A TALE OF TWO PRINCIPALS:

THE COMPLEXITY OF FOSTERING AND ACHIEVING ORGANIZATIONAL IMPROVEMENT

by

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A Dissertation Presented to the
FACULTY OF THE USC ROSSIER SCHOOL OF EDUCATION
UNIVERSITY OF SOUTHERN CALIFORNIA
In Partial Fulfillment of the
Requirements for the Degree
DOCTOR OF EDUCATION

May 2012

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Man knows himself only to the extent that he knows the world;

He becomes aware of himself only within the world,

And aware of the world only within himself.

Every object, well contemplated, opens up a new organ

Of perception within us.

- Johann Wolfgang von Goethe

Dedication

For my Family: Past, Present, and Future.

Acknowledgements

My completion of this dissertation is the culmination of countless hours writing, researching, and reflecting on all I have learned during my three years of study here at USC. It also represents what will now become the close of a very long period of my life in which I have been a student in a formal educational setting consecutively for close to a quarter century. To my great fortune, I have been surrounded by a number of people who have supported and encouraged me through all of my endeavors. I wish to now take a moment to formally acknowledge and deeply thank all those who have helped contribute to the success of this incredible achievement.

To begin, this dissertation, and all the work it entailed, would not have possible were it not for my Dissertation Committee Chair, Dr. Julie Slayton. Julie, I am forever grateful for your mentorship, constant support, and encouragement for my ideas - even when I was still unsure what those ideas were. Thank you for always challenging me to press upon those ideas and for pushing me towards a potential I did not even realize was possible. Though I have not said it until now, thank you for being my role model in encouraging me to challenge the status quo and to sharply question the "world of education" as I knew it. I will miss walking away from your office with a few new titles of books or articles to read; you have made me a better scholar, a more inquisitive researcher, and an even more passionate educator for it. From the bottom of my heart: Thank You.

A great deal of gratitude is also reserved for Dr. Robert Rueda, Dr. Sylvia Rousseau, and Dr. Paula Carbone, all of who have served as my dissertation committee members. Dr. Rueda and Dr. Rousseau: I am incredibly thankful to have been a student in

your classes. I knew from the engaging lectures and thought provoking papers that I had during my very first semester in the Ed.D. Program, I had come to the right place. Thank you for your encouragement and feedback, especially during this dissertation process. Dr. Carbone, thank you for your enthusiasm and interest in the work I have presented to you. I thoroughly enjoyed the opportunity to share my ideas with you.

Throughout all my years of schooling, my family has been a pillar of support and encouragement amidst the many, many challenges we have faced as a family. Mom and Dad: Thank you for encouraging me to dream bigger, reach higher, and relentlessly pursue all that I desire for myself. You have taught me the value of hard work, dedication, and the incredible magnitude of an education; those are values I have carried and will always carry with me for the rest of my life. Thank you for being the parents I needed. To my sisters: Thank you for always serving as an unspoken reminder of the role I play as your older sister and how I must always lead by example. Though our journeys may differ, may you always strive for the farthest galaxy and explore the uncharted waters our family has yet to tame. Thank you also to my aunts and uncles who, throughout my life, have helped in many ways and have been tremendously supportive in all my endeavors. At this moment, I wish to also acknowledge my grandparents: Frances Rios, Ralph Rios, Josephine Martinez, Francisco Martinez, Sr., my aunt, Yolanda Rios, and my uncle, Robert Martinez – all of who would have been so incredibly proud to see me graduate as Dr. Frances Jacqueline Martinez.

Above all, I am indebted to my husband-to-be, Jerry Kellar, who has been nothing short of amazing as I have worked to earn this degree and complete this dissertation. From late night coffee runs, to waking me in the early hours of the morning to write, to

supporting me in my decision to take a year from full-time work for the first time in my professional life, just so I could devote all my energy and resources to completing the dissertation; everything he has done for me throughout this journey greatly demonstrates his unwavering encouragement, support, and love as I pursued my dream of earning my doctorate. Jerry, I look forward to supporting all the dreams you have for yourself – just as you have supported mine. I am excited for a long and prosperous life with you filled with so many opportunities to create many more wonderful memories and to embark upon exciting new adventures. Our life, even amidst the piles of books and papers, is a delightful one; now it's time to live our life together gloriously. Let the celebration begin!

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Abstract

This dissertation served as a pilot study that tested a set of ideas drawn from the existing literature grounded in organizational learning theory, leadership theory, sociocultural theory, and the social and psychological constructs demonstrating leader behavior and capacity. The study examined the intersection within four individual components of leadership and how that intersection lead to demonstrated leadership behaviors and practices that influenced the possibility of enacting organizational change. To answer the following research question: to what extent does a principal's own mental models, level of leader self-efficacy, her immunities to change, and her level of leader creativity influence the principal to enact her style of leadership in fostering and achieving organizational improvement, a multi-case study method employing both a single-case and a cross-case inductive analysis was used to examine the interactions and intersections of these leader elements and leader behaviors as they occurred within the organizational context. Interviews, observations, and documents collected at two separate high schools served as the primary methods for data collection. The findings suggest that the role of the principal is an increasingly complex one when it comes to understanding how the intersection of a principal's mental models, levels of leader self-efficacy and her own immunities to change lead a principal to enact a level of leader creativity that influences the level of leadership practices she will employ to promote transformational organizational change. Implications for the field include improving opportunities for professional development and reflection for principals as well as a need to rethink the expectations placed on principals and what they are able to accomplish without the appropriate levels of developmental support.

