used to measure the students' skills as the cause for the lack of focus. Another teacher contributed the lack of leadership for the lack of focus:

Since I have been here, I noticed the leadership and grade level teams are doing 40 things rather than focusing on doing one or two things well before moving on to the next area. It's really all about leadership.

One teacher cited the need for reminders to keep the staff continually focused on the mission of the school. He stated "we need this chart posted in the staff lounge

where it reminds one of the school's mission and what we are working on." In summary, both principal and teacher felt the lack of time and the top-down decision-making approach may have inhibited inquiry. The teachers felt so strongly that the lack of consistency, sustainability and focus by the principal was a major factor that inhibited inquiry. The other factors that teachers shared of lesser importance included district expectations conflicting with site needs and lack of funds.

Perceptions of How Inquiry Influenced the School's Work

The next sections presents the findings to address the second research question, specifically, the principals and teachers perceptions of the effectiveness of the inquiry process on their own learning and the school's work. Mr. Alba and the teachers described their perceptions of the district's decision-making frame on the school's work and their own learning. Mr. Alba noticed that while the teachers could not name the inquiry process, they were actually using it. Mr. Alba and the teachers both agreed that the teachers were using data more as a tool to inform their work. Mr. Alba commented that the use of the inquiry model fostered school improvement; the teachers agreed, stating that the inquiry model improved instruction in language arts and mathematics. Both Mr. Alba and the teachers concurred that collaboration became the norm at the school site and allowed them to engage in feedback and reflection as well as idea implementation. The teachers also shared their insights about the pressure of being a program improvement year-five school and subsequent restructuring.

Teachers cannot name it as inquiry. Mr. Alba noticed, however, that although the teachers may have been practicing the inquiry model, they could not name the process as the inquiry model for student-based decision-making. Thus, Mr. Alba noted if teachers were asked if they used the inquiry process the term was unfamiliar to them. On the other hand, he reported if teachers were asked questions such as "Does Mr. Alba allow you opportunities to examine student work and analyze data? Are you able to develop a plan? Do you collaborate with each other?," they responded favorably and stated "we do that all the time."

Used data to inform work. Mr. Alba emphasized the teachers' use of data. He stated, "at first, teachers were not used to looking at data. They looked at the data but did not use it. We have seen that shift." As an example, one teacher eloquently stated

At this school, they use data to drive instruction. That is not the case in other schools. My experience has been that some teachers do not collect data at all. Therefore, I would not say using data is a district measure; it's dependent on the school where you work. It appears that this school is more focused on student outcomes because most of the teachers rely on their data.

This teacher's perception of the importance of the use of data may stem from the Reading First requirement to administer the OARS assessment every six weeks and develop an action plan based on the data. Another teacher shared, "I think it's been the focus of schools, especially those in the improvement phase, Title 1, or anything associated with No Child Left Behind, that has made teachers dig deeper and focus on the hard data." The analysis of this finding shows that although the school had its initial roots as an Accelerated School and focused on discovering solutions to the problem, the school evolved to using the inquiry model which emphasizes analyzing student data first to come up with solutions.

Fostered school improvement. Mr. Alba offered that the role of the teacher became solution-based by stating that "the teachers gave a lot of feedback …how to make it work better." An example he gave was when the teachers determined how the support teachers should be used for English language development instruction and teaming. Mr. Alba emphasized that the inquiry model for decision-making allowed him "to change whatever I needed to based on student data."

Some of the teachers provided examples of how their teams used inquiry to improve instruction in language arts and mathematics. In particular, one teacher stated that her grade level team member developed reading comprehension passages for the other teachers in her grade level to use and model with their students. She asserted "it showed a lot of improvement in reading comprehension for all of our classes." Another teacher stated "we talked about language arts instruction but we also had some math discussions with each other. We did it on our own and for our own benefits." Another teacher was elated about their grade level team's decision to teach the mathematics chapters out of order. She stated "we used the order we thought made sense so the children could build on concepts learned. After finishing this year, I feel the way we taught mathematics worked so much better and we got a lot more accomplished."

Another teacher felt the grade level collaborations led to an increase in student test scores, stating:

I felt that with all of our collaborations this year in our grade level teams, we saw our students' OARS assessment scores increase. I also felt my students did better in mathematics this year. I think part of it is attributed to the

sharing of ideas from teachers in this group. I benefited from this in a positive way.

Collaboration became the norm. One teacher stated "at this school, I am not involved in decision-making; however, we do it in our grade level team." According to her, the grade level team met weekly to check in, articulate where they were with the curriculum, and to discuss the efficacy of the current plan. She stated the weekly meetings were informal whereas the bimonthly meetings were formalized. One teacher expressed "this year, the fourth grade team was more cohesive. We can all see the difference that teaming makes, especially in mathematics." Another teacher stated:

I think the synergy that happens when you are sitting in a collaborative group is what makes the difference. Everybody's voice, both new and veteran teachers, is brought to the table. New teachers have a different eye and present new ideas. They have ideas that sometimes veteran teachers say "I am too tired. I am not going to do that one." The synergy that is created gets everybody thinking outside the box. It raises the level of teaching in all the classrooms. My experience has been that participating in a collaborative team raises my teaching and the teaching of everybody in the group.

One teacher shared that although collaboration is the norm at the school, it's evident when a teacher is not being a team player or participating in the grade level collaborations. For instance, she shared that it shows in the way that teacher's classroom looks or in the way one participates in the meetings. Reflecting on the concept of teamwork and collaboration, she stated "I think people know that one cannot survive on his/her own anymore," and expressed that the administrator looked at team participation in his evaluations of staff members. Further, she noticed that some of the veteran teachers who were reaching the end of their teaching careers

reflected the sentiment that they did not need a newer method of teaching, because they had been teaching forever," and emphasized that it became obvious in the way they delivered curriculum.

Mr. Alba shared that the teachers engaged in feedback and reflection in their collaboration meetings. He said "they would come together and ask how they could serve the needs of this child. They looked at their students' groupings and figured out what was working or not working and made some decisions about it." He noticed that the teachers shared a sense of collective responsibility and accountability for student learning and that they reflected on ways to make the educational process work better. Mr. Alba stated "I think this year they figured it out that the team shares students. Teachers at open house presented themselves as a team....It was about breaking away from the traditional *my kids, my students* to *we all share this.*"

Further, he stated that teachers understood the school was held accountable for results; however, they didn't understand that asking questions and looking at data was about serving children to ensure they were successful in the future. For example, he summarized

It's not just a No Child Left Behind thing to assess kids. This is about serving all children. It's not about whether you pass the test; it's about our kids making it. Are they on their way to a successful life? It's a big issue.

Mr. Alba also noticed that the teachers moved from sharing ideas to implementing them in their collaboration meetings. For example, he stated "you will see a grade level team say 'let's try this' and they will try it." The teachers looked at student work products and had conversations about them. Mr. Alba felt the teachers

engaged in higher level conversations over time but cautioned it was highly dependent on the teachers in the grade level team.

Status as a program improvement school. Some of the teachers shared how the pressures and the stress associated with being a program improvement year-five school have possibly thwarted reform efforts in their school. Their school is the first school in this Southern California School district to undergo a major restructuring that includes hiring a new principal and staff members for the following school year. They felt this rigid response to a lack of improvement in test scores has hindered progress in the school and opportunities to be creative.

## Leadership Behaviors

This section presents the findings to address the third research question, specifically, how principals and teachers perceive their principal's behaviors may have changed from participating in the district's initiation of an inquiry process. The staff members' perceptions of Mr. Alba from the Harris surveys (see Table 4.6 below) administered in both 2003-04 and 2005-06 remained generally positive; highlighting three areas in particular. Firstly, when the staff members were asked "Does your principal ask for your suggestions/opinions?," 76.6 percent responded favorably in 2003-04, increasing slightly to 77.3 percent in 2005-06. Secondly, in response to the question, "Do teachers/staff have a say in school policies that affect them?," 73.5 percent responded positively in 2003-04; however, there was a dramatic increase in 2005-06 where 88.6 percent responded favorably. Thirdly, when staff members were asked about teacher/staff involvement in decision-making, 62.8% gave the school an A/B net rating in 2004 and similarly, 62.5% responded with the same

rating in 2006. This data suggests that while staff members agree that Mr. Alba created more opportunities over time for them to have a voice in school policies that affected them, staff members did not feel included in the final decision-making. The data also suggests that Mr. Alba remained consistent during his tenure with respect to asking staff members for their suggestions and opinions.

Table 4.6. Comparison of Harris Interactive Survey Results from 2004 to 2006

Principal Standard	Questions Asked	2004 Results	2006 Results
Standard 1C, Implementation Change Process	• Teacher/Staff rating – "Are you an important part of your school?"	• 93.7% of the teachers and staff felt they were an important part of the school	• 93.2% of the teachers and staff felt they were an important part of the school
Standard 2D, Develop a culture of inquiry	<ul> <li>"Are you challenged to continually improve?"</li> <li>Teacher/Staff</li> </ul>	• 95.7 % of the teachers felt they were challenged to improve	• 92.9 % of the teachers felt they were challenged to improve
	involvement in decision- making?	• 62.8% of teachers rated their school an A/B net for overall involvement in decision-making	• 62.5% of teachers rated their school an A/B net for overall involvement in decision-making
Standard 4B, Shared Decision Making	<ul> <li>"Do Teachers / Staff have a say in school policies that affect them?"</li> <li>"Do Teachers / Staff Demonstrate Collaboration / Team Work?"</li> <li>"Does principal ask for your suggestions?"</li> </ul>	<ul> <li>73.5% of the teachers stated they have a say in school policies that affect them</li> <li>98% stated teachers/staff demonstrated collaboration/te am work</li> <li>76.6% stated principal asked them for suggestions</li> </ul>	<ul> <li>88.6% of the teachers stated they have a say in school policies that affect them</li> <li>95.5% stated teachers/staff demonstrated collaboration/te am work</li> <li>77.3% stated principal asked them for suggestions</li> </ul>

Mr. Alba noticed a change in his own leadership behaviors as a result of implementing the district's decision-making frame. He shared that he now provides supportive leadership, asks teachers to look at data to make more meaningful

decisions and expects teachers to reflect. He also reported that he asks questions and also coaches teachers to become better at their instructional practice. Mr. Alba shared that he has a strong focus on students and improving achievement. According to Mr. Alba, specifically at OCE, he implemented the inquiry process, established nonnegotiables to create an equitable experience for all students, and practiced moral leadership.

Provided supportive leadership. Mr. Alba defines his role at OCE as setting the stage for mobilizing the district's decision-making frame, by providing the teachers with information, examining student needs, and enabling teachers to learn different methods to meet students' needs. During his interview, he stated "I am trying to provide the information, background and support to say it could happen." Mr. Alba also provided the teachers with resources to support their work; for example, he stated that he bought the curriculum for second grade and vocabulary readers for second, third and fourth grade. Thus, he provided the teachers with the tools they required to support students in their learning efforts. Mr. Alba also realigned his budget to provide additional release time for teachers.

Asked teachers to look at data to make decisions. Mr. Alba shared that during his tenure at OCE, he expected teachers to review student performance data and present a rationale for moving a student to another classroom. He stated "I made sure they were not moving them because there were behavior problems or whatever reason that is not related to academics." He commented that when a teacher came to him, he asked them a lot of questions, frustrating the teachers that expected him to make a decision. Mr. Alba asked questions such as "What is your OARs data? How long

have the students been here and what interventions were implemented?" He expressed that one teacher told him "When I come to you, I want you to tell me the answer. I don't want more questions." As a result of his relentless questioning tactics, Mr. Alba shared that some teachers no longer came into his office. Mr. Alba adamantly expressed that if students are not achieving, then educators have to change the way they are serving students. He stated "The inquiry process allowed me to change whatever I needed to based on student data."

Expected teachers to reflect, asked questions and coached teachers. Mr. Alba shared an experience where he coached a teacher to improve her instructional practice. On one occasion, he interrupted the middle of a classroom lesson when he observed that the students did not understand the concept. He said to the students "This is a really hard concept. What if we looked at this? We'll go further into the lesson." Mr. Alba recognized a change in his own leadership behavior since he first came to Ocean Currents Elementary. He stated:

The inquiry process has allowed me to coach teachers. I didn't used to do that. I am starting to do this now because I can't let that teaching moment go by. One teacher said 'Wow, this is really cool to see it in action. We have discussed it but I never realized what you meant by that. I would come in so I am not overpowering the teacher. I say "Here's an idea, let's try this out, or I want to practice my teaching." I always tell that to the students in the classroom. I started coaching teachers because our kids are not achieving like they should. We've been observing, leaving feedback and wondering questions and have been working in collaboration. If you keep doing the same thing, you are going to get the same results. In the last two months, my associate principal and I have gone in and done some model lessons, particularly in the fifth grade, because they have had the lowest standardized test scores. We started to tell teachers we are going to come in and model some lessons. We looked at the data and they know it's not improving. We tell the teachers that we want to support these kids to really make some achievement. Let us come in and help you.

The teachers concurred that during their collaboration meetings, Mr. Alba prompted them, asked questions and provided them with suggestions.

Focus on students and achievement. The interview data revealed Mr. Alba's perception that he has a strong focus on students and academic achievement.

Offering an example, Mr. Alba shared a time when he met with his entire office staff at the beginning of the year. He wanted the office staff to understand why they had to change their procedures and routines to support students. In order to fit the needs of the students and thus increase instructional time, Mr. Alba asked the office staff to change their attendance-taking procedures, moving to a paper-based attendance procedure for teachers, which would later be entered into a data system by office support staff. Another example was when the teachers discussed flexible grouping of students by ability level, he reminded them that they could only handle three or four different groups in one day. He said "you have to look at what's in the best interest of children."

Principal had non-negotiables. On occasion, Mr. Alba established his non-negotiables for student learning. In strong opposition to gender or ethnicity-based student tracking, Mr. Alba worked with the teachers to ensure students were not tracked. He also created a culture where classrooms were open. He stated:

At our school, there is no option for not coming in. I hear at other schools the reading coach cannot come into the classroom. It's just not an option at Ocean Currents Elementary. There is an expectation that the teachers' classrooms are open. It is public property.

Practiced moral leadership. Mr. Alba practiced moral leadership by examining what is right for students. He stated:

Why are we doing what we are doing? If it's not working, then we need to do something different. Moral leadership fits right in with the student based decision-making model. It's moved how I've made decisions and I haven't done it perfectly. I had to weigh how I've made decisions. At first, teachers were not used to that is all, i.e. looking at data. They would do it but they were not used to it. We have seen that shift.

*Change in leadership behaviors.* Mr. Alba spoke candidly about how his leadership behavior changed as a result of using the inquiry process. He shared:

I used to look at the data and tell the teachers 'here is what is happening and here is what we need to do.' I told the teachers that I didn't have the exact answer but we exchanged ideas when working together. It's very exciting when everybody puts their heads together. I think teachers get excited about what they can do instead of me getting excited about what could happen. That's the "aha" moment of getting into the synergistic mode of "Wow, this is good. We can do that." The teachers took the lead. I gave them time and support to look at the data.

While the teachers agreed with some of Mr. Alba's perceptions of his own leadership behaviors, there were some notable differences. The teachers emphasized that Mr. Alba stated the school focus was supporting English language learners, but at times, he lacked a consistent and sustainable focus. The teachers also expressed he lacked the expertise to train them on the inquiry process, although he did give them opportunities to experience it in their weekly meetings. In addition to what Mr. Alba shared about his leadership behaviors, the teachers addressed how Mr. Alba fostered

team building, working together, and collaboration, and that he made decisions and was open and accessible. Two teachers shared:

I think decisions are made mainly at the front office, the district office, and through administration. I think teachers have a voice but I don't think it's a voice that is clear and affects the outcome. The student-based inquiry model on paper seems foreign to me. It does not seem to be what I noticed. It does seem like we are asked for input but I don't see it playing out. I see it left to higher powers. Most of the time, we do not have any notice until that same day.

One teacher found both the principal and vice principal to be easily accessible when she walked into the office to have a conversation with them. She said "when you share an idea, it may not get acted upon but they are open to hearing it. It may not result in any change or any further discussion but they are both open and accessible." However, another teacher said "I always feel like they are busy and I don't want to bother them."

Lacked consistent and sustainable focus. The teachers shared that while Mr. Alba did convey that the school focus was on English Language learners, his focus was inconsistent and there was little to no follow- through. The teachers attributed this to the possibility that Mr. Alba faced pressures in grappling between site needs and district mandates. One teacher expressed:

Since I have been here, I noticed the leadership and site-based decision-making team decided to do forty things rather than concentrating on one or two things that we could get good at. It's really all about leadership. I think in my eleven years in education, I have seen one strong leader and it wasn't in this Southern California School District.

The teachers' main wish was that there was a clear focus shared across the school, that they didn't work on more than two things at one time, and that everybody knew what was happening in the school. They noticed there was a collective energy when everyone was focused on one area.

Some of the teachers commented that the work of different committees waned or was dropped during the school year. For example, a positive culture committee was started last year whereby committee members met regularly over the summer to outline goals for their work. However, when the school year began, the committee began to meet less frequently, if at all. One teacher reflected that there may have been too many goals for this committee to sustain participation. Another teacher mentioned a technology committee that was also started, but did not meet frequently. The teachers also referred to a social committee that was started at the beginning of the year, but dropped sometime during the school year. In addition, another teacher started a mentoring program for students, with no follow-through. The teachers shared their frustrations with these initiatives that were started and subsequently dissolved. One teacher specifically stated, "I think there have been a lot of attempts but there is very little sustainability."

Training with inquiry. The teachers shared that most of the trainings during their Friday afternoon staff development meetings were inquiry-based. Mr. Alba gave them opportunities to use the inquiry process in their trainings. However, one teacher expressed:

I have only been here one year. I did not find the administration to be really strong in helping with the inquiry process. Fortunately, I think the people on this team have that ability. I don't think it's been modeled consistently. In

my one year of experience here, I find that I lead myself through it rather than the administration taking the lead on the inquiry process. Another teacher shared the same sentiment by stating 'Mr. Alba had no role with inquiry.'