Chapter 1: Statement of The Problem and The Underlying Framework

There has been a continuous dialogue among various stakeholders regarding the best ways to address and close the persisting achievement gap in the United States. Some of this dialogue has led to the development of legislation and educational policy. Starting with the Elementary and Secondary Education Act (1965) and its subsequent reauthorizations – No Child Left Behind (2001) and, most recently, Race to the Top (2010) – policy makers have sought to establish accountability mechanisms that focus on improving academic quality and student achievement. Yet, these newest approaches with NCLB (2001) and Race to the Top (2010) focus on the classroom level rather than the context within which these classrooms reside or the leadership necessary to create real change in either academic quality or student achievement.

Leadership is integral towards achieving organizational improvement (Northouse, 2007 Sternberg, 2007; Hallinger, 2003; Ruff & Shoho, 2005; Machida & Schaubroeck, 2011). Several authors have conducted research in areas investigating the psychological aspects of leadership such as leader creativity, mental models, and leader self-efficacy and how these elements influence leadership practice (Sternberg, 2007; Ruff & Shoho; Machida & Schaubroeck, 2011). Others have focused their research on investigating the behavioral aspects of leadership surrounding the ways a leader builds organizational relationships and promotes a culture of inquiry or reflection (Hallinger, 2003; Northouse, 2007). This study examined the extent to which a principal's leadership practice leads to the possibility of instructional improvement. This study also examined the ways in which the interpersonal and psychological attributes of a leader influence the choices and practices that lead to or constrain the possibility of organizational improvement.

Background of the Problem

Educational reform is not a new idea. Hargreaves and Goodson (2006) suggest that since the 1990's to the present, American education has experienced a period in reform surrounding standardization and marketing. They also assert that this most recent wave of educational reform has been the result of a loss of faith by the general public surrounding the lack of schools' ability to increase students' academic performance and close the achievement gap (Hargreaves & Goodson, 2006). The authors attribute this loss of faith to the surplus of information that has become increasingly available over the past decade. In a world that has seen an increase in the accessibility of information through technological advances, especially within the past decade, our world has become more integrated socially (ibid.). The release of data surrounding achievement losses or gains reported by schools and made available to the public has added to the debate on what stakeholders are doing to improve gaps in academic performance (ibid.). Hargreaves and Goodson (2006) argue that the public's loss of faith in our schools have led to accepted beliefs surrounding the need for increasing levels of school accountability, establishing performance targets, developing and implementing high-stakes testing, and implementing intervention (Hargreaves & Goodson, 2006). These accepted beliefs by stakeholders highlighted by Hargreaves and Goodson (2006) lie at the heart of our most recent reform efforts in education and educational policy in the advent of No Child Left Behind (2001).

Accountability Mechanisms and No Child Left Behind (2001)

The accountability mechanisms outlined in No Child Left Behind (2001) have held schools, school districts, and states to a higher standard than what existed prior to

the enactment of this law. The law requires states to: 1) adopt standards and assessments that prepare students to succeed in college, the workplace, and the global economy; 2) build and manage data systems that measure student growth and inform teachers and school leaders about instructional progress; 3) recruit, reward, retain, and develop effective teachers and school leaders, particularly in high need areas; and 4) turn around the lowest-performing schools (U.S. Department of Education, 2009). These are the core requirements geared at establishing external and internal accountability measures for states, districts, and schools.

No Child Left Behind's (NCLB, 2001) blueprint for strengthening schools suggest that schools will meet these requirements by: 1) providing more rigorous coursework, 2) hiring science and math professionals to serve as adjunct teachers, 3) using empirically proven methods of instruction, and 4) continuing to hold schools accountable for results (United States Department of Education, 2002). NCLB (2001) also places a large emphasis on the recruiting and hiring highly qualified teachers. However, NCLB (2001) delves little into discussion about what constitutes high-quality instruction. Furthermore, the NCLB (2001) blueprint mentions training teachers in empirically based instructional methods, but fails to fully define what this actually means.

Cochran-Smith and Lytle (2006) point to the ambiguity of improving teacher learning and training as they describe Title II of NCLB (2001), otherwise known as the Improving Teacher Quality Program, where it states that state funds received through NCLB (2001) may be utilized to ensure teachers obtain the necessary training to possess the subject-matter knowledge and instructional skills needed to teach their academic subjects. Furthermore, funds can be used to support principals in developing their

instructional leadership skills in order to help teachers teach and students learn (Cochran-Smith & Lytle, 2006).