## Mountainside Elementary

Mountainside Elementary (hereinafter, also referred to as "ME") also reflects the diversity represented in the case study district. ME has 551 students with an ethnic distribution similar to Ocean Currents Elementary. The student population is comprised of 75% Hispanic, nine percent White, six percent Filipino, four percent African-American, and less than three percent Asian, American Indian, or Pacific Islander. Approximately 42% of the total student population is designated as English Language Learners (ELL), 58% are eligible for free or reduced lunch, and 13% are students with disabilities.

While the school is *not* in Program Improvement, if it does not make Adequate Yearly Progress (AYP) targets for the 2007-08 school year in English language arts or mathematics, then it will be placed into program improvement for the following school year.

#### Mission

The mission at Mountainside Elementary is to educate students so they learn skills necessary to develop their best possible selves and a positive attitude toward others, develop enthusiasm for lifelong learning, develop the basic academic and technological skills necessary to live a productive life, develop personal concern for preservation of natural and human-made resources, and develop physically, intellectually, and morally.

#### School Plan

A review of the school plan showed that, for the 2007-08 school year, ME had established the following goals in language arts and mathematics. In language arts, the goal was to increase the percentage of students achieving proficiency or better on the California Standards Test in English language arts from 23.8% to 36% (+55 Students). The goal for English Learners (ELL students) was to increase the percentage of students reaching proficiency or better from 15.7% to 36% (+54 students). In mathematics, the goal was to increase the percentage of students reaching proficiency or better on the California Standards Test in mathematics from 33.7% to 40% (+28 Students). For ELL students, the goal was to increase the percentage of students reaching proficiency or better from 29.9% to 40% (+26 students). The CST data from 2007 may have been unavailable at the time this plan was written, as the plan appears to be based on 2006 data.

To implement the plan and accomplish its goals, ME developed an extensive school-based staff development plan, based on standards, reviewing student assessments and their performance, and differentiating instruction in language arts. The staff met with administrators and reading coaches as a group, in grade level teams, and individually to discuss methods for implementing effective instructional practices, meeting the needs of children who were not performing at grade level, and assessing students. In addition, the staff participated in trainings, workshops, and professional development sessions aimed at meeting the needs of students and planning effective instruction based on state standards.

For language arts, there was training in AB466, GLAD, RESULTS, writing assessment, best instructional practices, and data analysis to drive instruction.

Specifically, the professional development plan included:

- All staff had access to participate in the AB466 language arts training. K-3
  teacher training was paid for by the Reading First Grant. Training for teachers
  of grades 4-6 were paid for by Title 1 funds. 29 of the 37 teachers opted to
  participate in this training.
- Teachers in grades 3-6 were required to attend the district writing workshops for standards based writing strategies, use of rubrics, and examination of student work.
- All teachers attended biweekly grade level collaborations. Thus, every two
  weeks, teachers had approximately two hours to work together as a team during
  the school day. The team spent time analyzing classroom data, creating
  instructional plans for intervention, sharing best practices, and examining
  student work.
- Teachers met during Friday minimum days, which included whole staff, grade level, and vertical professional development.
- Some staff members participated in Community of Practice (CoP) meetings approximately four times per year to improve instructional practices for students.

In addition, 1-2 times per month, teachers met in lateral or vertical teams to discuss instructional issues, create school intervention plans, or learn instructional strategies specific to the needs of the students.

For support in mathematics a leadership team, consisting of six teachers, was paid from Title 1 funds to enroll in the AB466 math training during the summer. The same group participated in a follow-up math training session to guide their grade level teams. This included trimester collaboration, planning by grade level, and working with the district math resource teacher during collaboration and staff meeting times.

The plan outlined additional interventions in language arts and mathematics instruction for the students. For example, in grades 4-6, there were three language art support teachers who provided targeted instruction for students below level. In addition, the students most at need had a smaller student-to-teacher ratio for their language arts block and English Language Development instruction. The school also provided additional support for students new to the school, who had little or no English literacy. Students in grades 4-6 who were new to the school and had little to no English skills were clustered in a Newcomers class for beginning English instruction during the literacy block. Similarly, in mathematics, the students most at need had a smaller student-to-teacher ratio. In grades 4-6, an extra support teacher was provided for mathematics instruction during the afternoon math session.

Students who were new to the school had had little or no English skills were offered instructional materials and preview/review sessions in Spanish.

Some of the biggest barriers to student achievement at Mountainside

Elementary were related to the time devoted to grade level meetings, staff
development, and school-wide planning sessions. Substitute teachers were often
unavailable to release teachers for professional learning. In addition, the outlined

academic achievement goals require consistency of practice and time to implement the practices. As students and teachers become more familiar with the practices and processes, there is the potential for greater success. Additionally, the lack of technology at the school site proved to be another barrier to student achievement. Specifically, students were provided with outdated computers that were not capable of running current software programs that provided additional assistance in learning. The lack of a structured and well-articulated English Language Development (ELD) program, although ELD instruction is offered in most classrooms, also made it difficult for underperforming students to meet standards. Thus, students who needed additional help or a variety of services were removed from the classroom during other valuable instruction time. Additionally, the lack of professional development offered for all teachers in mathematics instruction was another barrier to student achievement. Further, the school lacked consistent and explicit instruction for students in specific areas of need.

Achievement Data

Table 4.7. School Academic Performance Index (API) from 1999-2007

Year	API	Statewide Rank	Similar Schools
1999	669	6	10
2000	664	5	6
2001	699	6	8
2002	701	6	6
2003	728	5	9
2004	705	4	4
2005	712	4	4
2006	714	4	4
2007	717	N/A	N/A

Table 4.8. Number of students who are Proficient or Advanced in California Standards Test, English Language Arts

Grades	2003	2004	2005	2006	2007
2	30	27	25	43	28
3	33	20	21	25	30
4	37	34	36	38	46
5	31	38	33	33	45
6	40	33	39	37	26
Overall	34	31	31	35	35
District	36	36	40	46	49

*Table 4.9.* Number of students who are Proficient or Advanced in California Standards Test, Mathematics

Grades	2003	2004	2005	2006	2007
2	40	41	49	54	45
3	30	32	47	47	49
4	51	49	47	60	60
5	54	54	56	45	52
6	54	42	51	44	40
Overall	45	44	50	50	49
District	42	44	52	56	58

*Table 4.10*. Number of students who are Proficient or Advanced in California Standards Test, 2007 by Subgroup

Subgroup	ELA	Math
Hispanic or Latino	33%	48.4%
Economically	24.2%	39.5%
English Learners	19.6%	36.9%
Overall	35%	49%
District	49%	58%

## School Improvement Efforts

During the 2006-07 school year, the school received \$83,000 in Title 1 dollars to support at risk students. In addition to Title 1 funding, the school also participated in partnerships with the Ball Foundation and Focus on Results.

Ball foundation. Mountainside Elementary was a Ball Foundation school, similar to Ocean Currents Elementary, described above. Its partnership with the Ball Foundation began in the 1999-2000 school year and lasted approximately eight years until the district formally ended its relationship with them in 2007. In 2002, Mountainside Elementary became a Cohort 2 partnership school with the Ball Foundation. As a cohort school, Mountainside received three years of intensive training from Focus on Results. Both ME and the Southern California Elementary District formed a relationship with Focus on Results to train the leadership team to collaborate more effectively to meet student needs. Focus on Results provided coaching and training for instructional leadership teams and held literacy academies for all principals.

Communities of practice. During the 2005-06 school year, Mountainside Elementary became a part of the Communities of Practice, comprised of four schools that met once per quarter to collaborate on new ideas. The four selected schools shared a similar demographic population and as a result, faced similar challenges. As a Community of Practice school, both the site teachers and principal participated in several meetings designed by district practitioners and Ball Foundation staff to learn

to build community within and across schools, to introduce new literacy content, and to dialogue about how to implement independent reading practices.

Mountainside Elementary Principal Background

Mr. Lang taught for seven years, was a technology coordinator for two years in another district, and is currently serving his fourth year (2007-08) as principal at Mountainside Elementary. He began as principal at ME during the 2004-05 school year. Because Mr. Lang entered this district from another district, he did not receive any formal training in the district's inquiry process. During the 2005-2006 school year, ME became a Communities of Practice school. Thus, Mr. Lang participated in several professional development meetings designed by district practitioners and Ball Foundation staff to learn about building community within and across schools, literacy content, and independent reading practices.

One of the teachers I interviewed shared some historical background about Mountainside Elementary. Prior to the 2003-04 school year Mountainside Elementary had a principal for many years. According to the teacher at the school, the staff was very unified and focused on improving student achievement in the area of writing. When the principal left in 2003 for a sabbatical, another principal was hired for the 2003-04 school year at Mountainside Elementary. The teacher felt the school focus changed from writing to reading and leveling classroom libraries. She also shared that the school staff was divisive and had decreased morale. After one year, the new principal left and subsequently, there were five principals filling in during a short-term period before Mr. Lang was appointed principal in October 2004.

The teacher shared that Mr. Lang's first priority as principal was building relationships with the staff members because they were so fractured from the rapid change in administrators. For his first three years at Mountainside Elementary, Mr. Lang familiarized himself with the history, culture, students and families at the school. At the end of the 2006-07 school year, the staff members focused more on student achievement; they looked at data and determined next steps. The teacher also shared that this newfound emphasis on student data and improving student achievement may have resulted from pressure from the district office because of declining performance on the California Standards Tests and the threat of moving into program improvement status. The diverse perspectives among the teaching staff, comprising varied age groups and experience levels, proved to be one of the biggest challenges for Mr. Lang. When Mr. Lang asked the teachers to look at test scores, some of the teachers felt challenged. However, Mr. Lang used the data to bring everyone together and get them focused on improving student achievement.

ME Principal's Definition of Inquiry

The next sections present the findings to address the first research question in the study - determining how the principals and the grade level team members perceived the implementation of the district's inquiry process in their schools.

When shown a chart of the four questions in the inquiry model, Mr. Lang indicated that he felt the inquiry process developed organically in his school, by stating:

I don't remember anything so formal that it had the title of "student-based" decision-making when I attended staff development. However, all of our staff

development at the school is based on this process of making sure our students are learning, it's done in an ethical way, and that all people are involved. It was nothing so formalized that we could say we had a lot of training on that specific facet of education.

Thus, while he was not aware of a formal inquiry process, Mr. Lang defined the inquiry process as insuring students were learning, it occurred in an ethical way, and that all stakeholders were involved.

#### ME Principal Sets into Motion Inquiry Model

Mr. Lang shared a time when the instructional leadership team (ILT), created as a result of work in collaboration with the Ball Foundation since 1999, used the district's decision-making frame. After the retirement of a resource teacher at the end of the last school year (2006-07), funds became available; Mr. Lang commented that he involved the ILT to discuss ways in which the school could put the additional monies to use. Based on interview data, it was noted that the teachers took a survey at the end of the 2006-07 school year, the results of which showed that a majority of teachers wanted release time for collaboration and planning. Mr. Lang expressed that the ILT engaged in a dialogue about the school's needs and determined one way to use the additional funds was to hire support staff to release teachers for increased collaboration time. According to Mr. Lang, there was sufficient funding to have collaboration meetings every other week. As a collaborative group, the ILT decided upon the number of support teachers required, the support teachers' roles when classroom teachers were released, the classroom teachers' responsibilities, and the purposes and outcomes of the collaboration meetings. He shared that he asked the

teachers questions such as "What is our objective? What is the bottom line ultimately? What is it that we want to accomplish?" Mr. Lang stated the ILT discussed ways to implement these ideas into action.

Mr. Lang also shared his responsibility was to take the information back to the School Site Council for their approval of the proposed use of funds. Mr. Lang stated "it was an inquiry-based process in that there was no definitive map that we had to follow....the decision was up to us and the staff members asked lots of questions." This finding illustrates how the principal used the ILT structure to set into motion the inquiry process school-wide and determine how collaboration time was implemented in the following school year (2007-08).

Mr. Lang recounted another time where he used the ILT to set into motion the district's decision-making frame. According to him, he involved the ILT in a discussion about the expectations for the grade level collaboration meetings so it was meaningful for staff members and improved student learning. He asked ILT team members questions such as "How are we going to keep people accountable? When we meet, will there be an agenda and, if so, who is going to create it? How do we assure that these meetings improve student achievement?" He also asked "What role will the ILT members play in this process? Will they take a leadership role in that collaboration time or will they participate as an observer? What are the expectations for the teachers during these meetings?"

According to Mr. Lang, the ILT members discussed who facilitated the meetings, the format for the agenda, methods for reviewing student work, and outcomes for the grade level team meetings. He shared that teachers serving on the

ILT decided they would facilitate the grade level team meetings initially, but over time, the responsibility was to be shared by everyone participating in the meeting.

Mr. Lang's expectation for the grade level collaboration was that everyone had input and an opportunity to facilitate the meetings. The ILT also decided that each grade level team would generate an action plan for their work. Based on a recommendation from the ILT, the principal and literacy resource teacher created the weekly agenda for the grade level team meetings.

Mr. Lang also shared that ILT members also discussed his role, as principal, in the grade level team meetings. The ILT determined that his responsibility was holding teachers accountable during their collaboration time by ensuring the meetings were aligned with school writing goals. He commented that the teachers were expected to use collaboration time to develop strategies to improve the students' writing skills and increase student achievement.

During Mr. Lang's interview, he shared that after the ILT engaged in the inquiry process they brought all of their ideas to the staff, in its entirety, for input.

The entire staff agreed with their suggestion to use the additional funds to buy support teachers to release teachers for collaboration time. Mr. Lang described the staff members' engagement in the inquiry process, as a whole, as a successful experience. He received positive feedback from the staff about having collaboration meetings every other week during the 2007-08 school year. Further, he shared that the teachers' role was deciding how to spend the funds so it benefited both staff members and students in the long term and to figure out ways to make the collaboration time work. He stated "everybody had a voice and an opportunity to discuss what they felt

was important in terms of how to spend the money." He noticed that the teachers valued additional time for planning and that there were funds available to this effect.

Mr. Lang shared that he always used the inquiry process to ask questions to engage staff members in ways to improve the school. He stated "although I know what I want in terms of answers, I think it's more effective when they derive or come to those same sorts of conclusions and implement the practices from there." He expressed that it's ultimately about improving student achievement. These findings indicate that he used the district's decision-making frame to address question (1), namely how the decision improves student learning. He also addressed question (3), specifically, whether there is an adverse impact on others by getting input from stakeholders, particularly staff members, about decisions that affected the entire school.

# ME Teachers' Definition of Inquiry

When shown a chart of the four questions in the student-based model for decision-making, most grade level teachers had never seen it before. One fourth grade teacher stated "the only way I heard inquiry used is during a partnership with the science center. We participated in inquiry- based learning. I never heard of it, had any training in it, or heard the district bring up inquiry-based decision-making." One second grade teacher, who also participated in the ILT meetings, shared that it was used in their meetings. However, she did not know if it was used during the parent or the English Language Advisory Council (ELAC) meetings. She also shared that they did not use this process explicitly in the School Site Council meetings and that although they discussed ways to improve student learning, they typically did not

discuss how decisions impacted others. Thus, the findings from interview data seem to suggest the impact on others may have been implied and not explicit.

ME Teachers Set Into Motion Inquiry Model

When grade level teachers were asked how this model made a difference in student achievement at their school, one second grade teacher stated that she had not seen any evidence that it made a difference. While she saw progress in her students' writing, she did not see evidence of the impact on the standardized test administered in the spring. Another teacher shared that it seemed like the model was only used to improve student learning in writing, noticing that her students from the current year (2007-08) are better writers than her students from the previous year (2006-07). She also shared that the students' writing improved, but teachers were still struggling to see results in the other subject areas. Another teacher stated that they were moving in the direction of the inquiry model because they met in grade level teams and used the inquiry process to look at results from the formative assessments to determine areas of need. She stated "we are moving in the right direction but we are not there yet." Many of the teachers in that grade level perceived that they did not use the district's decision-making frame; however, the findings seem to suggest they internalized elements from it such as the focus on improving student learning.

One teacher shared that the decision to use the OARS data as a formative assessment came about during the 2006-07 school year (from the ILT, as discussed below) because achievement scores were not increasing, the grade level teams were not working together, and some teachers were experiencing great results with students while others were not. The test was administered to students every six to eight weeks

and allowed teachers to quickly ascertain their student's reading comprehension levels. She shared that the staff members reviewed the results by grade level at the whole staff meeting. She asserted that Mr. Lang wanted the teachers to increase the number of students who were performing at or above proficiency.

After the whole grade level presentation, Mr. Lang distributed scores to each teacher for his or her own class. Each teacher sat with his or her grade level team to collaborate and determine which strategies were working. She expressed that the teachers talked to each other differently compared to the previous school year. The teachers interpreted the OARS color bands, red showing students who needed intensive support, yellow displaying students who were near proficiency, green showing students who were proficient and purple representing students who were above proficiency. The teachers evaluated the color bands and determined they needed to shrink the red band. They moved from analyzing color bands to looking at student percentages. From this analysis, the teachers concluded that the percentages in the area of writing were very low. One teacher noted that, as a result of this process, writing became a focal point for the school. Thus, these findings indicate that teachers were addressing question (1) of the district's inquiry model, namely, how the decision improves student learning and question (3) of the district's inquiry model, namely, whether there is an adverse impact on others, by analyzing data as a way to get grade level teams to work together to inform instruction and improve student learning.

*Instructional Leadership Team (ILT)* 

Mr. Lang expressed that the instructional leadership team (ILT), which had been in existence for at least seven or eight years, used the district's decision-making frame. As described above, he shared that the ILT formed as a result of the school's work with the Ball Foundation; its function was to foster school-wide decision-making. Specifically, the team discussed ideas, brought them back to the whole staff, and insured everyone supported the proposed ideas. The ILT is currently comprised of nine staff members including at least one teacher from each grade level, a special education teacher, and a literacy support teacher. The role of the ILT is also to disseminate information to the staff and discuss ways to improve the grade level collaboration meetings or the work of the school. Mr. Lang shared that the instructional practices implemented by the entire staff are a result of the work of the ILT.

As mentioned above, one teacher shared that the decision to implement the OARS assessments evolved from the ILT meetings and that the ILT was responsible for presenting the idea to the entire staff. The ILT also provided the staff with examples of different assessments implemented in schools, a cost analysis, and results from other schools that had implemented OARS. She said the literacy support teacher was instrumental in performing the research to determine the best formative assessment to use. According to her, the ILT shared evidence that OARS was the preferable assessment to implement at their school but they wanted to get input from the other staff members. They didn't want Mr. Lang to come in strongly and state "we are going to use OARS and everybody is going to do it." She said that Mr. Lang

allowed the teachers to present their ideas. According to her, while some staff members were apprehensive because it meant changing their instructional practice and developing new ideas, most teachers supported it. The staff members implemented the OARS assessments during the second month of the 2006-07 school year.

One teacher shared that towards the end of the 2006-07 school year, some of the staff members were upset that only a chosen few attended the ILT meetings, which were held off-campus, at least once or twice a month. The ILT members were disenchanted with the frequency of meetings - one teacher shared that she was pulled out of her classroom constantly and the meetings were not valuable. She also expressed that there was not much to report back to the site and some of the topics were already studied and learned in teacher preparation programs. Some of the staff members referred to the ILT as the "elite" team. She shared that it was not just happening at her school but that staff members were disenchanted with the ILT in many schools. However, she noted that with the grade level collaborations that occurred every other week, it seemed the ILT members didn't attend as many meetings during the current school year (2007-08).

One of the teachers, serving on the ILT, shared that some of the teachers at the school did not know that the current year's school focus was writing. For example, one teacher shared that during the last school year, the staff members stated that while writing was the school's focus, there was staff development in English language development and reading comprehension that didn't correlate with that focus.

She also shared that some of the teachers at the ILT meeting did not know that this year's school focus was writing. As a result, the ILT focused on communicating that the school focus was writing, displaying evidence of writing around the school, having teachers model writing, and creating instructional objectives around writing. She emphasized that one message that came out strongly in one of the ILT meetings was that everyone had to know writing was the focus area. Another teacher shared that the ILT meetings were not always aligned to the grade level collaboration meetings at the school and had been much broader in focus in recent months. One teacher stated "we don't make any decisions by ourselves at the ILT. We always bring it back to the whole staff."

At the end of the 2006-07 school year, the ILT conducted a walkthrough of classrooms in the entire school and looked for evidence of writing. One teacher shared that although the ILT meetings had a focus, there was little follow-through of what they discussed. However, she noticed a difference this year since they were working with the Targeted Leadership consultants (TLC). She felt they were more focused and stated "with TLC, we focus on what Mountainside needs." The TLC worked with the ILT members.

Mr. Lang shared that while the ILT did not meet for several months during the current school year, for future meetings, he wanted the ILT to discuss ideas on displaying or collecting student work to present to the whole staff. Mr. Lang shared that students generated many written products and the next step was for the team to review how teachers provided feedback to their students. He said the goal was for students to edit and revise their writing independently.

## Supports Inquiry Process

Mr. Lang described some conditions that supported the district's decision-making frame. He created a collaborative environment at the school site and used funding to support the process.

Principal created a collaborative environment. According to Mr. Lang, during the 2007-08 school year, the teachers met every other week in their grade level teams from 10:30am to 2:15pm, or, the end of the school day. A different grade level team met each day of the week, except on Fridays. On Fridays, the support teachers prepared their lesson plans for the following week.

The focus area for the collaboration meetings was writing. The teachers were expected to contribute writing samples from prompts they agreed to administer to the students as discussed in the previous collaboration meeting. The teachers shared the writing samples with each other and provided written *warm* and *cold* feedback. After the teachers finished providing feedback for each of their classes, the two to four teachers in the grade level teams took turns sharing their feedback aloud while one teacher charted it. Mr. Lang shared an example of the process:

If there were seven things on the chart that were in the *cool* feedback column and two of those were concerns everybody shared, then the grade level team members worked on those areas the following one or two weeks. For example, the teachers stated 'We are going to work on punctuation because it was a problem throughout the grade level.'

Mr. Lang shared the teachers then created an action plan indicating methods to help their students improve in the area of punctuation through practice activities or implementation of instructional strategies, with guidance from the language arts support teacher. Mr. Lang participated in the grade level collaboration and asked teachers how they measured progress. The teachers incorporated a measurement tool into their action plan; they assigned a written prompt to the students at the end of the two weeks to measure the effectiveness of the strategies outlined in the action plan. Mr. Lang shared the difficulty in creating a measurement tool that quantifies writing. To this end, he stated "does one state 8 out of 10 or 80% of the sentences will be error-free in the area of punctuation?" He shared that he pushed the teachers to quantify student learning using data because it's relatively simple to look at a paper and say "it's good and better than before." Mr. Lang encouraged the teachers to use some measure of progress so they knew, with certainty, whether the results were effective.

In the afternoon session of the grade level team meeting, the teachers developed writing-oriented focus questions that they posed to students. The questions integrated across the subject areas of math, social studies, and art. In the last 45 minutes of the collaborative planning time, the grade level teachers planned curriculum, worked on their teaching schedules, or worked on rotations with other teachers. Mr. Lang shared they sometimes visited other classrooms and discussed what they learned from the observation.

Mr. Lang stressed that grade level collaborations at his school allowed teachers to use the inquiry process. Every grade level met to review student work and develop action plans. Mr. Lang allowed the grade level teams to formulate their own goals. For example, he stated:

Second-graders might have errors with punctuation and third graders may have problems with descriptive sentences. Instead of expecting all the grade levels to work on punctuation, I allowed them to determine the greatest need based on the student work they brought to those meetings.

The teachers concurred with the Mr. Lang's view that he created a collaborative environment at the school. The teachers felt they collaborated all the time.

Budget. There were additional funds available this school year that allowed the teachers to spend time collaborating bimonthly where they could implement the student based model for inquiry. Mr. Lang used the additional funds to hire four support teachers as long term substitutes contracted for 150 days for the entire 2007-08 school year.

### Barriers to the Inquiry Process

According to Mr. Lang, during the 2005-06 and 2006-07 school years, collaboration time was minimal because he did not have the funds to release teachers. The teachers were only released four days last year, once every nine weeks, for planning. Furthermore, the dates the teachers met were highly dependent on the availability of substitute teachers. The teachers developed their own agendas for the release day but it usually did not align with overall school goals. Although the teachers used the time for planning, Mr. Lang shared that the time was not used very effectively for helping the school meet its goals. During the school year, the teachers often planned on their own time, after school, or during their lunch hour. Thus, the lack of funds and time for planning inhibited inquiry.

Perceptions of How Inquiry Influenced Their Own Learning

The next sections presents the findings to address the second research question, specifically, the principals and teachers perceptions of the effectiveness of the inquiry process on their own learning. Mr. Lang and the teachers shared ways the district's decision-making frame influenced their own learning. The principal and literacy support teacher conducted walkthroughs and talked to students as part of that process. They looked for evidence of writing and questioned if it was not in the classrooms. He noticed the teachers engaged in more feedback and reflection.

Teachers engaged in feedback and reflection. Mr. Lang shared that the inquiry process allowed the teachers to be more thoughtful in their actions during their grade level collaborations. He stressed that the teachers pondered over issues, asked questions and discussed ways to improve student achievement in the area of writing. For example, Mr. Lang stated "If punctuation is the problem, it's not like we could pull out a punctuation book, go to page 15 and the problem is fixed." He said the teachers often felt frustrated and challenged simultaneously because they tried something that did not work, reassessed why it didn't work, and figured out a different solution or approach for the classroom.

One teacher shared how the grade level collaboration meetings helped her own learning. She expressed that she did not do an effective job teaching her students descriptive writing last year. As a result of engaging in the inquiry process with her grade level team, they decided they would teach the students a code or song to get them to write a descriptive paragraph. The team discussed the important components of a descriptive piece of writing such as an introduction, conclusion and elements

from what can be seen, heard, felt, and touched and created an interactive song to engage the students in their learning. She commented that this evolved from something that was not successful last year and thinking about how it could be more successful with the support of the grade level team.

Another teacher who was teaching second grade for the first time this school year shared how the grade level collaborations helped her. She conveyed that she did not know what proficient writing looked like for the second grade. She told her students to write something and was surprised by the written product she received. She expressed that the grade level collaborations allowed her to dissect student needs with her team members. They taught her ways to evaluate student needs and re-teach concepts based on those needs. She said that participating in the grade level collaborations allowed her to better understand the standards for second grade and her students' needs.

One teacher shared that she changed the way she taught as the year progressed based on input from her colleagues who were getting better results with their students on the OARS assessments. She stated that in their grade level collaborations, the teachers reviewed their OARs data and made adjustments on their instruction based on those results. She shared that the teachers were held accountable to turn in their results to Mr. Lang. Another teacher who taught kindergarten, fifth grade, and now was teaching fourth grade shared that by analyzing the OARS data with other teachers, he learned strategies from those who had achieved improved results in their classroom. He stated:

It was easier to move into teaching another grade level, especially for newer teachers, when we used the OARS assessments. As a teacher, you know the strategies you use to improve reading in the second grade were going to be the same as those in the fourth grade, just at different levels.

Another teacher shared "My first year in fourth grade was easier for me than my first year in fifth grade because of the OARS assessment." He commented that he now understood what to accomplish at the end of a unit before administering the OARS assessment. He explained that when he taught fifth grade, there were some differences in the way the grade level teachers taught. When he didn't have the OARS assessment as a tool, he expressed that he did not know the curriculum well enough to understand what he was supposed to teach the students at the end of six weeks. Another teacher iterated that they sat down, looked at the standards and felt overwhelmed. As new teachers, they did not know where to start, if they were addressing the standards, and if students understood and retained their learning. The teachers shared that a veteran teacher had her whole year laid out and couldn't explain what she did to new teachers. With the OARS assessments, the teachers knew what the students would be tested on and what they had to teach them. In summary, the process of collaborating with stakeholders and engaging in reflective questioning about the data indicates the teachers were addressing questions (1) how does the decision improve student learning in the district's decision-making frame and (3), is there adverse impact on others.

Perceptions of How Inquiry Influenced the School's Work

The next sections presents the findings to address the second research question, specifically, the principals and teachers perceptions of the effectiveness of the inquiry process on the school's work. The findings show that the school's relationship with the Ball Foundation, Focus on Results, and Targeted Leadership and utilization of the district's decision-making frame adopted by the school board in 1998 influenced the school's work. At the school, collaboration became the norm, there was a strong focus on student learning, and teachers led site-based staff development.

Collaboration is the expectation. One of the teachers shared the district's decision-making frame was used all the time in their collaboration and whole staff meetings. She shared that the teachers always analyzed student work and developed ways to improve student learning. One teacher shared an example of a grade level collaboration meeting at the beginning of this school year. She shared the teachers on her team found many students who were having difficulty with run-on sentences. The grade level team members met to develop an action plan to support the students in that area. The action plan stated exactly what they were teaching, ways they would teach it, and the resources to be used. They reviewed student writing samples and observed some improvement after two weeks but it was not sufficient. After an additional two weeks of implementing their action plan, they saw a significant decline in the students' writing run-on sentences based on the assessment tool they created to measure progress. The teachers felt it was through their grade level collaborations that the students made progress. One teacher stated:

The collaboration days have been really beneficial. We didn't have them last year. It just seems that our teaching is much more focused and we are looking at student work all the time. We also go back and look at what's working or not working and if we need to re-teach it in a different way. I see a difference in the writing of our children compared to last year.

Another example a teacher shared was when her students were struggling with capitalization and punctuation. The grade level team created an interactive song with movements to teach the students about capitalization and punctuation. The teacher noticed the students imitating those movements and that it made a difference in their writing. She noted that the students no longer struggled with capitalization and punctuation.

One of the teachers shared her experience on the grade level team. At one of the grade level collaborations this year, she said the second grade teachers conducted walkthroughs of first and third grade classrooms as well as an upper grade level classroom. During the walkthrough, they looked for evidence of rigor in writing and focused on the writing expectations across the different grade levels. They also looked for similarities in classroom environment such as if all classrooms had word walls or student work displayed. Additionally, they looked for evidence of collaboration such as similar posters on the classroom walls. The teachers concluded they observed more evidence of collaboration and modeled writing in the primary grade classrooms than the upper grade classrooms. For example, they saw evidence on the walls of the primary grade classrooms that the teachers were working on the same thing and the learning objectives were also posted.

One teacher commented on her experiences from last year without the grade level collaboration meetings. She stated that even though there were four second grade teachers, she collaborated with just one other teacher during their common lunch time. She expressed that she did not give it her full effort because it was time consuming to meet. She commented

I tried to get through it as quickly as possible. We looked at what we did last week and decided to do the same thing this week for the new concept we were teaching. Since we have had the collaboration meetings this year, we get a lot deeper into our work. Instead of saying "I think they got it now," we actually look at the work for evidence they understood the concept. If they demonstrated understanding, we move on. If they did not, we started over again, thought about reasons they didn't understand it and what we could do to help them.

She also admitted that they crammed through the entire district reading series so the students would perform well on the OARs formative assessments last year. She realized a change in her own behavior. She felt she was more strategic this year about looking at student work and re-teaching concepts if students did not demonstrate they learned them.

Based on the interview data, the teachers seemed pleased with the systemic and consistent structures in place this year with the grade level collaborations occurring every other week. The teachers shared the contrast from the previous school year (2006-07) when they met only once every nine weeks with their grade level team. They commented that the principal came in during the morning and covered information and the agenda for the remainder of the day was left for them to decide. They used the time to develop a focus for each subject area and plan the curriculum for the entire school year. In addition to the grade level collaborations, a

teacher shared that the home teams, which represented all grade levels and included classified and support staff, met during one staff meeting every month. However, the classified and support staff members did not attend.

Focus on student achievement. Mr. Lang supported the district's decisionmaking frame with his strong focus on student achievement. He insured that the school funds were used to benefit students and foster school-wide improvement. He shared that the whole staff agreed that modeling instruction was one of the key practices that would improve the students' writing. The teachers agreed to model writing, engage their students in shared writing, and facilitate interactive writing. Mr. Lang monitored this focus by conducting instructional walkthroughs. During his walkthroughs, he found evidence that the teachers modeled writing in their lessons. For example, in some grade levels, he saw charts on the wall and posters with an interactive writing activity which the teachers stated they would accomplish in their action plans. However, he did not find all of the teachers incorporated modeled writing in their lessons. Mr. Lang expanded the thinking of his staff members by asking "Do you see evidence of your action plans? How do students access learning if it's not visible to them?" Some of the teachers responded by saying the students accessed learning tools in their writing folder. While conducting classroom observations, Mr. Lang observed that students were not accessing the learning tools as much as teachers anticipated. Therefore, Mr. Lang expected the teachers to show their work on chart paper rather than use the overhead projector so the charts could be posted on the wall for students to access them. Some of the teachers responded but others did not. Because the teachers agreed to implement their action plans, Mr. Lang showed some of the teachers examples of classrooms where the information was posted for students to access throughout the day. Mr. Lang maintained the strong focus on improving student learning and reinforced that the district's decision-making frame allowed the staff to make decisions that were in the best interest of students.

Teachers led staff development. One of the teachers shared how the staff members used the student-based model for inquiry in their whole staff meetings to decide upon areas of need school-wide. She conveyed that based around the area of need, the literacy support teacher or a district staff member provided some staff development. During their staff meetings on Fridays, she shared that the principal and literacy support teacher asked teachers who were strong in certain areas to present strategies they knew were best practices in their classroom. She shared that they emulated this practice from work they had done with the Ball Foundation where teachers on the ILT from many schools presented their best practices. One teacher stated "Teachers and principals are on the same plane. That's why Mr. Lang sat back a lot and let the teachers present." In summary, the inquiry process allowed for collaboration to become the norm, a strong focus on student learning, and teachers to lead site-based staff development at Mountainside Elementary.

#### Leadership Behaviors

This section presents the findings to address the third research question, how do the principals and teachers perceive their principal's behaviors may have changed from participating in the district's initiation of an inquiry process.

The Harris surveys (see Table 4.11) were administered in both 2003-04 and 2005-06 to show the staff members' perceptions of their principal. It is important to

note that the data from 2005-06 only applies to Mr. Lang since he became principal in October 2004. When the staff members were asked "Does your principal ask for your suggestions/opinions?," 96.9 percent responded favorably in 2005-06 compared to the data for the previous principal from 2003-04 where 92 percent responded favorably. In response to the question, "Do teachers/staff demonstrate collaboration / team work?," 96.8 percent responded positively in 2005-06. This data suggests that the majority of staff members felt Mr. Lang asked for their input and fostered collaboration and team work.

Table 4.11. Comparison of Harris Interactive Survey Results from 2004-06

Principal Standard	Questions Asked	2004 Results	2006 Results
Standard 1C, Implementation Change Process	• Teacher/Staff rating – "Are you an important part of your school?"	• (N/A) of the teachers and staff felt they were an important part of the school	• 96.9% of the teachers and staff felt they were an important part of the school
Standard 2D, Develop a culture of inquiry	• "Are you challenged to continually improve?"	• 96.2 % of the teachers felt they were challenged to improve	• (N/A) of the teachers felt they were challenged to improve
	• Teacher/Staff - involvement in decision- making?	• 86.1% of teachers rated their school an A/B net for overall involvement in decision-making	• 84.4% of teachers rated their school an A/B net for overall involvement in decision-making
Standard 4B, Shared Decision Making	<ul> <li>"Do Teachers / Staff have a say in school policies that affect them?"</li> <li>"Do Teachers / Staff Demonstrate Collaboration / Team Work?"</li> <li>"Does principal ask for your suggestions?</li> </ul>	<ul> <li>96% of the teachers stated they have a say in school policies that affect them</li> <li>(N/A) stated teachers/staff demonstrated collaboration / team work</li> <li>92% stated principal asked them for suggestions</li> </ul>	<ul> <li>(N/A) of the teachers stated they have a say in school policies that affect them</li> <li>96.8% stated teachers/staff demonstrated collaboration/ team work</li> <li>96.9% stated principal asked them for suggestions</li> </ul>

Mr. Lang noticed a change in his own leadership behaviors as a result of implementing the district's decision-making frame. Although he was never formally trained in using the inquiry model, he became a principal in 2004 when it seemed to be embedded in the district's culture. He shared that he improved at holding staff

members accountable. He also asked many questions, expected his staff to reflect, and asked for feedback from his peers as well as other staff members. He emphasized his strong focus on student achievement, his open and supportive nature, structured approach and utilization of shared decision-making as his leadership behaviors.