In the section of Title II that discusses improving teacher quality, it is noted that it is only 79 words in total length (ibid.). This is important to note because the brief description of Title II within NCLB (2001) does not exhibit a level of depth in understanding on not only defining what improving teacher quality meant, but defining *how* principals can support the improvement of teacher quality through their enactment of instructional leadership. Furthermore, Title II makes repeated use of the terms *subject-matter knowledge, academic subjects,* or *academic content standards*. There is a great deal of emphasis on teacher development in the area of curriculum and content knowledge, but in a section that was supposedly devoted to improve the quality of teaching, there is little discussion about how teachers can achieve enhanced capacity for content knowledge and pedagogical knowledge (Cochran-Smith & Lytle, 2006). Furthermore, leadership is mentioned only twice in Title II stating that principals need to have the instructional leadership skills to help teachers teach and to help students meet the challenges within the content standards set forth by their respective state governments. Title II does not go into any further detail as to how leaders are to develop the skills necessary to meet these demands.

The program blueprint of No Child Left Behind (2001) fails to account for one large component: school leadership. As Helsing, Howell, Kegan, and Lahey (2008) point out: school leaders now have the responsibility to improve teaching and learning for an increasingly diverse student population, dexterously facilitate teaching learning and professional development, and navigate the pressing political climate and educational

reform context both at the state and federal levels (Helsing, Howell, Kegan, & Lahey, 2008). To complicate matters even more, much of the legislation surrounding education reform fails to account for the capacity and development of leadership (Darling-Hammond, Orphanos, LaPointe, & Weeks, 2007). When it comes to leadership, assumptions are being made that school leaders automatically possess the capacity for not just leadership, but the kind of change leadership that results in the school achievement outcomes desired from No Child Left Behind (2001) and Race to the Top (2010). Policy makers and other stakeholders are not taking into account the underlying attributes and hidden complexities of leadership.

Issues in Leader Development

Darling-Hammond, Orphanos, LaPointe, and Weeks (2007) discuss issues in leader development in the advent of No Child Left Behind (2001). The authors argue that policymakers have placed a large emphasis on reform efforts surrounding a direct connection to student learning, teacher recruitment and training, credentialing and evaluation, and curriculum issues surrounding the development of content standards, textbooks, standardized testing, and accountability (Darling-Hammond et al., 2007). Furthermore, the considerable role the principal must play in creating the necessary conditions for improving student learning outcomes has been overlooked (ibid). Principals have experienced increasing demands through these reform efforts but leadership development has not sufficiently prepared principals with the capacity needed to meet these demands (Darling-Hammond et al., 2007). Darling-Hammond et al. (2007) highlight that preparation programs for principals in the U.S. have traditionally consisted of “a collection of courses regarding general management principles, school laws,

administrative requirements, and procedures, with little emphasis on knowledge about student learning, effective teaching, professional development, curriculum, and organizational change" (Darling-Hammond et al., 2007, p. 4). Principals entering schools post-NCLB are under-prepared to meet the challenges of organizational improvement through instructional leadership and, therefore, the extent to which a principal feels prepared to meet the organizational challenges may influence the extent to which she is able to lead (Darling-Hammond et al., 2007).

Helsing, Howell, Kegan, and Lahey (2008) examine leadership development through another lens but also support Darling-Hammond, Orphanos, LaPointe, and Weeks' (2007) argument that school leaders have not been sufficiently trained to meet the varying demands placed on them to lead schools. Helsing et al. (2008) assert professional development programs need to employ a framework that tackles an individual's *immunities to change*. The authors identify immunities to change as "the underlying barriers that prevent an individual from making progress towards a desired professional goal" (Helsing, Howell, Kegan, & Lahey, 2008, p. 441). At present, the authors assert that professional development programs do not address an individual's underlying assumptions, beliefs, or mental models that give rise to levels of the kind of cognitive dissonance, or opposing thoughts and ideas that are needed to contemplate on the work needed to achieve a desired professional goal. Helsing et al. (2008) also argue that understanding the underlying behaviors and assumptions that lead principals to act is important because "their actions affect student achievement" (Helsing et al., 2008, p. 458).

The development and enactment of No Child Left Behind (2001) was thought to address the increasing need for innovation in preparing students for a 21st-century world (Hargreaves & Goodson, 2006). As the 21st-century approached, stakeholders discussed the need for future generations of students to be equipped with certain skills in order to be competitive in an increasingly global economy (Schoen & Fusarelli, 2008). Among these skills included students possessing the ability to: think critically and creatively, solve complex problems, possess collaboration skills, and be skilled with new forms of media (Schoen & Fusarelli, 2008). The call for action in preparing future generations of students with skills in innovation, creativity, critical thinking, and adaptability is juxtaposed by the demands for schools to meet the narrow and focused testing targets or Adequate Yearly Progress (AYP) outlined in NCLB. As a result, principals, school leaders, and teachers are in constant tension in determining the appropriate direction to go with respect to improving teaching and learning for student achievement. Within the school context, the persistent threat of failing to meet AYP and the resulting consequences (e.g., public embarrassment, associated stigma, threats to school funding, school restructuring methods, and staff/faculty/administrative replacement) influence actions and decisions made by teachers and school administrators (Schoen & Fusarelli, 2008; Hamilton, Stecher, & Yuan, 2008).