The teachers also agreed that Mr. Lang held them much more accountable by expecting them to turn in action plans and by conducting instructional walkthroughs to observe instruction. They also noticed that Mr. Lang asked lots of questions. The teachers agreed that Mr. Lang maintained the school's instructional focus on writing. They also felt he was a facilitator, modeled his beliefs through his actions and used data to inform his work.

Accountability. Mr. Lang emphatically believed that one of his main roles as principal was holding people accountable. He stated "During those meetings, I made sure there was a measure of accountability for our work and that it wasn't going to be an opportunity for them (teachers) to just meet and plan whatever it is they wanted to plan." He shared that he is much more aware of the importance of accountability as a leader. He felt that although his teachers were very professional, his role was to follow up and hold people accountable. He noticed his leadership behavior changed over time and it was critical for him to hold his staff members accountable. He felt that the teachers realized it was a lot of work meeting in grade level teams and being held accountable for implementing their action plans but saw the rewards in student learning. Mr. Lang stated the increased accountability this school year has caused more stress but the teachers were not asked to do anything different. Mr. Lang shared

The accountability is more challenging for some teachers, especially those who were used to a looser structure. I refer to the inquiry process by emphasizing to the staff members that the decision was something that we discussed, everybody had a chance to give their input, it was the best course of action, and everybody agreed to it. The teachers asked for increased accountability because they felt it was not high. I promised them that the accountability would be greater and I would follow through. My leadership behavior has changed as evidenced by the structure and accountability now in place.

One teacher agreed that Mr. Lang's follow through with his actions improved this year. She stated that last year, some teachers tried things while others did not. She further noticed that this school year, it was communicated to all the staff members that they were expected to implement an innovation because the staff decided it was effective. She felt the teachers were held accountable for showing evidence of student learning. She stated the teachers were expected to write action plans in their grade level collaborations and turn them in to Mr. Lang. They also had to create assessment tools to measure student progress. One teacher stated

It's just human nature. If you are not held accountable, a lot of people are not going to do it. Mr. Lang said "I want to see evidence that you have tried one of these new strategies when I come through your classroom." He is holding people accountable and I think that is why the follow through and success are greater. People are trying new things now and experiencing that it really works. All they had to do was try it but being held accountable is making them put in the effort.

Asked for input from peers and staff. Mr. Lang received feedback from four other principals in his district. He met formally with his principal peer group about once every month and communicated with them informally on the phone or through email a few times every week. The principals shared their strategies for increased collaboration time and holding staff members accountable. Mr. Lang felt the action plan his teachers developed was one of the most structured ones in the entire district.

He shared that the principals in his group helped him create that process. Mr. Lang also shared that a consulting firm working with schools in the district, Targeted Leadership, also shaped the process by posing inquiry questions to the ILT to get them to share what they wanted to accomplish, how it would get done, and how individuals were held accountable.

Mr. Lang shared that he created opportunities for all voices to be heard at his school. Mr. Lang expressed

The feedback I have been getting this year has been positive overall. I would say that was one of our success stories. Everybody had a voice or an opportunity to discuss what they felt was important in terms of how to use the money...in other words, what will improve our school long-term and benefit the staff and students was one of the questions posed to the teachers on the ILT.

Mr. Lang shared that he always strived to make decision-making a shared process rather than telling people what to do. He stated "I have access to the bigger picture more often than they (the staff members) do, but I always try to present it in a way that allows them to give input."

He shared an experience he had with a grade level team at his school about learning environments. He shared that he did not like the way they set up their classroom learning environment. Therefore, he took the grade level team members to visit a school where the teachers in their grade level had learning environments conducive to student learning. He told the grade level team to focus on the environment and the resources the students had access to in the classroom. After they

finished observing classrooms, Mr. Lang asked them, "What did you think? Is there anything we should talk about? I'd like to know if there's a reason why we wouldn't want to have our rooms like that." One of the teachers responded "Are you really sure that you are open to our opinion about the learning environment?" Mr. Lang responded back "I am absolutely sure. I want you to tell me why you would not want to have a room environment like the ones we observed." He conveyed that the teacher, in essence, said "If this is what you want, then tell us that this is what you want. If we really have a voice in this matter, we have some concerns about it." Mr. Lang heard the teachers concerns. Mr. Lang shared that after an open discussion, "the teachers agreed to make their learning environments look like the ones they observed because their reasons for not doing it were not compelling."

Asked questions and expected staff to reflect. Mr. Lang asked his staff members many questions. He stated

I am very uncomfortable directing people to do something at every corner. I feel like it's not going to really stick and hold if it's just me telling them to do something. Therefore, I ask questions and have them try to work it out. I know what I want in terms of answers but I think it's more effective when they come to those conclusions on their own and implement the practices. I use the inquiry process because the underlying question is how do we improve student achievement?

Mr. Lang shared that he used the term *wonderings* to pose inquiry questions to his teachers to get them to reflect on their instructional practices. For example, he would typically say "I wonder if students would have a good understanding of the objective of that lesson or I wonder if you considered using charts in your rooms as opposed to using only the overhead."

The teachers also concurred that Mr. Lang asked the staff members some reflective questions such as "Why are you doing that? What is the point?" One teacher articulated that Mr. Lang walked through the classrooms more than once a week and gave them feedback about their instructional practice by the end of the day. He asked questions such as "Why are you doing that? What evidence do you have that it's been successful? Do the students know why they are doing it?" She also shared that oftentimes, his feedback included praise for good work and he also posed a wondering such as "the consultant from Targeted Leadership Consultancy was wondering why this occurred." She emphasized that Mr. Lang also engaged the staff members in questions during their staff meetings on Fridays, grade level collaboration meetings, or through feedback he provided after the classroom observations.

Focus on student achievement. Mr. Lang felt he maintained a strong focus on improving student achievement in the area of writing. He shared that the overarching goal of every meeting was improving the student's writing and developing writing instruction. One second grade teacher thought the principal and the literacy support teacher determined the focus for the school. Interestingly, another teacher shared that she thought the school focus area was reading comprehension, especially since the staff members agreed to administer the OARS assessment last year. She said she was surprised when she came back at the beginning of this school year to find out the school focus area was writing. She stated "I felt like we did the inquiry process and it was thrown out the window." However, one fourth grade teacher thought the ILT met and determined the school's focus was writing because the writing scores were very low based on the CST data. She shared that out of the 44 schools in the district,

Mountainside Elementary scored 43<sup>rd</sup> on the statewide writing test. She shared the irony in this data because several years ago, the school was known as a *writing school*. She expressed that the ILT told Mr. Lang he had to explicitly state "writing is our focus." One teacher stated

We passed the buck because it wasn't clear to everyone that writing was our focus. If we had implemented site-based decision-making where we brought it back to the staff, they would have said "we did OARs and I thought reading was our focus." Everyone on the ILT agreed that writing should be the focus but Mr. Lang needed to explicitly state 'Repeat after me, writing is our focus. Your kids should know that writing is our focus.'

One teacher attributed the focus on writing to district pressure to perform since the school was on the verge of being in program improvement. Because Mr. Lang spent so much time developing relationships with the staff earlier in his tenure as principal, she said the staff members were ready to work together on an instructional focus. She emphasized some challenges the school faced with teachers of differing age and experience levels at the school. For example, she shared that when they looked at the OARS assessment results as a whole staff, some of the teachers felt attacked. According to her, many of the teachers struggled looking at the data because they perceived it meant using basal text or it felt like it was a Reading First school when it was not. She shared that another struggle was that some of the teachers wanted the freedom to teach according to what they felt was in the best interest of students. She stressed that Mr. Lang brought in the OARS assessments because he felt very strongly that it would get everyone on the same page.

One teacher shared that although they were still implementing the OARs assessments which focused on reading comprehension, there was much more writing

in the classrooms. She emphasized that when Mr. Lang conducts his walkthroughs, he looked for evidence of writing. Additionally, she stated the grade level collaborations that occurred every two weeks focused on writing. One teacher stated "That was more of a hands down principal decision. This year, it has been a lot more of his decisions about what's going on and his expectations." According to her, the ILT was not part of the decision-making process in some instances. For example, she shared the teachers received an email about writing their focus on the whiteboard but the ILT never met about that or discussed the value of it. She also said the teachers received an email about maintaining writing portfolios for each student but again that was never discussed with the ILT. She also expressed that the staff meetings last year focused on analyzing OARs data but shifted to a focus on writing this year. She mentioned some of the teachers were asked by Mr. Lang and the literacy support teacher to present writing strategies but the ILT had no part in observing those teachers or making the decision about who presented. They met only once this year and never looked at the data on writing. The findings suggest that the school's relationship this school year with Targeted Leadership consultants had something to do with the change in the focus area to writing and the principal's decisions at the school.

Open and supportive. Mr. Lang felt the staff members came in and shared with him all the time attributing it to his open leadership style. He asked them "Are you just talking to me? Am I a shoulder to cry on at this point? Is there an action that you would like me to take?" He asked these questions when the staff members came to see him. The majority of interactions between him and the other staff members

were through verbal and personal contact although he often sent the teachers feedback via email after conducting a classroom observation. He shared that sometimes the teachers responded back to him through email but they usually came into his office to talk to him about the feedback they received. The staff members concurred that Mr. Lang was open and accessible to them. One teacher stated the staff was very vocal and shared during staff meetings if something was on their mind. One teacher stressed that Mr. Lang was open to discussing whatever was working or not working in their classrooms. She also shared that Mr. Lang had an open door policy and informed staff members when he was on campus so they could meet with him.

Put structures in place. Mr. Lang examined how his own leadership behaviors changed since he became principal at Mountainside Elementary. He shared

At the beginning, I was a deer in headlights. I was overwhelmed and naïve. I didn't know how to start some of the things that we now have in place. I thought a lot of things would just happen on their own in terms of improving instruction and achievement. I realize now that structures had to be in place for the actions to take hold. During my first three years as principal, I assumed they (the teachers) planned effectively on their own with some guidance on my part. I thought I had to answer a few technical questions but I figured they could do it on their own and it would lead to better results. I realize that in order for real action to take place, structures had to be implemented and carried through.

Supported shared decision-making. During staff meetings, Mr. Lang stated that he allowed time for other issues or concerns to be discussed. He said he supported a consensus-based model where staff members were encouraged to support ideas for the benefit of others even if they disagreed with it. The teachers' views were in alignment with those of Mr. Lang about shared decision-making at the school. For example, one teacher shared an experience where Mr. Lang used shared

decision-making to determine the school-wide focus area. During a staff meeting, the teachers met in their home teams which were mixed heterogeneously across grade levels to evaluate student work. The teachers asked each other "What did you notice? What trends did you observe looking at the data?" They then proceeded to chart the trends in their home teams and decided on their top three priorities in the areas of writing, math, or a different subject matter. Each staff member reviewed the charts in a gallery walk. They came back together as a whole staff and discussed the trends they saw on every single poster. They asked each other "Was there something that stood out? Did everybody say they were having a hard time with grammar, punctuation, or complete sentences?" They used this process to determine their school-wide instructional focus on writing.

Facilitator who modeled his beliefs and used data. The teachers also shared additional insights about their principal's leadership behaviors. They felt he was a facilitator, modeled his beliefs through his actions and used data to inform his work. For example, one teacher shared that Mr. Lang typically assumed the role of the facilitator or process observer at grade level collaboration meetings. She said he kept the teachers focused on the topics in the agenda and meeting goals. She said he clarified things other people were saying to make sure the teachers understood what was occurring.

Another teacher stated that Mr. Lang's role was to present the data and tell the staff where they were headed. The teachers shared that he informed staff about the results from the OARS assessments and the areas that were lacking in those assessments. Another teacher shared that he created opportunities for staff members

to seek help from other staff members who were achieving success in the classroom based on the OARS assessments. She emphasized that Mr. Lang encouraged the teachers to try using the OARS assessments and if they didn't like it, they had the option of using a different assessment in the school. Mr. Lang stated "if this doesn't work for us, we'll find something else. Let's try it for one year."

Subsequently, she said each teacher was expected to meet with Mr. Lang and the literacy support teacher every six to eight weeks to review their classroom results. In these student monitoring sessions, the teachers explained why certain students needed intensive support, what they did for students who were above proficiency, and what they were doing to support students below proficiency. They also discussed who received small group instruction, how often it occurred, and what happened during that time. Mr. Lang questioned them by asking "what do you think is preventing you from getting these kids to succeed in your class? and "if it was a perfect world, what would you change to move these kids up?" These student monitoring meetings were very individual, structured, and focused on the OARS data. The teachers selected two focus students who were almost proficient on the CST. The teachers worked closely with them to push them to be proficient on the tests that school year. They discussed the progress of these two students during their monitoring meetings with the principal as well.

One of the teachers noticed that Mr. Lang was willing to do research and model a lesson when he observed that a teacher had to improve in an area. She shared an example of a time when he was conducting a classroom walkthrough and observed one of her lessons. He wondered how she was going to get all students

nvolved. Instead of just asking her "how do you get all students involved", he stated "let me do some research for you and I will come and model a lesson for you."

Comparison and Contrast of Ocean Currents and Mountainside Elementary Schools

Ocean Currents and Mountainside Elementary Schools both have similar demographics. Both schools have large Hispanic populations, 87% for Ocean Currents and 75% for Mountainside. Both schools also have significant populations of English Language learners, 57% for Ocean Currents and 42% for Mountainside. Both schools are located in socio-economically poorer areas with 92% free or reduced for Ocean Currents and 58% for Mountainside. Ocean Currents in is program improvement year five and Mountainside could go into program improvement if they do not make AYP two years in a row. The CST scores from 2008 will determine their fate.

Table 4.12. Comparison of School Demographics and Principal Tenure

	Ocean Currents	Mountainside
Principal	Mr. Alba: 2001	Mr. Lang: 2004
English Language Learners	57%	42%
Free or reduced	92%	58%

Principal and teacher perceptions of the inquiry process. The first research question, in what ways do principals and the grade level team members perceive the implementation of the district's inquiry process in their schools, is addressed in this study. The principal, Mr. Alba, from Ocean Currents received formal training in the inquiry process since he was an associate principal in 2000-01 and attended monthly meetings with the assistant superintendent. He learned the inquiry process by observing and interacting with peers at those meetings. He was also at a school with

a principal who was trained in the inquiry process. Mr. Lang, however, became principal in 2004, and he was working out of the district for two years prior to that. He was familiar with the process but did not have formal training in it. The four questions in the district's decision-making frame were posted in the front offices in most schools. Because he was an administrator in the district for a longer period, Mr. Alba was more familiar with the process through training than Mr. Lang.

Most of the teachers interviewed at both schools had never heard of the term "student-based model for inquiry" and were not familiar with the chart with the four questions when I showed it to them. However, as shown in each of the case studies, the teachers seemed to set into motion the elements from the district's decisionmaking frame through the collaborative processes implemented in their grade level teams. For example, in their grade level collaboration meetings, they focused on student learning by reviewing and analyzing data to plan how to meet student needs. In both schools, there was collaboration among principals and teachers, and principals sought input from parent stakeholders. They seemed to consistently address the questions (1) how does the decision improve student learning, (3) is there adverse impact on others, and (4) how are individual needs balanced with group needs? For example, for question (3) is there adverse impact on others, they collaborated with stakeholders, primarily teachers, and constantly analyzed data prior to making a decision. Although they never explicitly addressed question (2) is the decision illegal, unethical, or immoral, it seemed to be implied in their decision-making. It seemed that the teachers at both schools internalized some components from the

district's decision-making frame as a regular part of their work, without following the four questions as a specific protocol.

The staff members at Mountainside Elementary seemed to be more consistently putting into motion the district's decision-making frame school-wide through a strong ILT. In contrast, the ILT was virtually non-existent at Ocean Currents Elementary. According to participants, the ILT had met during the summer but there was little evidence that it was involved in decision-making at Ocean Currents. However, Mr. Lang at Mountainside engaged the ILT during the end of the 2006-07 school year to solicit input from staff members about how to spend funds when a teacher retired and create a format for the grade level collaboration meetings. He asked the staff to ponder over issues and present their best thinking to the entire staff. There was no such mechanism at Ocean Currents Elementary. At Ocean Currents Elementary, Mr. Alba assumed primary responsibility for decision-making and did not involve teachers with decisions that affected the entire school.

Both principals supported the inquiry process by creating structures at their schools to allow grade level teachers to collaborate during the school day. They used funds to release the teachers and honor their time. The grade level teachers engaged in a process where they evaluated student work or analyzed data, developed some instructional strategies based on need, implemented those strategies in their classroom, and re-assessed if it worked or not (see Figure 4.1). The grade level teachers at Mountainside took it a step further by using a measurement tool to measure student progress at their collaboration meetings (see Figure 4.2). The feedback from evaluating student work helped them measure student needs.