School Reform Efforts

In the wake of NCLB, there have been a large number of efforts to address the gaps in student achievement and organizational performance. Yet, even with these reform efforts the focus has been placed on teaching and the needs of students and teachers rather than placing focus on developing the leadership needed to facilitate improvement

in teaching and learning. Three such reform efforts of note include the 21st Century Schools Movement (Schoen & Fusarelli, 2008), Ted Sizer's Coalition of Essential Schools, and Ed Hirsch's Core Knowledge.

Schoen and Fusarelli (2008) discuss the 21st Century Schools reform movement as being "rooted in constructivist approaches" where educators, business leaders, and policy makers work to instill in students the essential skills that will be required in our rapidly changing and technology-driven global society (p. 183). Schoen and Fusarelli (2008) state that business and industry leaders are finding themselves in evolving global markets where there is rapid change with respect to communication, product development, and service and delivery systems. As a result, there is an increased need for a new type of workforce that "understands systems thinking, can work collaboratively, is flexible, innovative, resourceful, and able to access and apply new information to solve complex problems" (Schoen & Fusarelli, 2008, p. 185). In order to prepare students with these imperative skills, instructional methods and practices must be cultivated and employed to meet these increasing demands (Schoen & Fusarelli, 2008). However, this educational reform movement continues to place emphasis on improving teaching and learning through improved instructional methods as opposed to providing resources for improving leadership capacity to lead instructional change.

Ted Sizer's Coalition of Essential Schools is another type of educational reform movement focused on improving student learning through providing a more comprehensive education. In providing what Sizer calls a comprehensive education, his organization aims to equip students with the "intellectual, emotional, and social habits and skills to become powerful and informed citizens who contribute actively toward a

democratic and equitable society" (retrieved from www.essentialschools.org, 2011). Sizer argues that no two schools are the same and, therefore, it is through increased professional collaboration that stakeholders can share practices and ideas that can help one another reach success. Resources provided by the organization center on improving classroom practice and organizational practice, but are lacking in developing leadership.

A final educational reform movement of focus is E.D. Hirsch's Core Knowledge. Hirsch asserts there is a "core" of knowledge that needs to be taught at each grade level with each grade level knowledge base building on the previous years' of a student's progress. This sequence of skill sets that students need to acquire lead to a narrowly focused curriculum that pushes students to the next level within that learning continuum. The curriculum is focused and narrow, starting at kindergarten and builds into 12th grade in the following subject areas: visual arts, world history, American history, math, science, geography, language arts, and music (retrieved from www.coreknowledge.org, 2011). However, much like Sizer's Coalition of Essential Schools, resources provided by the organization center on instructional improvement and do not provide much support in the development of leadership.

The reform efforts among 21st Century Schools, Sizer's Coalition of Essential Schools, and Hirsch's Core of Knowledge appeal to both sides of the NCLB conundrum regarding preparing students for a 21st-century society while meeting the focused performance targets in high-stakes standardized testing. The 21st Century Schools movement focuses on providing students with the skills necessary to compete in our evolving global economy (Schoen & Fusarelli, 2008). The Coalition of Essential Schools has the look of a constructivist model of education (Hargreaves & Goodson, 2006). The

Coalition of Essential Schools model attempts to help students, mentored by teachers, to construct meaning of their learning and develop interest in a collaborative setting. Core Knowledge, on the other hand, seems to model a more direct model of instruction where well-developed and carefully crafted lessons are derived from specific and targeted learning objectives. One commonality between these three reform efforts lies in the approach to educational reform focused on classroom instruction, but lacking clear approaches to cultivating leadership that supports these reform efforts.

From the literature presented here, educational reform efforts do share a common goal that involves increasing students' academic performance and closing the persisting achievement gap. From policy in No Child Left Behind (2001) to reform efforts like 21st Century Schools, the Coalition of Essential Schools and Core Knowledge, all stakeholders involved are looking to find what will work to improve educational outcomes for all students and to, finally, close the achievement gap. Despite these reform efforts highlighted by Hargreaves and Goodson (2006), Cochran-Smith and Lytle (2006), and Darling-Hammond, Orphanos, LaPointe, and Weeks (2007), we are continuing to find ourselves in the same conundrum involving ways to improve the academic performance and achievement of the students we teach – even after the implementation of No Child Left Behind (2001).

Statement of the Problem

The accountability mechanisms with No Child Left Behind (2001) infer that the role of the principal is becoming more and more complex. Principals are faced with an increase in responsibility for ensuring school performance targets are met for Adequate Yearly Progress (AYP) and the Academic Performance Index (API), which measures

performance on high-stakes standardized tests. This increase in responsibility has also increased a need for identifying strategies and methods principals and other school leaders can utilize to improve organizational performance specific to improving instructional practice.

Principals are expected to change instructional practice and support increased student learning, but do not necessarily have the appropriate support in order to effectively lead in this capacity. Educational reform efforts and educational policy such as No Child Left Behind (2001) and Race to the Top (2010) do not specifically outline appropriate support measures for fostering leader development in instructional improvement. Yet, principals still are expected and responsible for enacting change in an era of increased school accountability, but with a persisting absence of the adequate and necessary support that will enable them to effectively lead.

Thus, a principal is often left to lead an organization, under-prepared and under-supported, while relying on her own perception of how she should lead given what she already knows. The problem, then, lies with the principal's actions and leadership practices infrequently translating into actions that are likely to create improvements in teaching and student learning. As a result, our schools are filled with well-meaning principals who cannot create the kind of change they are expected to make (Darling-Hammond, Orphanos, LaPointe, & Weeks, 2007; Helsing, Howell, Kegan, & Lahey, 2008).

Purpose of the Study

Factors like a leader's level of self-efficacy, mental models, levels of creative thinking, and one's immunities to change are factors that have not been traditionally

considered as being important in educational reform, especially in cultivating an understanding in what enables a leader to even possess the capacity to accomplish the tasks she sets out to accomplish (Machida & Schaubroeck, 2011; Helsing, Howell, Kegan, & Lahey, 2008; Sternberg, 2007). To understand what influences leadership practice, we must engage in a deeper examination of the interaction of an principal's level of leader self-efficacy, mental models, leader creativity, and her immunities to change, and how the intersection of these elements influence the capacity of leadership practices aimed at achieving organizational change. No Child Left Behind (2001), Race to the Top (2010) and other reform efforts have placed a great deal of focus on the instructional perspective of the educational reform argument, much to the detriment of discussing how leadership builds the very instructional capacity needed to create change.

The purpose of this study focused on the intersection of a principal's level of leader self-efficacy, mental models, leader creativity, and her immunities to change, and how the interaction of these elements lead the principal to employ organizational practices that promote a culture of inquiry while cultivating and maintaining organizational relationships that lead to the possibility of fostering and achieving organizational improvement.

Research Question

The following question guided my inquiry:

- To what extent does a principal's own mental models, level of leader self-efficacy, her immunities to change, and her level of leader creativity influence the principal's ability to enact her style of leadership in fostering and achieving organizational improvement?

Importance of the Study

This study focused on the leadership elements linked to one's leader self-efficacy, mental models, immunities to change, and leader creativity, which are believed to influence principal practices that promote a culture of inquiry and cultivate in-group/out-group organizational relationships in an effort to foster and achieve organizational improvement. This study contributes to the limited literature and empirical research that exists with respect to leader self-efficacy, leader creativity, immunities to change, and mental models influencing a principal's leadership practices. Furthermore, this study contributes to the increased need for understanding the importance of leader development as we continue to move forward in this age of accountability. Finally, the study's implications and findings may prove useful to current and aspiring administrators who desire to improve their capacity for leadership and achieving instructional improvement.

Methodology

A qualitative multi-case study was employed to examine the extent to which a principal's leader self-efficacy, mental models, immunities to change, and leader creativity influenced the leadership practices that lead a principal to the possibility of achieving organizational improvement. The multi-case study was conducted focusing on two high schools where the principals were working with their leadership teams and faculty members in attempting to achieve a desired level of organizational change. The two high schools studied consisted of a school that were an independent charter and a school that was a non-charter, both operating within the same district. Data collection occurred at each site separately in an effort to keep all data organized and clearly distinguished between the schools. Formal interviews were conducted with both the

principals and several faculty members. I conducted direct observations of, professional development meetings, faculty meetings and leadership team meetings of which the school principals were either facilitators or active participants. Principal Shadow Day observations were also conducted to observe the Principal in action during a typical workday.

Assumptions

For the purpose of this study two assumptions are made. First, it was assumed that responses gathered from the individual interviews with the principals were truthful as their responses were self-reported. Second, it was assumed that behaviors and dialogue observed within faculty meetings were typical on any given day outside of the days I observed.

Limitations

There are five limitations identified with this study. First, there is a limitation in the generalizability of this study as I am focusing on only two high schools. As a result, it is difficult to determine whether the results obtained from this study can be replicated at additional schools or in different organizational contexts. Second, the timeline of data collection will only span two months versus a nine-month academic year and may not allow for enough data to be collected to gain deep enough insight into whether or not instructional improvement is achieved by the principal. Third, the qualitative nature of the study and the small number of participants interviewed only provides individual portraits that are, perhaps, unique to the school and the individual principal and may not be representative of the entire population of principals in California schools. Fourth, answers obtained from participants cannot be anticipated to coincide with the questions

asked within my own instrumentation. Finally, my own researcher bias acts as a limitation as the inferences I make from the observations and interview notes are made from my own lens and may not always align with what the participants are thinking when providing their responses.