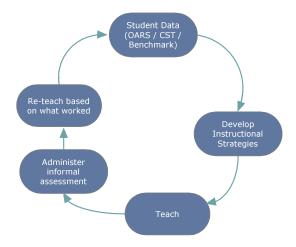


Figure 4.1. Ocean Currents Elementary Grade Level team inquiry cycle

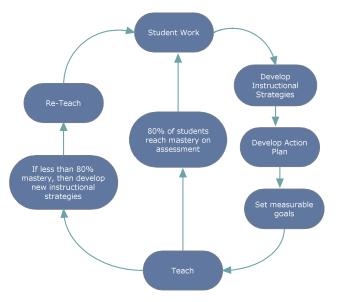


Figure 4.2. Mountainside Elementary Grade Level team inquiry cycle

Both schools emphasized the lack of time and collaboration as primary factors that inhibited inquiry. As previously shown, not having opportunities to collaborate during the school day prevented teachers from engaging in inquiry-based conversations that they felt were sufficiently reflective. Interestingly, the teachers at Ocean Currents Elementary also shared that their principal lacked focus and

consistency and considered this a major factor for inhibiting inquiry. The teachers indicated they were to improve achievement of English language learners, but the way this was to be accomplished was less clear. At Mountainside, the interviews revealed that teachers indicated there had been a shift in the focus. A number of teachers initially indicated they thought the focus was on reading comprehension because they were required to administer the OARS, a state reading assessment, at the end of the 2006-07 school year. However, as the 2007 school year began, they learned through their work that the school's focus was writing. Everything they did at that school focused on improving the students' writing. Table 4.13 summarizes the principal and teacher perceptions of the inquiry process.

Table 4.13. Principal and Teacher Perceptions of the Inquiry Process

	o Principal assumed primary responsibility for D-M			
Ocean Currents	ILT was non-existent			
Elementary	Teachers shared principal's lack of focus and			
	consistency inhibited inquiry			
	Set into motion district's D-M frame school-wide			
Mountainside Elementary	through strong ILT			
	o Grade level teachers also used measurement tool to			
	measure student progress			
	<ul> <li>School focus was on improving student writing</li> </ul>			
	Teachers never heard of inquiry and were not			
	familiar with the four questions on the chart			
	<ul> <li>Set into motion elements from the district's D-M</li> </ul>			
	frame through grade level collaborations			
	Strong focus on student learning through data			
	analysis – Question 1 (Q1)			
Both schools	Primary stakeholders were teachers – Q3			
	<ul> <li>Grade level teachers engaged in a process of</li> </ul>			
	analyzing data or evaluating student work,			
	developing some instructional strategies,			
	implementing strategies in the classroom, and re-			
	assessing if it works or not			
	Lack of time and collaboration inhibited inquiry			

*Principal and teacher perceptions of the effectiveness of the inquiry process.* The second research question addresses the principal and teacher perceptions about the effectiveness of the inquiry process on their own learning and the school's work. The teachers at both schools shared that they learned from the collaboration. The collaborations with other teachers allowed them to engage in a process of inquiry where they received feedback from their peers and reflected on ways to improve their instructional practice. The fourth grade teachers at Ocean Currents seemed to keep their inquiry-based conversations during collaboration focused on strengthening literacy and mathematics instruction for their students. They decided to track their students in mathematics and language arts by proficiency levels on the CST and included the additional support teacher to create smaller class sizes. Since their classes were homogeneous, they were able to tailor their instructional strategies according to the needs of the students rather than struggle with addressing diverse needs within one classroom. In 2007, their work together resulted in a 33 point gain in the CST language arts and a 30 point gain in CST mathematics, the largest increase in the entire school. In contrast, the interview data revealed that the Grade 2 teachers seemed less engaged in such focused conversations and work. The team did not share the same achievement gains. At least one teacher felt the team was not focusing its work and meetings were not effective. Meetings did not have a consistent structure or format and effectiveness seemed dependent upon who was leading the meeting. In 2007, the Grade 2 team's work resulted in an eight point gain in the CST mathematics, possibly attributed to their grade level work to rearrange the sequence

in which math units were taught. However, their students actually went down from 21 to 20% proficient or advanced in the CST language arts.

At Mountainside Elementary, although the teachers indicated they were focused on different strategies, second grade on writing and fourth grade on reading comprehension, teachers felt their collaborative work was helping their students. In both grade levels, teachers indicated they helped each other understand the standards for their grade level and engaged in inquiry to determine instructional strategies to help their students improve in writing or reading. Mountainside teachers indicated their grade level teams were effective in part because the meetings were highly structured. There was a strong format for their meetings that did not depend on who facilitated or led the meetings. In addition, teachers indicated there was a school-wide focus on writing and the staff was involved in providing professional development.

Teachers at both schools indicated that through the inquiry process, collaboration was strong and that through the collaborative process, they focused on using data to achieve improvement at both schools. Although both schools analyzed student achievement data, there seemed to be a couple of critical differences between the two schools. At Ocean Currents Elementary, the teachers engaged in inquiry to review their students' test scores such as the CST scores or OARS assessment results, developed instructional strategies to meet the needs of their student population, implemented those strategies, determined if it worked or not, and taught concepts again based on the student outcomes from the lesson. At Mountainside Elementary, the teachers engaged in a systematic inquiry process to analyze student writing

samples, determine student needs based on their work, develop and implement instructional strategies, and use a measurement tool to determine student progress.

They then taught concepts again until they achieved the desired outcomes for writing. Thus, at Mountainside, the attention was more on student work rather than on test results.

A key difference in the way the school functioned seemed to reflect a critical difference in achievement outcomes. Ocean Currents, with a five year program improvement status, knew it was going to be restructured which would result in significant changes in the staff and principal. Although Mountainside had not met its AYP goals the previous year, it was not under the same threat and sanctions. Certainly, Ocean Currents Elementary teachers were stressed and threatened, yet there was strong evidence the fourth grade team was doing all it could to operate in ways that increased its instructional effectiveness.

Both schools made positive upward gains with its Academic Performance Index (API) scores. For example, from the time Mr. Alba was principal at Ocean Currents Elementary from 2001-02 until 2006-07, the API scores increased from 572 to 685 points, a total of 113 points. The API scores at Mountainside Elementary marginally increased from 712 to 717 from 2004-05 to 2006-07, the time when Mr. Lang was principal. A summary of the principal and teacher perceptions of the effectiveness of the inquiry process is outlined in Table 4.14 below.

Table 4.14. Principal and Teacher Perceptions of the Effectiveness of the Inquiry Process

Ocean Currents Elementary	<ul> <li>Grade level meetings lacked structure</li> <li>Greater emphasis on reviewing student data (CST scores, OARS, etc.)</li> <li>No school-wide focus</li> </ul>	
Mountainside Elementary	<ul> <li>Highly structured grade level meetings</li> <li>School-wide focus on writing</li> <li>Staff involved in providing professional development</li> <li>Emphasis on reviewing student work</li> </ul>	
Both schools	<ul> <li>Strong grade level collaboration</li> <li>Teachers learned how to improve their instructional practices from collaboration</li> <li>Used data to improve achievement</li> </ul>	

Comparison of principal and teacher perceptions of how inquiry processes had influenced the principals' behaviors. The third research question centered on how principals and teachers perceived principal behaviors may have changed from participating in the district's initiation of an inquiry process. Several differences between the two principal's implementation of the inquiry process emerged from the interviews. Through the inquiry process, especially in 2007, indications are that Mr. Lang focused his behavior and thus focused the school. Mr. Lang contracted with Targeted Leadership consultants in August 2007 to assist the school in focusing on writing. In contrast, teachers indicated that Mr. Alba lacked focus in his leadership of

Ocean Currents Elementary. The school seemed to have a general goal, but Mr. Alba had not set a specific instructional target as Mr. Lang had done at Mountainside.

Another identified difference in principal behaviors seemed to be in terms of monitoring student progress. For example, Mr. Lang held monitoring meetings with his teachers during the 2006-07 school year where he expected them to track two students who were close to being proficient and monitor their progress over time. Mr. Lang also held teachers accountable by expecting them to turn in their action plans after their grade level collaboration. He also pushed for them to create assessments to measure student progress in writing. In contrast, Mr. Alba did not seem to engage the grade level teams in the same monitoring and accountability practices, even though he had a strong focus on using achievement data.

Another area of differing behaviors was in terms of the ILT. Mr. Lang seemed to be better at getting input and involving other stakeholders in decision-making through the ILT. He seemed to use the ILT as a vehicle to set into motion inquiry school-wide. The ILT was virtually non-existent in Mr. Alba's school since they stopped meeting after the beginning of the school year. Although he used the School Site Council to bring up decisions that affected the entire school, he didn't seem to use the ILT to engage staff members in shared decision-making.

Both principals indicated they coached teachers with their instruction and said they had become more effective in using questioning and engaging staff through questioning. However, as shown in the case study, Mr. Alba also indicated that he met teacher resistance to his questioning. Thus, although Mr. Alba received more formal training through the mediation training and working with a principal who was

well trained in the process, the data suggests Mr. Lang, according to teachers, seemed to be enjoying greater success in engaging the whole staff in consistent inquiry compared to Mr. Alba.

From their own perspectives, the primary areas where the principals felt their behavior had been modified by the inquiry process were in terms of questioning. Mr. Alba shared he changed his leadership behavior by asking questions to staff members to get them to reflect instead of making decisions for them. He also shared that since he began using the inquiry process, he coached teachers with their instructional practices in the classroom, a practice he had not engaged in previously. He also used to interpret the data, inform the staff members about the trends, and tell them what to accomplish based on the data. Over time, he allowed the staff members to look at the data and draw their own conclusions. Mr. Lang shared that his leadership behaviors improved over time because he got better at holding teachers accountable and putting structures in place like the format for the grade level collaborations. Table 4.15 below summarizes the principals and teacher perceptions of how the inquiry processes had influenced the principals' behaviors.

*Table 4.15*. Principal and Teacher Perceptions of How Inquiry Processes Had Influenced the Principals' Behaviors

Ocean Currents Elementary Principal, Mr. Alba	<ul> <li>Lacked focus</li> <li>Strong emphasis on use of achievement data</li> <li>Less emphasis on monitoring and accountability</li> <li>Did not engage staff in shared D-M through ILT</li> </ul>	
	<ul> <li>Shared he became better at expecting staff members to review data and draw their own conclusions</li> </ul>	
Mountainside Elementary Principal, Mr. Lang	<ul> <li>Had strong focus (specific instructional target – writing)</li> <li>Monitored student progress through monitoring meetings</li> <li>Teachers were held accountable to turn in their action plans and create assessments to measure student progress</li> <li>Received input and involved other stakeholders in D-M through ILT</li> <li>Shared he became better at monitoring and putting structures in place</li> </ul>	
Both school principals	<ul> <li>Coached teachers with instructional practices</li> <li>Engaged staff through questioning</li> </ul>	

#### Chapter 5

#### Discussion

The purpose of this study was to explore how a district-initiated inquiry process affected principal and staff behaviors and was incorporated into school practice. In this study, I examined the phenomenon of inquiry as it was enacted in two elementary schools, one in program improvement and the other on the verge of being in program improvement, in a district where the school board adopted the inquiry model in 1998. I explored in what ways the inquiry process has been enacted and maintained many years after its board adoption and after a change in district leadership. This study makes a contribution to the literature on district reform by capturing how a district's inquiry process was perceived and implemented by staff members at two schools and how it promoted organizational learning and shaped principal leadership behaviors.

## *Review of Methodology*

To address this purpose, I used an exploratory and descriptive multiple case study design. The research design included: (a) research questions, (b) propositions (c) unit(s) of analysis, (d) the logic linking the data to the propositions, and (e) the criteria for interpreting the findings (Yin, 2003). The theoretical propositions guided data collection and analysis. In this study, I used documents and interviews as sources of evidence and triangulated the evidence to substantiate the findings.

Two elementary schools participated in my study. The schools were selected based on two criteria. The first criterion was whether the principal received some type of formal training or not in the inquiry process and the second criterion were

school demographics. In my study, one principal was trained in the district's inquiry frame and the other principal was not. However, both principals received support and professional development through the Ball Foundation and Focus on Results, which enabled them to operationalize the district's student-centered inquiry process at their schools. The two demographic factors considered were schools with similar percentages of English Language Learners (ELL) and students on free/reduced lunch. These criteria were chosen to minimize confounding factors yet recognized there would still be some contextual differences between schools that was likely to reveal unique aspects of implementation of the district-initiated inquiry process.

My primary sources of data were documents (such as Single School Plans for Student Achievement, achievement data, previous studies of this district's reform process) and interviews. I interviewed the principal in each school as well two focus groups of grade level teams. I made a purposeful selection of a primary (grade two) and upper level (grade four) team to interview in a focus group. Each team was comprised of at least three teachers who were asked to share their perspectives on how the inquiry process was implemented at their schools and how it affected their own learning and the school's work. I used the process of meaning condensation described by Kvale (1996) to interpret the transcribed interviews. Another source of data was the Harris Interactive Survey program, which was administered at each school in the case study district every two years to administrators, parents, students, and staff members and measured the principal's use of the inquiry process at the school site. The results from this survey were triangulated with data obtained from the principal and focus group interviews.

## Summary and Discussion of Results

The results of this study answered the following research questions:

- 1. In what ways do principals, teachers, and the leadership team members perceive the implementation of the district's inquiry process in their schools?
- 2. How do principals and teachers perceive the effectiveness of the inquiry process on their own learning and the school's work?
- 3. How do the principals and teachers perceive the principals' leadership behaviors have changed from participating in the district's initiation of an inquiry process?

# Inquiry

District policy on inquiry. The case study district's shift from a site-based to a student-based decision making model and the school board's decision to adopt it was the catalyst for the inquiry frame to become the values statement for the entire district with its emphasis on student learning. McLaughlin and Talbert (2003) underscored the importance of district leadership by stating "districts matter fundamentally to what goes on in schools and classrooms and that without effective district engagement, school-by-school reform efforts are bound to disappoint" (2003, p. 5). Furthermore, there was a growing body of research that showed school districts were important agents of change and units of instructional renewal (Elmore, 1999; Hightower, 2002; Hightower, Knapp, Marsh & McLaughlin, 2002; Marsh, 2000; Massell & Goertz, 2002). This study presented a case of how a district shifted to a

student focus by posing a series of four questions for all stakeholders to consider when making a decision, and how this process has influenced its schools.

District implementation of inquiry model. Between 1996 and 1998, the superintendent at the time brought in four major whole school reform models including (a) Comprehensive School reform models, (b) specialized programs with local corporations, (c) charter schools, and (d) magnet schools. These models reflected current approaches to reform, which allowed choice at the school level. Nevertheless, at the same time, the superintendent also put in place a guiding framework (described in detail in Chapter 2) that was to be used by all district and school staff: "The Student-Based Decision Making" inquiry model, which the school board adopted in 1998. Murphy (1988) in his study of high performing districts identified that these districts exercised a balance of district control and school autonomy and collaboration and leadership. This case study district seemed to be pursuing such a path.

Datnow (2000) argued that in order for district reforms to be sustained, there needs to be coordinated and systematic supports from multiple levels. To ensure implementation of this board adopted inquiry policy, the district formed partnerships in the year 2000 with the Ball Foundation and Focus on Results to provide professional development to principals through leadership academies and to school level Instructional Leadership Teams (ILTs), thus achieving the support required to sustain reform. These actions by the district are supported by other research studies demonstrating that specific practices at the district level to build capacity have a positive influence on student achievement and resulted in district wide improvements

in teaching and learning (Elmore, 1999; Ragland et al., 1999; Skrla et al., 2000; Snipes, Doolittle, & Herlihy, 2002; Togneri & Anderson, 2002; Marzano & Waters, 2006). Furthermore, the district and these schools embraced the use of data by engaging in six-week assessments, which are scored by the district and made available for grade level team use. This focus on data is supported in the literature. A recent national study of the impact of NCLB revealed that districts were allocating resources to increase the usage of student achievement data to inform instruction in schools identified as program improvement (Center on Education Policy, 2004). Studies of "successful" school districts showed these districts invested heavily in data-driven decision-making (Cawelti & Protheroe, 2001; Doolittle, Herlily, & Snipes, 2002; Tognieri & Anderson, 2003). In conclusion, the case study district had established structures necessary to support data guided decisions, but with a special twist: how will you improve student learning.

In 2002, both Ocean Currents and Mountainside Elementary became a Cohort 2 Community of Schools (CoS) and began working with the Ball Foundation and Focus on Results for a three-year period. The teachers and administrators learned how to create SMART goals, evaluate student work, manage meetings, and create instructional leadership teams at their schools. As a result of the schools' work with these partnerships, certain practices such as instructional walkthroughs, looking at student data, and writing SMART goals became embedded in the school site plans system-wide. Additionally, the principals attended a literacy academy. It was not until the 2004-05 school year for Ocean Currents Elementary and the 2005-06 school year for Mountainside Elementary that both schools also became a part of the

Communities of Practice (CoP, see timeline in Chapter 1). In the CoPs, the teachers and principals met quarterly to continue their professional development and learn new literacy content, discussed implementing independent reading strategies, and built community with other schools in the district.

As shown in Chapter 4, these collaborative efforts with the Ball Foundation and Focus on Results seemed to have served as the process through which the district's inquiry model was made operational. The findings showed evidence of the professional development the principals and instructional leadership team members received. For example, the principals incorporated SMART goals in their school site plans, helped grade level teams evaluate student work, and created instructional leadership teams at their schools. The principals also learned how to collect data through instructional walkthroughs. This shaped how the principals led their schools and allowed them to implement the district's decision-making frame.

The professional development the schools received from the district's strong partnerships with the Ball Foundation and Focus on Results led to the inquiry frame permeating throughout the system. The findings showed that the principals and teachers at the two case study schools in the district understood through these trainings how to look at student work and improve student learning and were addressing to some degree the four questions in the inquiry model, as was proposed initially in the three propositions presented in Chapter 3, Propositions 1A, B and C. However, the findings also showed that the four questions were not addressed in a linear fashion as a checklist. Instead, the questions became embedded in the structures and processes put in place by the Ball Foundation training received through

Focus on Results. For example, both schools had structures built in for teachers to collaborate in grade level teams to analyze data in the form of test scores or student work as a way to advance instruction (Proposition 1A and 1B). By continually focusing on student data or work, the teachers were addressing question #1 of the decision frame: How will this decision (work) improve student learning? In fact, this first question seems to have become the core system value. When addressing this question, the findings showed that the staff members, prior to making decisions, gathered evidence or data to support what was best for student learning. Through the data gathering process, the staff was also addressing the third question (3) is there adverse impact on others? In both schools it was evident the primary stakeholders who collaborated were the teachers. When the staff collaborated in the ILT, grade level teams, or whole staff meetings, it did not include other stakeholders such as parents, community members, or district office personnel. The fiscal and personnel impact were also typically considered when making a decision. However, as indicated in the model, the findings showed that the district was not directly included in the problem-solving process.

The other two questions seemed to be subsumed in answering question (1) how does the decision improve student learning and were less explicitly pursued.

While it seemed the staff members took question (2) is the decision illegal, unethical, or immoral into account, they never discussed it. It seemed that in addressing question (4) how are individual needs balanced with group needs, equity was implied since both schools had large percentages of students who were Hispanic, English

learners, and received free or reduced lunch. This is summarized in Figure 5.1 below.

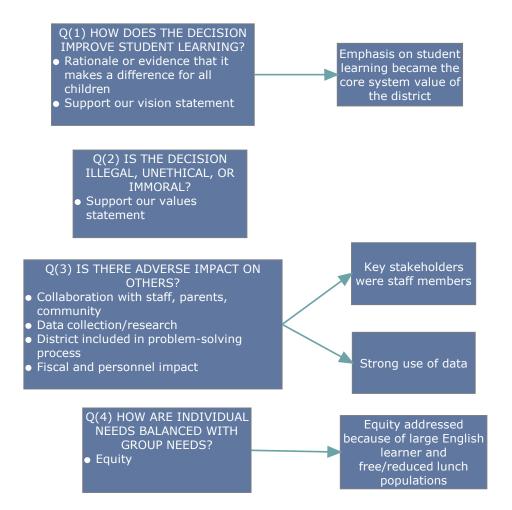


Figure 5.1. Findings about the Student Based Model for Decision-Making in Case Study District

Uniqueness of district's inquiry model. Two major inquiry models were presented in the literature review, the Accelerated Schools approach and BASRC cycle of inquiry. One of the two schools, Ocean Currents Elementary, adopted the Accelerated Schools model in the early stages of district reform (1996-1998) but it was difficult to discern if many of the teachers at the school were familiar with it.

There are some similarities and differences between the district's decision-making frame and the Accelerated Schools and BASRC approaches. As we saw in those two models, the inquiry cycle began with defining a problem. However, the case study district's inquiry process started with looking at data or student work in the grade level collaboration, ILT, or whole staff meetings. This seemed to give this district a student and classroom-centered approach, which was strongly shaped by the first inquiry question (1) how does the decision improve student learning. Although obviously the intention of other inquiry models is to address school and student needs, the case study district's attention first to student learning seems to make it unique and may account for why it has been recognized as an exemplary district in raising overall student achievement (Togneri & Anderson, 2003).

Similar to the BASRC model, Mountainside set measurable goals in their grade level meetings, developed a tool to assess progress, and created an action plan. However, this practice of measurable goal setting was not evident at Ocean Currents. As stated earlier, another difference between the two schools was Mountainside Elementary had a school wide focus on a specific instructional goal—student writing—whereas Ocean Currents Elementary focused more generally on six-week achievement data, without a school wide goal to direct action. Although studies suggest that looking at data is a critical first step to help a team focus on teaching and learning (Chrispeels, Castillo, & Brown, 2001), it may not be sufficient raise student achievement (Marzano et al., 2005).

In summary, a major finding from this study was that the district's inquiry decision-frame seemed to be inculcated into the district's culture since its adoption in

1998. This was largely attributed to the structures created through the district's partnership with the Ball Foundation and Focus on Results with their strong attention to initiating the inquiry process by looking at student data. The strong emphasis on the impact on student learning became the focal point for decision-making and the values system for the entire district. Each school had structures in place such as grade level and/or instructional leadership team meetings, which focused on student learning. These schools seemed to exemplify what Reeves (2006) called high inquiry schools. Reeves (2006) found that teachers and leaders with high inquiry believed instructional practices were the primary cause of student learning. It seemed that the teachers at both schools had high inquiry. At both schools, the evidence showed that teachers in grade level teams developed and implemented instructional strategies in their classrooms based on student needs. As shown in Chapter 4, Ocean Currents, the most challenged school in the study, had been making consistent achievement gains, even though they were not sufficient to remove it from program improvement status. If Reeve's analysis is correct, the new intense focus on student writing at Mountainside may enable it to remain out of program improvement.

An Inquiry Process as a Pathway to Organizational Learning

The review of the literature indicated that inquiry is a key component of organizational learning and improved performance (Argyris & Schon, 1996; Wheatley & Kelner-Rogers, 1998; Mulford et al, 2002b; Reeves, 2006). The adoption of an inquiry decision frame by the case study district and its operationalization through extensive professional development laid the foundation for organizational learning in the two case study schools. The evidence presented in

Chapter 4 suggests that grade level teams and the staff as a whole were engaged in organizational learning through inquiry as indicated in Proposition 2C. To discuss the ways organizational learning unfolded in these schools, I will use a combination of Mulford et al. (2004) seven dimensions of organizational learning and Hord's (2004) description of shared leadership as a framework to show how the two schools exhibited aspects of learning organizations and how the grade level and instructional teams could be considered professional learning communities within their schools.

Mulford et al. (2002b) shared seven dimensions that defined schools as learning organizations. They included: (1) employ the processes of environmental scanning, (2) develop shared goals, (3) establish collaborative teaching and learning environments, (4) encourage initiatives and risk taking, (5) review regularly all aspects related to and influencing the work of the school, (6) recognize and reinforce good work, and (7) provide opportunities for continuing professional development. Hord (2004) used many of these same characteristics to describe a professional learning community with one notable difference. She also included shared leadership as a necessary component for a professional learning community. To show how both schools displayed characteristics of learning organizations and how the grade level and instructional teams could be considered as professional learning communities within their schools, each one is described in the section below.

Shared goals. It seemed that Ocean Currents Elementary, with its lack of a school-wide focus and an ILT that did not meet for much of the school year, did not have shared goals that could guide its everyday actions and decisions and shaped long

term planning (Mulford et al., 2002b). The grade level teams at Ocean Currents set their own goals and created their own agenda for each meeting. There was no strong evidence of school-wide articulation, especially around an instructional focus. The absence of shared goals and a clear instructional focus may have hindered Ocean Currents from moving towards being a true learning organization. In contrast, Mountainside Elementary was characterized by shared goals with its strong ILT and school-wide focus on writing. The presence of shared goals at Mountainside seemed to be shaping the identity of the school by giving meaning to its work as the teachers explored instructional strategies to improve writing, and allowing the organization to grow through collaboration (Wheatley & Kelner-Rogers, 1998). Although Ocean Currents seemed to be less focused, it is important to note that both schools had what Hord (2004) defined as shared values and vision — a strong commitment to student learning that was consistently articulated and referred to. Part of this commitment seemed to stem from the district-initiated inquiry process and decision frame. Addressing the first question of that framework, (1) how does the decision improve student learning, was central to these schools' work, as evidenced by principal and teacher interviews thus confirming Proposition 2A. A student focus appears to be a strong core value for the district. Wheatley and Kelner-Rogers (1998) reinforced the importance of inquiry as a factor for promoting organizational change, and, in this case, the district's decision-making frame may have been the catalyst for the emergence of a significant shared value.

Employ the processes of environmental scanning. The findings showed that both schools engaged in the process of environmental scanning through the exchange

of valid information to look closely at the school activities (Mulford et al., 2002b). At Ocean Currents a critical component of environmental scanning was attention to the six-week assessment data. Both grade level teams shared evidence that the review of this data led to important changes (such as the changing of the sequence of teaching mathematics or change in master scheduling). It is difficult to know if these actions reflect fundamental change in norms, rules and theories in use (Argyris & Schön, 1996) that would suggest double loop learning or if these were more immediate responses to pressing problems (single loop learning). Teachers did express that they felt the result of their changes led to improved student learning. The evidence from Mountainside suggests that the principal was the leader in environmental scanning, and having reviewed the achievement data in 2006, which reflected minimal gains, he took action to redirect the focus of the school. In addition, he sought guidance from Targeted Leadership staff to determine the best practices to pursue. The grade level team scanning focused collectively on the work generated by the students. They used insights gained to develop instructional strategies to support their students in writing.

Establish collaborative teaching and learning environments. Both schools had established collaborative teaching and learning environments through grade level meetings, which occurred every other week. In these meetings, teachers indicated they actively looked at data and made instructional plans. Research of others indicates that this kind of collaborative work leads to teacher learning (Chrispeels, Andrews & Gonzalez, 2007, Dufour et al., 2006). Interestingly, at Mountainside Elementary, the grade level collaboration seemed to be a highly structured process that appeared to

match what Crossan et al. (1999) calls an institutionalized and embedded routine within the school (as shown in Figure Example 2.2, Crossan's 4I Framework).

Although both schools had ILTs, the one at Mountainside Elementary met regularly thus enabling the school to maintain a school-wide process that makes operational the district's inquiry frame.

Encourage initiatives and risk taking. Risk taking and initiatives were encouraged at both Ocean Currents and Mountainside Elementary. For example, at Ocean Currents, the Grade 4 team was encouraged to change the master schedule based on data and student need. The principal, Mr. Alba, also supported the Grade 2 team by allowing them to change the sequence of how mathematical concepts were taught so the students would experience greater success in their CST mathematics exam. This is somewhat unusual for schools that undergo restructuring due to program improvement, which seem to have much less risk taking (Daly, in press; Mintrop, 2003).

At Mountainside, as well, the grade level teams had the flexibility and autonomy to create and implement writing strategies in the classroom and were not bound by a particular set of strategies or a prescribed program. However, Mountainside with its highly structured format for grade level meetings may provide less room for experimentation. This raises questions about what risk taking means in the era of accountability. What is the needed balance between a strong instructional focus and allowing teachers to try new innovations?

Review regularly all aspects related to and influencing the work of the school. Mountainside had an ILT that met frequently to review regularly all aspects related to and influencing the work of the school but at Ocean Currents the ILT had not met since the beginning of the school year. For example, the ILT at Mountainside made the decision to implement the OARs formative assessment and created the format for the grade level meetings. The evidence showed there was no venue to look at and review the school's work at Ocean Currents other than perhaps through the School Site Council meetings. It could be that the principal at Ocean Currents felt there was no point in bringing together the ILT since the school was going to be restructured and a new direction set. The principal instead placed his focus on the grade level teams and walkthroughs to assist the teachers in providing the best instruction in the time the teachers and principal would remain at the school.

Recognize and reinforce good work. The teachers at Mountainside spoke about the recognition and praise they received from Mr. Lang for good work after he conducted a classroom observation. There was no evidence to determine whether the staff at Ocean Currents Elementary received recognition for their good work. Other researchers have found that the praise and recognition is often not prevalent in educational settings (Mohrman, Wohlstetter, & Associates, 1994). It could be that the stress conditions of reconstitution at Ocean Currents also undermined the actual principal behaviors and teachers' sense of non-recognition (Daly, in press).

Provide opportunities for continuing professional development. The evidence also showed that the staff members at both schools received substantial professional

development through their work with the Ball Foundation and Focus on Results as Cohort 2 schools, Communities of Practice schools, and in whole staff meetings at their schools. In addition, as presented in Chapter 4, the school plans outlined a number of professional development workshops. This raises the question about whether the duration, quality or focus of the professional development was sufficient to bring about sustained change in teacher practice since both schools' gains fell short of meeting AYP goals. The literature on professional development suggests that for it to be effective it must be focused and sustained with multiple opportunities for feedback, practice, and coaching (Joyce & Showers, 1995). The strong grade level collaborative culture in both schools and the new focus on writing in Mountainside offer the potential for enhanced quality of professional development in these schools.

Shared leadership. Both principals and staff members at the two schools provided evidence of collaborative professional learning communities through the ILTs and grade level teams. The ILTs, which are comprised of grade level representatives, provided a structure for two-way flow of information. As discussed earlier, the principal at Mountainside Elementary, Mr. Lang, supported shared leadership by allowing staff members to give input and participate in decision-making at the school site through the instructional leadership team. In fact, the findings showed that he brought many decisions before the ILT team in order for them to bring to the whole staff. As described in Chapter 4, Mr. Alba recounted several incidents in which he and the staff members at Ocean Currents Elementary used the inquiry process collaboratively to make important school-wide decisions. Mr. Alba supported teacher leadership as evidenced by the decision-making of the grade level

teams; however, without an active ILT in his final year of leadership, these decisions did not have a school-wide impact. Table 5.1 summarizes these findings.

*Table 5.1.* Mulford et al. (2004) Seven Dimensions of Organizational Learning and Hord's (2004) Description of Shared Leadership Framework

	Ocean Currents Elementary	Mountainside Elementary	Both Schools
Shared goals	<ul> <li>Principal lacked school-wide focus</li> <li>ILT did not meet for school year</li> <li>Grade level teams set own goals</li> </ul>	<ul> <li>Principal had school-wide focus on writing</li> <li>Strong ILT</li> </ul>	Had strong     shared values     and vision – Q1     central to     school's work;     Confirms Prop.     2A
Employ the processes of environmental scanning		<ul> <li>Principal was the leader in environmental scanning</li> </ul>	Both schools engaged in exchanging valid information
Establish collaborative teaching and learning environments		ILT met     regularly;     operationalized     inquiry frame	Strong grade level collaborations
Encourage initiatives and risk taking			<ul> <li>Encouraged at both schools</li> </ul>
Review regularly all aspects related to and influencing the work of the school		ILT met regularly	
Recognize and reinforce good work		<ul> <li>Teachers spoke about praise and recognition they received from principal</li> </ul>	
Provide opportunities for continuing professional development			<ul> <li>Extensive support from Ball Fdn. and Focus on Results</li> </ul>
Shared leadership		Strong ILT for shared D-M	Worked with grade level teams for school-wide D- M

Outcomes of organizational learning. Leithwood and Louis (1998) argue that it is difficult to measure organizational learning. The seven dimensions of learning organizations outlined above reflect what Leithwood would call the conditions of organizational learning, which are easier to identify and observe. Nevertheless, others argue that organizational learning is observable in changed practices. Under the press of accountability, outcomes are significant for schools. In this case study, both schools were making positive upward gains in their Academic Performance Index (API) scores. For example, from the time Mr. Alba was principal at Ocean Currents Elementary from 2001-02 until 2006-07, the API scores increased from 572 to 685 points, a total of 113 points. Ocean Currents made gains in its API in a positive way even though it was a fifth year program improvement school. At Mountainside Elementary, the API scores marginally increased from 712 to 717 from 2004-05 to 2006-07, the time when Mr. Lang was principal.

In summary, a major finding from this study was that the ILT helped to operationalize inquiry school-wide and the absence of a functioning ILT may have limited the school's ability to maintain shared goals and foster shared leadership, key components for learning organizations and highly collaborative professional learning communities. Both schools exemplified characteristics of learning organizations and professional learning communities with some notable differences. The frequency of grade level team meetings was a structure that became institutionalized at each school. It also seems that the high stress associated with being in program improvement may have resulted in the staff members and the principal operating in ways that did not promote organizational learning.

Strong Leadership for Organizational Learning

An important point that was mentioned throughout the review of literature was the role of leadership in promoting organizational and student learning. Leithwood (2003) suggested schools and students benefited from the positive effects of strong school leadership and studies on effective schools showcased the principal as responsible for improving instruction and learning (Hoachlander, Alt, & Beltranena, 2001; Smith & Andrews, 1989). The school board's adoption of an inquiry decision frame by the case study district and the ways it was made operational through extensive professional development demonstrated leadership at the systems level. This study focused on the ways in which principals' behaviors were influenced and how they led their schools in the implementation of the board's policy. Since previous research has documented that inquiry promotes organizational learning, of particular interest in this study was the interaction between leadership behaviors of the principals and organizational learning. To discuss the behaviors characteristic of a principal who fosters organizational and student learning, I will use Leithwood et al. (2004) leadership actions of (1) setting directions, (2) developing people, and (3) redesigning the organization as a framework.

Setting directions. Mr. Lang at Mountainside Elementary had established a school-wide focus on writing at the beginning of the school year, although some of the teachers ended the previous school year with the notion the focus was on reading comprehension. Nevertheless, the interview data indicated that the two grade level teams embraced this new direction. This refining of the school focus may have been attributed to Mr. Lang's work with Targeted Leadership just before the 2007-08

school year began. In addition, the desire to refocus may have been prompted by the sense of urgency created as a result of the threat of program improvement if the school did not make AYP targets for the 2007-08 year. These findings support the research that principals who set directions at their school create a focus for the school (Leithwood et al., 1999; Liontos, 1993; Corbally & Sergiovanni, 1984; Marzano et al., 2003). The principal leadership behavior of focus has been shown to increase student achievement (Marzano et al. 2003; 2005) although the impact on achievement is unclear at this time for Mountainside. Contrarily, Mr. Alba at Ocean Currents Elementary did not implement a similar strong school-wide focus other than telling the teachers to address the needs of English Language Learners who represented the majority of the student population. As was shown in Chapter 4, each grade level team set its own direction. Achievement gains were being made, but they were mixed across the grade levels and after five years in program improvement, the school was being reconstituted with a new principal and primarily new teaching staff.

Mr. Lang shared his perception that his leadership behavior changed since he first became principal at Mountainside because he improved his ability to monitor instruction and hold teachers accountable. He held the teachers accountable for implementing their action plans, creating assessment tools, and measuring student progress. His insight was these changes were confirmed by the teachers who also perceived that he improved at holding them accountable. He attended grade level meetings to observe what occurred there and conducted instructional walkthroughs to monitor instruction and student learning. These actions support the research that a

leader who sets directions creates high performance expectations (Cotton, 2003; Leithwood, 1992; Leithwood et al., 2004).