Delimitations

There are three delimitations, or the characteristics that limit the scope of the study's inquiry as indicated by the researcher, within this study. The first involves school site selection as I am purposefully sampling the school sites for my case study. The second delimitation involves the timeline established for data collection where I will spend two months at the selected school sites. Third, my instrumentation and measures for data collection and analysis, such as interview protocols, will be established by me and implemented by me.

Definition of Terms

Academic Performance Index (API) – In California, the API was established as law in 1999; the law was established in an attempt to generate an academic accountability system for K-12 public schools. The API is calculated using student performance scores from standardized state assessments in multiple content areas. The API score range for a school is from 200 (low) to 1000 (high). (California Department of Education, 2010).

Adequate Yearly Progress (AYP) - A set of annual academic performance benchmarks that states, school districts, schools, and subpopulations of students are supposed to meet and achieve if the state is receiving funding under Title I, Part A of the federal No Child Left Behind Act (NCLB).

Alignment – The extent to which curriculum, instruction, textbooks and other instructional materials, assessments, teacher preparation and professional development, and systems of accountability all reflect and reinforce the educational program's objectives and standards.

Assessment – A test students take to measure academic knowledge and skills; can also refer to a system for testing and evaluating students, groups of students, schools or districts.

Benchmark: A specific level of student achievement expected and established for students at particular ages, grades, or developmental levels.

California Standards Test: Exams that are a part of the Standards Testing and Reporting (STAR) program and are based on the state's academic content standards.

Core Academic Standards: The basic K-12 academic content standards that are assessed at the statewide level for the state's testing system.

Curriculum: The course of study offered by a school or district influenced by the state's academic content standards.

Professional Development: Programs that allow teachers or administrators to acquire the knowledge and skills they need to perform their jobs successfully.

Professional Learning Communities: An organizational practice in which the teachers in a school and its administrators continuously seek and share learning and then develop goals and plans to act on what they learn in order to improve teaching and learning for student outcomes.

Chapter 2: A Review of the Literature

At the core of each public school site in K-12 education is the leader – the principal (Crum, 2008). The principal plays a pivotal role in improving the quality of instructional practice to boost student achievement and close educational and performance gaps (Goldring, Porter, Murphy, Elliott & Cravens, 2007). For this review, I draw from three bodies of literature. These three bodies of literature provide insight into the role leadership plays in supporting organizational change and instructional improvement. First, I will examine the current role of the principalship. Second, I will examine three leadership styles associated with principal leadership: *instructional leadership*, *transformational leadership*, and *distributed leadership*. Third, I will examine literature on four psychological elements of leadership: *leader self-efficacy, mental models, immunities to change,* and *leader creativity*. I will conclude this review of the literature with the presentation of my conceptual framework that will serve as the basis for my study's methodology.

The Role of the Principalship in Organizational Improvement

With the adoption and implementation of the No Child Left Behind Act (2001), the role of the principal has changed immensely (Hess & Kelly, 2007). Prior to the enactment of No Child Left Behind (NCLB, 2001), the principal's responsibilities were primarily to complete paperwork, act as building manager and as a disciplinarian (ibid.). With the introduction of new accountability measures in NCLB requiring schools to demonstrate improvement in student achievement and the use of data to inform and drive student results, the principal's role has expanded to include a larger focus on teaching and learning (King, 2002). Researchers have sought to examine the role of the principalship

in organizational change from various perspectives. Some have researched the principal's role from a traits perspective (Zaccaro, 2004, 2007; Northouse, 2007; Vroom & Jago, 2007). Some researchers have discussed the principal's role from a behavioral perspective (DeRue and Wellman, 2009; Fullan, 2001, 2002; Hinds & Pfeffer, 2001; Judge, Piccolo, & Ilies, 2004; Bolman & Deal, 2008; Wahlstrom & Louis, 2008). Other researchers have examined the principal's role from an operational perspective (Printy, 2008; Leithwood, 2005; Scharmer, 2009; Schein, 2010; Portin, Schneider, DeArmand, & Gunlach, 2003; Wood, 2005; Rynes, 2001). This section of the review of the literature will focus on the principal's role in organizational change. I will first present theoretical research addressing the traits, behavioral and operational perspectives of the principalship. I will then direct my focus on several studies from researchers whom have sought to explore the principal's role in organizational change.

Trait Perspective

Research from the trait perspective has typically centered on the attributes a leader needs to possess in order to be considered effective (Elmore, 2000, 2005, 2006; Fullan, 2001, 2002; Spillane, Halverson & Diamond, 2004; and Northouse, 2007). Northouse's (2007) theoretical perspective on trait research in leadership focuses on identifying "innate qualities and characteristics possessed by leaders" (p. 15). Numerous research has centered on identifying specific traits associated with effective leadership such as: *having vision, passion, communication skills, intelligence, ability to establish trust, having integrity, organizational relationships, establish a culture of inquiry,* and being a *facilitator* (Bennis, 1989; Fullan, 2001, 2002, Northouse, 2007, Bolman & Deal, 2008). Northouse (2007) asserts that there are five central attributes of a leader that the

Trait Perspective indicates are effective leadership traits. According to Northouse (2007) these attributes consist of: 1) intelligence, 2) self-confidence, 3) determination, 4) integrity, and 5) sociability. According to the theory, organizations will work better if a leader possesses these traits (ibid.). The five traits identified by Northouse (2007) as the major leadership traits are expanded upon below.

Northouse (2007) identifies the first major leadership trait to be intelligence. When it comes to the trait of intelligence, Northouse (2007) explains that this trait is one where the leader has a "strong verbal ability, perceptual ability, and reasoning" ability indicating that a leader possesses a level of intelligence that enables them to acquire "complex problem solving skills and social-judgment skills" (p. 19). The author also cautions that leaders with an IQ level that is strikingly different from their organizational members may prove problematic as the leader may experience difficulty in communicating ideas with organizational members (ibid.). Northouse (2007), however, does not illustrate this position with any reference to studies conducted that support this definition of intelligence, which makes it difficult to conceptualize the leader's demonstration of intelligence in an applied setting.

A second trait Northouse (2007) identifies from his theoretical perspective is self-confidence. Northouse (2007) defines self-confidence as the "ability to be certain about one's competencies and skills" (p. 19). Self-confidence, in essence, is the underlying belief that one is sure that she has the ability to make an impact or make a difference (ibid.). Without self-confidence and an inherent belief in what a leader wants to accomplish, it becomes difficult for the leader to even begin communicating her ideas to her organizational members (ibid.).

A third trait Northouse (2007) discusses involves a leader having integrity. The trait of integrity refers to the idea being honest and trustworthy (Northouse, 2007). Leaders with integrity take responsibility for their actions and maintain a strong set of principals (ibid.). Within the trait of integrity, there is a subset of traits as Northouse (2007) adds the descriptors of "loyal, dependable, and not deceptive" in defining the trait of integrity (p. 20). Because leaders with integrity are seen to be faithful, trustworthy, and possessing a strong moral code, they are able to cultivate a sense of trust among organizational members because "integrity makes a leader believable and worthy of our trust" (Northouse, 2007, p. 20).

A fourth trait elucidated by Northouse (2007) involves a leader's ability to be determined. Within this trait is a subset of traits where a leader is defined by Northouse (2007) to be persistent, dominant, driven and one who takes initiative. Leaders who are determined are ones whom assert themselves of their beliefs and positions while preserving through any obstacle towards completion of a goal. Northouse's (2007) brief explanation of "determination" yields little examples from research illustrating what a determined leader actually looks like, but one can only conclude that a determined leader is one who, despite challenges and tribulations, never gives up in pursuit of a goal.

The final trait Northouse (2007) identifies is sociability. Sociability refers to the leader's ability to seek out and engage in positive social relationships (ibid.). Descriptors Northouse (2007) offers to illustrate the trait of sociability include: courteous, tactful, friendly, outgoing and diplomatic. From these descriptors, it becomes difficult to separate trait or characteristics from behaviors or behavioral actions employed by the leader, which may speak to the level of ambiguity in identifying central traits of effective

leadership – a potential weakness. Nevertheless, Northouse (2007) asserts that leaders who are social have strong interpersonal skills and are able to create cooperative relationships with their organizational members. Again, the author offers no additional research to illustrate his definition of sociability.

There are strengths that one can take away from Northouse's (2007) theoretical perspective of the five major traits of leadership. First, the trait perspective is naturally appealing (Northouse, 2007). In the mainstream media, so many images are created of leaders as people who are special and have certain gifts that enable them to do extraordinary things (ibid.). As a result, the idea that a leader is someone who has specific attributes or characteristics and that those attributes can help an organization are appealing to the general public (Northouse, 2007). Second, the trait perspective is one of the first bodies of research aimed at studying leadership (ibid.). Therefore, there is certain longevity to this research that allows for a certain "level of credibility that other approaches lack" (Northouse, 2007, p. 24). A third strength identified by Northouse (2007) is that the focus of the trait perspective theory focuses on the leader. This deliberate focus on the leader allows for deeper insight on how the personality traits influence the process of leadership enacted (ibid.). Lastly, the identification of specific traits found within a leader acts as a benchmark for what one needs to look for to become a leader (Northouse, 2007).