As noted in Chapter 4, both Mr. Lang and Mr. Alba received extensive professional development through the Ball Foundation and Focus on Results on how to conduct instructional walkthroughs, thereby allowing them to monitor what occurred in the classrooms. They also maintained a strong emphasis on student learning by keeping the first question in the district's decision-making frame (1) how does the decision improve student learning, at the forefront of their everyday actions. These walkthroughs and the constant focus on how the teachers were improving student learning, may help to account for the achievement gains that Ocean Currents had made in spite of the lack of strong focus. Mr. Lang at Mountainside now seemed poised to capitalize on the walkthrough process because of the strong focus and the structures he put in place in conjunction with the ILT. These structures included action plans and focusing the grade level teams, not just on test scores, but also on student work. The walkthrough allowed him to closely monitor what occurred in the classroom.

It is important to note that setting direction is seen as a leadership function and not necessarily the task of the leader alone. In fact, considerable research supports the significance of shared leadership (Chrispeels, 2004; Murphy & Datnow, 2003; Reynolds et al. 1994). Mr. Lang encouraged the development of shared goals in the ILT meetings. For example, the ILT collectively decided, with Mr. Lang's guidance, to administer the OARS formative assessment school-wide during the 2006-07 school year because achievement scores were not increasing, the grade level teams were not

working together, and some teachers were experiencing great results with students while others were not. This desire to have the ILT address the variability among classroom results reflects significant leadership. Recent studies (Sandler) have shown that within school achievement, variability among classrooms is often greater than differences between schools. Yet this variability often is not examined or addressed because of the culture of teacher autonomy (Little, 1993). In addition, the ILT agreed to use funds to purchase support teachers to release grade level teachers for collaboration meetings. They also established the purpose and outcomes for the grade level meetings. These findings confirm the leader's role in setting directions is fostering acceptance of group goals (Cotton, 2003; Leithwood, 1992; Leithwood et al., 2004).

Mr. Alba, in contrast did not appear to engage with the ILT to establish or create shared goals. As shown earlier, this school seemed to be burdened with a layering of remedial programs and interventions and was currently lacking a school-wide focus. Unlike Mr. Lang, Mr. Alba seemed to be lacking in the area of setting directions to foster sufficient organizational and student learning at his school to remove the school from program improvement sanctions.

Developing people. Mr. Lang seemed to demonstrate behaviors that resemble what Argyris and Schön (1996) describe as Model II behaviors. He allowed for the exchange of valid information, promoted free and informed choice, and fostered internal commitment in his instructional leadership team (Argyris & Schön, 1996). The teachers on his ILT were involved in the school's decision-making and often shared information with the whole staff to get their input. Mr. Lang exhibited the

leadership responsibility of strong input or involvement of the teachers in the design and implementation of important decisions as described in Marzano et al. (2005) Balanced Leadership Framework such as the format for the grade level collaborations. As a result, the staff members I interviewed at his school seemed to have minimally defensive interpersonal and group relationships, high freedom of choice, and increased risk-taking (Argyris & Schön, 1996). It seemed that Mr. Lang moved away from a traditional "top down" decision-making approach within his school and collaborated with staff members confirming the research that when this occurs, sustainability of reforms may be enhanced (Reeves, 2006; Copland, 2003). These findings confirmed the research that states a principal who develops people builds collaborative processes to foster participation in school decision-making and teacher empowerment (Cotton, 2003; Leithwood, 1994b; Liontos, 1993; Pepper & Thomas, 2002; Sagor, 1992). It also confirmed Gil's (2001) research, which purported two critical principal behaviors for leading the district-initiated inquiry process was "to invite others to share their ideas and be avid listeners" (p. 17).

Contrarily, it seemed that the teachers at Ocean Currents Elementary felt their principal was top down at times. As documented in Chapter 4 some teachers felt that decisions were made in the front office or at the district level and their voices did not have much impact even when sought. It is also important to note that these interviews were conducted after teachers knew the school was being reconstituted. The failure of the ILT to meet also seemed to exacerbate the teachers' feelings that they were not included in the decision-making at the school. Furthermore, Mr. Alba may have felt the pressure from being in program improvement and, as a result, may

have acted in ways representative of Model I behaviors that made the staff members at his school left with a feeling of minimal control to initiate change and potentially inhibiting double loop learning at the school (Argyris & Schön, 1996).

Research has shown that the principal's ability to develop people and create a culture of reflective practitioners has a positive effect on student achievement (Schön, 1982; Schön, 1987; Gil, 2001). Dufour et al. (2006) posited the leader's role was to ask the right questions, facilitate the dialogue, and build shared knowledge. Both principals shared they coached teachers and engaged them through posing questions and encouraging reflection about their instructional practices in the classroom. In fact, Mr. Alba shared that he used to make decisions for his staff members. He indicated that his current use of questioning was one example of how his leadership behavior changed after he began using the district's inquiry frame. As illustrated in Chapter 4, he met some resistance from staff members. Mr. Lang used questioning but not to the same degree. This may be attributed to Mr. Alba receiving some formal training in the inquiry process and Mr. Lang not receiving the same level of training. The findings showed that both principals, through the use of questioning, may have challenged staff members to question their existing theories-in-use in order to affect the school in the long term (Argyris & Schon, 1996). Both of them exhibited intellectual stimulation, ensuring that staff members were aware of research-based practices and regularly discussed them as part of the school's culture, which has been show to increase student achievement (Marzano et al., 2005). Overall, both principals in these schools influenced instructional behaviors among teachers thus confirming Heck and Marcoulides (1993) assertion that principals who developed people

promoted instructional improvement. This also supported Evans (1996) claim that principals promote reflective inquiry among the staff, students, and themselves.

Both principals kept the focus on student learning and used data to inform their decision-making. Mr. Alba tended to place emphasis on achievement data whereas Mr. Lang relied on both achievement data and student work. Mr. Alba shared that his leadership behavior changed from interpreting the data for the staff members, informing them about the trends, and telling them what to do to expecting the staff members to look at the data and draw their own conclusions. He shared this was not something he did before he started using the district's decision-making frame.

Redesigning the organization. Mr. Lang and Mr. Alba had structures in place at their schools to support teachers meeting in grade level collaborations during the instructional day. As described in the previous section, they also emphasized professional development for their staff members, thus creating high performance expectations for their staff. Some level of risk taking and initiatives were also encouraged at both Ocean Currents and Mountainside Elementary as described earlier. According to Cotton's (2003) research, these behaviors were significant of a principal who redesigned the organization.

Both principals supported a strong culture around collaborative teaching and learning as was described in the last section. This was demonstrated through the biweekly grade level collaborations that occurred at both schools. The teachers and principals at both schools kept students at the forefront of all decisions made through use of question one in the district's inquiry frame (1) how does the decision improve

student learning. As the findings showed in Chapter 4, Mr. Alba made numerous references to *non-negotiables* and doing what is best for all students. Similarly, Mr. Lang continually asked his staff members about the benefit for student learning. Both principals strengthened their school culture by fostering shared beliefs around student learning and a sense of community and cooperation (Fullan, 1992; Matthews & Crow, 2003) and this has been shown to increase student achievement (Marzano et al., 2005). The findings also suggest the district's inquiry frame may have become a mental model (Senge, 1990) for the principal and teachers at the schools. Table 5.2 summarizes these findings.

In summary, Reeves (2006) would describe the principals at both schools as *high inquiry* principals since they sustained improvement over time. The findings showed that these high inquiry principals had a high understanding of the necessary decisions that improved student achievement, thus confirming Proposition 3(c). Both principals seemed to promote finding solutions to advance learning via instruction rather than blaming external variables and challenged their schools to find meaning behind why students failed to achieve.

Table 5.2. Principals' Leadership Actions

Leadership	Ocean Currents Principal	Mountainside Principal  o School-wide	Both Principals
Setting Directions		o School-wide focus on writing O Monitored instruction and held teachers accountable O (action plans) Focus on student work Encouraged shared goals through ILT	instructiona  l walkthroug hs Kept focus on improving student learning at forefront of actions
Developing People	<ul> <li>Principal         may have         been top         down at         times,         although he         worked with         teacher         leaders and         grade level         teams to         make         school-wide         decisions         Mainly         emphasized         achievement         data.</li> </ul>	<ul> <li>Developed strong ILT</li> <li>Fostered shared D-M</li> <li>Emphasized data and student work</li> </ul>	<ul> <li>Coached teachers and engaged them through questioning</li> <li>Encouraged reflection</li> <li>Strong focus on using data for D-M</li> </ul>
Redesigning the organization			<ul> <li>Put         structures in         place for         grade level         collaboratio         ns         High         emphasis on         pd         High         inquiry         principals</li> </ul>

#### Conclusion

This study highlighted the implementation of the Student-Based Decision-Making Model, the only known model to be formally adopted by the local school board, at two schools in a high poverty district that put student learning at the forefront of its efforts. Togneri and Anderson (2003) highlighted this district in their study for having made significant improvements in student achievement since the board adoption of the district's inquiry model. As was shown throughout this study, the principals and teachers in these two schools regularly referenced how their work would improve student learning. Two significant conclusions can be drawn from this study. One is the critical need for a clear instructional focus in the schools. The second is the incredible tensions generated by the No Child Left Behind Act (2001) seem to be pulling the district back in another direction.

The first major conclusion drawn from this study is the critical need for a clear instructional focus in the schools. A principal who sets a strong focus has been shown to increase student achievement in the school (Marzano et al. 2003; 2005). As the findings in Chapter 4 indicated, Mountainside Elementary had a strong instructional focus on writing. Additionally, there was time set aside in the instructional day for grade level collaboration meetings, a format for those meetings and an opportunity for the teachers to evaluate achievement data and student work. Although the impact on achievement is unclear at this time for Mountainside, it seems with the strong instructional focus, they are headed in the right direction for improving student learning and making achievement gains.

A recent study by Firestone (2008) on district cultures is used to support the second conclusion. His study indicated how rarely districts maintain the focus on students. He argued that there are three types of district cultures. They are: (1) the loosely coupled, (2) the accountability, and (3) the student learning cultures. He shared the most typical district culture is loosely coupled where districts have little influence on school practice. The district with an accountability culture was brought about by the No Child Left Behind (NCLB) legislation. In this type of district, Firestone (2008) emphasized "greater coherence is created through centralized control" (p. 2). In a student learning district, there is a strong vision for student learning with strong district leadership and board and community support. He stated that districts with student learning cultures are "the rarest but most effective for promoting student achievement" (p.1). He shared that data use, curriculum improvement, and professional development are approached very differently in each of these cultures.

Insights from Firestone's (2008) research on district cultures can be used to show the Southern California School district under Dr. Robard's leadership had a student learning culture. Firestone posits that strong district leadership in conjunction with board and community support results in a district with a student learning culture. Togneri and Anderson's (2003) study confirmed that in high-achieving, high poverty districts, board members, union leaders, principals, teachers, community members, and administrators played a role in reform. As illustrated in Chapter 1 and supported with two school examples in the findings from Chapter 4, the district had a strong consensus that all children can learn and educators make a difference. This focus on

students is exemplified in *Question 1* in the district's inquiry decision frame: how does the decision improve student learning.

There was strong evidence that the district under Dr. Robard's leadership became focused on students from the district to the school level. Firestone (2008) argues that a district with a student learning culture has a strong vision of student learning and instructional improvement. The findings from Chapter 4 showed that although the district held schools and teachers accountable for student learning, typically measured by scores on the state achievement tests, the educators at both schools took initiative and leadership to address student learning needs. The educators worked in professional learning communities to create solutions for student learning problems and had opportunities to build trusting relationships. The work in the learning communities also fostered improved teaching as the pathway to improve student learning. Firestone shared that districts with student learning cultures used data to hold schools and staff accountable, to provide formative feedback for teachers, monitor programs, and align curriculum. The findings from Chapter 4 showed that both Ocean Currents and Mountainside Elementary used data extensively to guide their work. Firestone also posited that student learning districts spent time training educators on how to use and interpret data, and this was evident in the case study district under Dr. Robard's leadership. Togneri and Anderson (2003) reiterated that high performing districts promoted the use of data, made it readily available, and used data-driven decision-making. According to Firestone, these districts also have extensive professional development aligned with best practices. The evidence showed this was the case at both schools, whose principals and teachers received training

from the Ball Foundation and Focus on Results. Togneri and Anderson (2003) also postulated that high poverty districts which demonstrated improvements in student achievement made professional development useful by implementing research-based strategies to improve principal and teacher skills. In fact, Togneri and Anderson (2003) highlighted this Southern California district's primary theory of change was improving the skill of school leaders and increasing the level of teacher leadership.

Firestone (2008) conceived a district with a student learning culture requires more shared influence and joint problem solving with teachers and administrators working together to make critical decisions to support student achievement. The findings from Chapter 4 showed this was particularly evident at Mountainside Elementary, which had a strong instructional leadership team. Furthermore, Firestone shared that in a student learning district, the teachers internalized the school goals as their own visions for improvement and held themselves accountable. At Mountainside Elementary, the teachers embraced the school wide focus on writing and held themselves accountable for the students' learning in their classrooms as was illustrated in the findings from Chapter 4.

In this case study, the pressure and response to the federal No Child Left Behind legislation, however, seems to be pulling this district in the direction of an "accountability culture where greater coherence is created through centralized control" (Firestone, 2008, p. 2). Firestone's research suggests a district with an accountability culture is not as effective at promoting student achievement as one with a student learning culture. The change is driven by policy demands because some schools in the district are not making AYP targets and are being designated

program improvement. This tension and pressure on the district to revert to an accountability culture is natural given what is known about organizational response to threat rigidity. Staw et al. (1981) postulated that when faced with significant perceived threat, organizations, like individuals, may close down, reduce information flow, engage in poor decision-making, and limit divergent views. The district and schools within it started from a board of education guided student-centered frame in 1998. Great progress in student achievements were made and schools in the system still show evidence of steady growth; yet now they are pulling back to an accountability culture. For example, from the time Mr. Alba was principal at Ocean Currents Elementary from 2001-02 until 2006-07, the API scores increased from 572 to 685 points, a total of 113 points. Although Ocean Currents made gains in its API scores in a positive way, it was being reconstituted because it was in its fifth year of program improvement. These data are being used to hold the school and staff members accountable through the district emphasis on test scores and raising achievement to meet the NCLB targets (Firestone, 2008. p. 3).

Firestone (2008) also describes a district with an accountability culture has social relations that are authority driven and emphasize short term solutions for problems. For example, the principal of Ocean Currents Elementary, Mr. Alba, tried to establish more trust with staff members by engaging them in decision-making through their grade level teams; however, the findings showed that he felt pressed to sometimes operate in an "authority-driven" posture to get the school out of program improvement. He was also receiving pressure from the superintendent to improve achievement at the school, which was the lowest performing in the district. Since Mr.

Lang at Mountainside Elementary did not face the same immediate threat of program improvement sanctions when he first arrived in October 2004, he was allowed to operate more like a principal in a student-learning centered district. For example, he spent the initial two years of his principalship building relationships and establishing trust with his stakeholders. For this school, which had experienced leadership turmoil the previous year, this was an essential first step. At the beginning of the 2006-07 school year, Mr. Lang shifted his attention more directly to the urgency to help the staff collect and use achievement data, which then informed the instructional focus on writing in 2007-08.

Firestone (2008) emphasized a district in an accountability culture acts on the suggestion to tighten control from the top whereas the district in a student learning culture promotes a much more organic and democratic form of leadership among all stakeholders. While the natural progression seems to move from a loosely coupled, to an accountability, and then a student learning culture, it seems the case study district exhibited many of the characteristics of a student learning culture but is reverting to an accountability culture because of the pressures resulting from NCLB.

The Southern California school district in this study made significant gains in student achievement because of its focus on student learning. The district is currently forced to respond to schools which are not making California growth targets under NCLB and may fall into program improvement. Togneri and Anderson (2003) suggested district reform efforts must be coupled with school-level flexibility in order to sustain student achievement. It seems the districts should give the schools the autonomy and flexibility to use funds, develop structures, and engage staff members

to maintain the focus on student learning without having to move into a threat rigid response.

# Implications for Practice

Several lessons can be drawn from this study.

- The district moved forward and improved student achievement because it had a student learning culture with a focus on students.
- 2. In order to maintain the focus on student learning, the California growth targets have to be reasonable so that schools are not forced into a threat rigid response.
- 3. There is a critical need for a clear school-wide instructional focus at schools.
  Teaching and learning must be supported by collaboration time that is built into the school day. The collaboration meetings must have a structured format, clear instructional focus, and attention to student work.
- 4. Equally important is attention to shared decision-making at schools. There needs to be a mechanism such as the ILT meetings at these schools where staff members regularly meet to review the instructional work of the school and to set direction in terms of both short and long-term goals.
- 5. District support must be coupled with school level autonomy and flexibility to sustain student achievement.

### *Implications for Future Research*

Two important areas for further research suggested by this study stem from the fate of implementing sanctions against an improving school and the value of building relations and setting a clear focus. There is a need to follow longitudinally the schools in this district that are being reconstituted. What do the reconstituted schools look like? Are they similar or different in terms of teacher collaborations, work of the ILT and focus on student learning than those that are not in program improvement? As the achievement standards move toward 100% proficient by 2014, do other schools in this district also begin to evidence more authority-driven and threat rigid responses as were displayed in the PI school in this study?

Following the progress of Mountainside in the next few years could add to the knowledge base. We need to know in what ways setting a clear instructional focus and creating a school level accountability system through structured grade level meetings assists a school to remain out of program improvement. We need to determine if the shared decision-making structures, such as the ILT established at the site, sustain if the school does not make progress and whether the principal resorts to a more authoritarian decision-making style as a result.

# Southern California Elementary School District

## PRINCIPAL STANDARDS

### Timeline/Standards/Worksheets

"Principal standards are a tool to look at honest and reflective feedback."

<u>Purpose</u>: The following protocol is proposed to help keep common language: How have you ethically performed your job across the standard areas and specifically to the chosen goals? Identify the specific strategies and interventions needed to accomplish the chosen goals. What evidence is there to show growth in chosen goals? What did you learn? How did you learn it and how will you use the most important learning in the future? What are the challenges or next steps to improve? Upon completion of full cycle this process shall be reviewed for effectiveness.

### Timeline:

**Jul-Aug**: Each Principal will complete a self-evaluation in August to formulate two goals. First goal will be in the area of student achievement and a second goal will be in a self-selected area. It is understood that over time goals should reflect a variety of the standards.

**Aug-Sept**: Share goals Superintendent/Cabinet. Goals will be in writing, include a rational for selection as well as ideas on how you will accomplish them. Share goals and data with peers – peers will collaborate on ways to accomplish. Goals will be based on both trend and prior year data.

**Midyear**: Midyear formative evaluation with peer group. Where are you? How are you doing? What evidence do you have at this point? What support do you need to accomplish goals?

**Spring**: Reflection piece will be draft of final narrative. Last week of contract after students leave with peers/peer input will be incorporated in the final narrative).

**Summer**: Final narrative self-reflection by standards and goals by start of new contract year. Meet with Superintendent/Cabinet in the beginning of the year. After the first year this meeting will also be used to share goals for the new year.

 $Table\ Al.$  Principal Standard: #1 The principal is accountable for staff performance that impacts student achievement.

Element	Emerging	Applying	Innovating
1A. Supervision/ Evaluation of Staff	Supervision is performed by administration and in strict compliance with the contract. Appropriate forms and documentation are in place. All timeline requirements are met. In addition to formal and informal supervision by the principal, Peer Coaching is encouraged, but a well-defined structure for sustained collegial work is not in place. There is on-going dialog between administration and staff regarding performance in relation to student achievement. The principal spends 1-2 hours daily doing classroom observations, visitation or walkthroughs.	Administrators participate in the evaluation process and their assessments add to a performance portfolio rather than defining it. The portfolio includes self and peer assessments, student and parent feedback, and research findings. Elements of the SRI Teacher Perceiver, which focus on talents and attributes, are utilized to provide feedback to staff. Through collaboration with principal, a Peer Coaching model is clearly developed with well-defined next step benchmarks in place that include teachers observing teachers and principal modeling instruction. The principal spends 2-3 hours in classrooms daily. The principal promotes a learning community by establishing staff meetings that focus on research and "Best Practices." Walkthroughs are a part of the principal's process for evaluation.	As a way of challenging the status quo, all staff including the principal, will be evaluated by a representative panel of all stakeholders including students. As part of the ongoing efforts to improve student achievement, self reflected processes such as protocols, fish bowls, and data analysis will be used to assess the effectiveness of performance. Walkthroughs are systematic and staff and principal conducts these at the school site and other schools sites on a regular basis to as a process of self-reflection. The principal and staff will be recognized for innovative practices beyond the school site, i.e. District, County, State and National levels. Surveys from all including students will be part of the evaluation process.
Element	Emerging	Applying	Innovating
1B. Instructional Strategies	Principal observes teacher and provides feedback on observed instructional strategies. Principal reads, analyzes and discusses with teachers, information on research -based practices that result in increased student achievement. Lesson design and instructional strategies are aligned with standards and assessments. Principals conduct walkthroughs on a regular bases to inform instructional strategies.	Lesson design and instructional strategies are aligned with standards and assessments. Principal assists teachers in becoming effective instructional leaders by providing staff development and demonstrating instructional strategies that reflect best practices that result in increased student achievement. Principal holds teachers accountable for implementation of research-based practices to address needs of all students resulting in increased student achievement. Principals and teachers participate in walkthroughs on a regular basis.	Principal holds teachers accountable for the implementation of differentiated educational learning plans with long and short-term goals specific to each child, which may include virtual web-based learning opportunities. The entire learning community team takes responsibility for each child's learning. Walkthroughs are systematic and institutionalized at the school site. The staff, principal and stakeholders conduct walkthroughs at the school site and other schools sites on a regular basis to inform instructional strategies.

Element	Emerging	Applying	Innovating
1C. Implementation of change process for continuous student improvement	Principal identifies need for systemic change based on data collection, analysis and inquiry. Principal investigates avenues of change with all stakeholders. Principal has the ability to communicate and prioritize information to facilitate the change process.	Principal facilitates the implementation and maintenance of the change process with all stakeholders. Principal has the ability to articulate, implement, and demonstrate a unity of purpose.	As evidence of systemic change all stakeholders have assumed responsibility and ownership for ensuring that school reform continues to meet the diverse needs of all students.
Elements	Emerging	Applying	Innovating
1D. Achievement Goals Met	Principal focuses on testing and test results.	Principal facilitates a shift from focus on testing to focus on powerful learning and achievement for all students.	Principal has created an environment dominated by powerful learning that creates improved achievement trends for all students.

Table A1. Principal Standard # 2 The Principal is accountable for building Leadership Capacity, Continued

Element	Emerging	Applying	Innovating
2A. Hire personnel with capacity to do leadership work.	Principal facilitates a process to select employees based on screening and interview only.  Principal facilitates a process to select employees based on screening, interview, and observation of a teaching demonstration lesson.	Principal facilitates a process to select employees based on screening, interview, and observation of a teaching demonstration lesson and has the candidate describe how he or she perceives his or her role as teacher, how he or she improves his or her craft of teaching. Uses simulations for candidates to interact in problem solving activities and also asks candidate to respond to a case study. SRI Teacher Perceiver is a tool used during the interview process. Interview teams are trained as to what to look and listen for during an interview.	Principal is a connoisseur of talent and hires for attitude and trains for skill. The principal dares to collaborate and to hire based on values and dreams over experience and years of services.
Element	Emerging	Applying	Innovating
2B. Assess and monitor staff and school capacity for leadership	Principal surveys/observes staff for leadership capacity. Principal surveys/observes staff for leadership capacity and uses data to summarize staffs' highest needs.	Principal assists staff in prioritizing and selecting options for participating in leadership opportunities and uses data to summarize staff's current leadership status. Provides time, resources and opportunities for staff to chair committees, lead staff development and participates in collaborative action research. Principal acknowledges staff for self-assessment and encourages active involvement of all stakeholders.	Principal uses multiple methods to develop leadership capacity for each teacher. A representative of all stakeholders will design the criteria for measuring staff and school capacity for leadership. An Individualized Leadership Growth Plan that includes activities, which promote staff leadership beyond the school site and may include the SRI, will be developed. Leadership skills are focused on engaging reluctant staff and parent in leadership roles. Principal implements a leadership team approach where staff members promote the school vision and values

Element  2C. Building student, parent and community leadership	Emerging  Principal encourages students, parents and community members to participate in established organizations that require their involvement and encourage them to volunteer. Parents are actively recruited to participate in mandated committees, and their input is valued. Principal models community participation through membership in PTA/PTC, service clubs,	Applying  Parents, students and community members are involved in all facets of the school governance structure and are a part of all student-based decision- making. Parents, students, and community members represent the school in community and district organizations. Parents, students, and community members work with staff to present and	Innovating  The principal collaborates with staff, students, and community to create a new service model that will meet the needs of all students, their families and the community, such as Spirit of Caring, or Healthy Start.  There is a focus on providing such services within and beyond the schoolhouse walls.
Element  2D. Develop aculture of inquiry.	Emerging  Principal examines student work and analyzes data. Principal asks questions of staff that foster dialog and reflection on data.	Applying  Principal creates opportunity for staff to examine students work and analyze data. The principal creates opportunities for stakeholders to develop a plan of action based on inquiry. Principal asks questions of staff that foster dialog and reflection on data. Principal provides opportunities for examination of disaggregated data to reflect on instructional practices. Collaboratively, all stakeholders address areas of need, modify instructional practices and provide for a review of resources.	Innovating  Through the inquiry process mistakes are viewed as learning tools and levers to the change process.  Staff seeks input from community and "Critical Friends" i.e. experts outside of the school site to collaborate with them on supportive statements and critical questions.
Element	Emerging	Applying	Innovating
2E. Organize school community for collaborative work.	Principal shares decision making with small groups; i.e., leadership team, School Site Council, PTA/PTC and other governance groups. Principal responds reactively instead of proactively.	Principal promotes and practices collaborative student-based decision-making that provides options to meet diverse individual and group needs of the school community. Principal is proactive and participates in community service organizations. The principal promotes school-wide collaboration within the grade level and across the grade level. This is evident by consistent practices observed by the Principal.	To ensure student success the entire learning community consistently seeks and collaborates with others to create new models that foster increased collaborative work. Staff and students give back to the community through service oriented activities.

Table A1. Principal Standard #3 The Principal is accountable for Customer Satisfaction, Continued

Element	Emerging	Applying	Innovating
3A. School Culture	The principal is responsible for and collaborates with staff in establishing a culture, which fosters mutual respect, fairness, pride, collegiality, trust and excellence within the school community. The principal fosters a welcoming an exclusionary atmosphere. The principal makes positive connections with students as demonstrated by their interactions with him or her.	The principal takes responsibility for creating a student leadership team representative of all that develops an ongoing process to address student rights, to hear student voice, and to ensure student-based decision-making. The principal fosters a welcoming an exclusionary atmosphere for all staff, students, parents, and community.	The entire school community demonstrates a willingness to continuously examine their assumptions, beliefs, and practices in doing the work required for high levels of personal and organizational performances. The school culture reflects a customer driven environment. There is an established process for addressing problems and mediating conflict.
Element	Emerging	Applying	Innovating
3B. Communication	Principal communicates effectively, understanding the unique needs of community and channels information in specialized ways to fit the traditions and expectations of community. The principal uses basic communication skills, i.e. electronic mail. Principal listens and responds to selected stakeholders.	Principal facilitates the effective flow of information to all customers to ensure a sound communication loop with all stakeholders including ESSC. Principal carefully plans, systematically manages and continuously refines the communication throughout the organization and between the school and its stakeholders. The principal applies active listening techniques to all stakeholders Communication is proactive and timely.	There is a commitment to create opportunities for dialog with parents, community members, business/service organizations, and colleagues. Concerns and issues are depersonalized and handled in a professional manner.
Element	Emerging	Applying	Innovating
3C. Parent Involvement	Principal communicates to all stakeholders respect for the important role parents play as partners in educating their children, which has a direct impact on student achievement.	Principal instills the value of parent participation in the school and also models inclusiveness in his or her interactions with parents, staff and students. As a result of principal leadership, all staff, parents and community agree on a Home/School Contract, which will be monitored by a panel of staff, community and parents.	All stakeholders embrace the value of inclusion in all decision-making. The school is the center of the learning community, which provides parents, requested services such as: GED classes, ESL, training and utilization of technology, welfare to work program, and parenting classes.

 $Table\ Al.$  Principal Standard #4 The principal is accountable for acting with integrity, fairness, and in an ethical and legal manner at all times, Continued.

Element	Emerging	Applying	Innovating
4A. Shared values	Principal refers to the vision and values, strategic goals, and student-based philosophy when reviewing the school plan.	Principal makes a commitment to the vision and values, strategic goals, and student-based philosophy when reviewing the school plan on a consistent basis in dealings with students, parents, staff and community. They are embodied in day-to-day operations.	Vision will be implemented through action reflecting deep core values and beliefs.
Element	Emerging	Applying	Innovating
4B. Shared decision making	Under the leadership of the principal, a committee is investigating a process for shared decision-making. When shared decisions result in negative impact on children, the principal takes responsibility for leadership.	A structure has been established for shared decision-making and can be articulated by all stakeholders. There is willingness by the principal to accept responsibility for the all the decisions made. The principal, through a process of evaluation, guides the shared decision making process so results will have a positive impact on children.	Through cognition and instinct, principals consistently implement the steps to good decision-making.

Table A1. Principal Standard #5: The principal is accountable for managing the school site to be a safe, efficient and effective learning environment, Continued

Element	Emerging	Applying	Innovating
5A. Safety Plan	Principal develops and implements school-wide safety and discipline plans.	Principal includes all stakeholders as well as students in the development and implementation of the school-wide safety and discipline plans.	Safety and discipline is a part of ongoing learning focused. Students are self directed and made a safe learning environment a top priority as demonstrated by their actions
Element	Emerging	Applying	Innovating
5B. Awareness	Principal understands the physical and emotional needs for safety and the maintenance of the physical environment is sustained with a preventative eye.  Data collected is shared with staff.	A process is in place to gather data regarding the safety plan. This data is shared with all stakeholders. Everyone is responsible for the safety of all children.	Students are more involved in the process of gathering data and monitoring.
Element	Emerging	Applying	Innovating
5C. Safety of physical plant (this is from school operations element)	Principal maintains security and safety measures and oversees the daily care of the physical plan by working collaboratively with facilities, transportation, food services, and other appropriate ESSC departments	Principal collaborates with ESSC departments in order to maintain a secure and safe learning environment.	Principal shares expertise and provides assistance outside the school walls.
Element	Emerging	Applying	Innovating
5D. Conflict Resolution	Principal demonstrates ability to facilitate and successfully resolve conflict at local level. Principal leads students, staff and community in development of skills in problem solving and conflict resolution. Principal sees conflict and disequilibrium and manages it.	Principal provides ongoing opportunities and establishes an infrastructure supporting student based decision-making using learned mediation skills and processes. Principal successfully manages conflict in a proactive manner. Principal institutes a student conflict resolution coalition that promotes schoolwide peace, respect and understanding.	Divergent opinions that create conflict are valued and treated with respect and dignity by all stakeholders.  The principal seeks disequilibrium and creates conflict with purpose and meaning.

 $Table\ Al.$  Principal Standard #6: The principal is accountable for the integration of technology in the school curriculum and use in school operations, Continued

Element	Emerging	Applying	Innovating
6A. Data management	Principal uses technology to effectively manage site data and generate district reports or information according to required district timelines	Principal involves staff in making reports and presentations to community using technology. Staff is required to submit student data using different computer programs.	Principal initiates the challenge of change in technology and creates models to motivate the staff and students to acquire the necessary skills to compete in the 21 <sup>st</sup> century.
Element	Emerging	Applying	Innovating
6B. Instructional Implications	Principal monitors that students and staff are routinely utilizing technology as a tool for instruction. In collaboration with stakeholders, Principal develops and implements a plan, and demonstrates to staff how to integrate technology into the curriculum.	Principal builds on staff and students' strengths, and community and student interests to move the school forward in the use of technology to generate school reports and student products and provides necessary staff development. Principal works with staff to utilize data to inform instruction.  Technology is a tool used to magnify and enhance instruction.	Technology is utilized as a tool for learning and focused on instruction and achievement. The use of technology is seamless and unnoticed.

Table A1. Principal Standard #7: The principal is accountable for managing the school site budget, Continued

Use what is written under school operations EXCEPT The final sentences of each area (Those sentences were added to the "safety" standard)

Element.	Emerging	Applying	Innovating
7A. School Operations	Principal understands District and site budgets and uses them to meet long and short-term instructional program goals. Principal understands the intent, rule, regulations and limitations of appropriate categorically-funded programs and provides for staff and community involvement in budget preparation. Principal maintains security and safety measures and oversees the daily care of the physical plant by working collaboratively with facilities, transportation, food services, and other appropriate ESSC departments.	Principal demonstrates expertise in utilizing site budgets to meet long and short-term instructional program goals. Principal actively seeks additional staff development in budget design and understanding by their participation in District Budget Committee, ACSA Business Managers Academy, and other budget related inservices. Principal develops an inclusionary budget process to involve all stakeholders. Principal collaborates with ESSC departments in order to maintain a secure and safe learning environment.	Principal assumes responsibility and is accountable for implementation of a direct-funded model. Principal facilitates a process that involves all stakeholders in budget decisionmaking. Principal works with the ESSC and makes decisions that will not negatively impact others. Principal creates an environment that enables staff to choose alternatives to employee representation. Principal shares expertise and provides assistance outside the school walls.

## Appendix B

# **Principal Interview Questions**

- 1. When did you become an administrator in this Southern California School District, can you give me a little bit of background?
- 2. Can you tell me a story of a time when you had an exceptional experience with the inquiry process? In other words, a time you knew you made a difference in the lives of those you are serving.
- 3. Tell me all the ways staff members can share their ideas or opinions in this school?
- 4. In what ways does the inquiry process shape the way you conduct classroom observations, walkthroughs and your work with teachers?
- 5. Tell me how the inquiry process supported collaboration and teachers working together?
- 6. How have your peers and superintendent supported the development of your inquiry skills?
- 7. Tell me an ahaa moment on how your leadership practice has evolved from the time you started the inquiry process?
- 8. Tell me what types of decisions are not suitable for the inquiry process?
- 9. What is getting in the way of using inquiry as a means for decision making?
- 10. In 1998, this Southern California School District shifted from a site based decision making model to a student based model. How has this made a difference for student achievement at your school?

## Appendix C

## Focus Group Interview Protocol

- 1. This Southern California school district uses a site-based decision-making model to collaborate in a grade level team. How long have you been participating in this grade level team?
- 2. Can you tell me a story of a time when your grade level team (or school as a whole) had an exceptional experience with the inquiry process? In other words, you knew you were making a difference in the lives of those you are serving.
  - i. What was your role?
  - ii. What was the role of the principal?
  - iii. What was the role of other stakeholders?
  - iv. What were the conditions that made this experience possible?
  - v. What did you do that made it possible?
  - vi. Who else contributed to it?
  - vii. What decisions led to or flowed from this exceptional experience?
  - viii. How often does this process happen in your school?
- 3. If you could make three wishes for this school in the use of the inquiry process to have more of these exceptional engagements, what would they be?
- 4. Tell me all the ways staff members can share their ideas or opinions in this school?
- 5. How has your principal supported the development of your inquiry skills? In what ways has the principal used this inquiry process with you? (Perhaps, as he/she observes your classroom, discusses instruction with you, or helps you make important school or grade level decisions?)

- 6. Tell me a story of how your teaching practice has evolved as a result of using the inquiry process?
- 7. In what ways has the inquiry process supported collaboration and teachers working together?
- 8. In what ways has the inquiry process supported teachers in taking leadership roles?
- 9. Have there been times when you found that the inquiry process was not helpful?
- 10. In 1998, this Southern California School District shifted from a site based decision making model to a student based model. How has this made a difference for student achievement at your school?
- 11. If evaluating the school, where would you place it (on inquiry rubric)? Ask why if we have time.

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