Though there are strengths in Northouse's (2007) approach to defining the idea of the trait perspective in leadership, it is not without weaknesses. First, Northouse (2007) fails to illustrate his definitions of the five traits with any additional research. The lack of empirical studies fails to provide a deeper understanding of the five traits and how these

traits are applied in leadership. Second, while Northouse (2007) only spoke to five major traits associated with effective leadership, additional research as noted by the author has identified other traits such as the ability to have insight, the ability to be cooperative, the ability to be alert, and possessing task knowledge and cognitive ability (ibid.). The various lists of traits do not provide a definitive or clear list of what actual attributes are most closely associated with effective leadership (Northouse, 2007). The lack of a clear list of traits allows for ambiguity in defining what constitutes an effective leader. Third, the trait perspective on leadership focuses exclusively on the leader and not organizational members or the organizational situation (Northouse, 2007). The author defines leadership as a *process* that consists of the leader, the organizational members and the organizational situation (Northouse, 2007). Placing sole focus on the leader from the trait perspective only presents a one-third viewpoint in understanding the full context of leadership. As a result, Northouse's (2007) trait perspective lacks an ability to examine leadership in relation to leadership outcomes.

Northouse's (2007) work is just one piece that has explored the idea of the trait perspective in understanding effective leadership. Northouse's (2007) work and explanation of the five central leadership traits is important for the purpose of my study because there is a foundational level of leader traits that are necessary for a leader's potential effectiveness (Northouse, 2007). It is also important to understand that the types of individual traits possessed by a leader may bear influence on a leader's level of effectiveness and may also influence the actions a leader will take within an organization. This is discussed further in the study conducted by DeRue, Nahrgang, Wellman and Humphrey (2011), whose work are reviewed later in this chapter.

While some argue that traits in a leader are essential to effective leadership (Bolman & Deal, 2008; Mumford, Campion, & Morgeson, 2007), others argue that placing sole focus into the study of leadership traits creates a perception that leaders who possess these traits operate as heroic individuals whom bear sole responsibility for an organization's improvement (Hallinger, 2005; Marks & Printy, 2005; Robinson, Lloyd & Rowe, 2008). Other researchers such as Zaccaro, Kemp, and Bader (2004) provide an extension from the trait perspective of leadership asserting that focus must not only be placed on the traits of the leadership but on how these characteristics eventually influence leadership behavior.

Zaccaro, Kemp and Bader (2004) first define the term *trait* to refer to personality, temperament, disposition, abilities and demographical characteristics. In defining what the term *trait* refers to early on, the authors are able to provide a guideline for the types of labels that can be associated with traits in leadership. The authors provide an empirical review and summary of trait research compiled from research gathered between the years 1990 and 2003 (Zaccaro et al., 2004). From their compilation of research, the authors examined patterns of identified traits and identified five primary categories of leader attributes (Zaccaro et al., 2004). These categories are: cognitive abilities, motivation, social appraisal skills, problem solving skills, expertise, and tacit knowledge (ibid.). When it comes to understanding the category of cognitive abilities, Zaccaro et al. (2004) mirror similar traits identified from Northouse (2007) with regard to a leader possessing reasoning abilities, verbal abilities, complex problem-solving abilities and intelligence (Zaccaro et al., 2004). Zaccaro, Kemp and Bader's (2004) category of motivation can be thought to overlap Northouse's (2007) determination trait as the authors identify

descriptors such as the leader's need for dominance and need for achievement. This aligns with the determination trait because the leader is both motivated and determined to succeed at goal attainment (Northouse, 2007; Zaccaro et al., 2004). Social appraisal skills are similar to what Northouse (2007) defines as sociability. Zaccaro et al (2004) explain that social appraisal skills, or social intelligence, refer to the leader's ability to "understand the feelings, thoughts, and behaviors of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding" (Zaccaro, Kemp & Bader, 2004, p. 115). The authors assert that social intelligence lies at the heart of effective leadership (ibid.).

Finally, Zaccaro et al (2004) present a category that Northouse (2007) did not – expertise and tacit knowledge. The authors define tacit knowledge as knowledge that is not overtly taught or verbalized but is knowledge that one must acquire in order to succeed in a given environment (Zaccaro et al., 2004). The authors add to their definition asserting knowledge "emerges when individuals acquire new experiences and have the cognitive appraisal skills that allow them to draw lessons from these experiences" (Zaccaro et al., 2004, p. 118). Reflecting on lessons obtained from experiences enable a leader to build on their own tacit knowledge and can increase potential for leadership effectiveness (ibid.).

There are strengths to having thematic categories as Zaccaro et al. (2004) present in their research. By creating thematic categories such as cognitive abilities, motivation, social appraisal skills, problem solving skills, and expertise and tacit knowledge, we can now group the extensive list as briefly described by Northouse (2007) and place various attributes into appropriate categories. Furthermore, Zaccaro, Kemp and Bader's (2004)

discussion of tacit knowledge as a leadership trait is something that Northouse (2007) did not discuss but would appear to be relevant in understanding how this trait can influence leadership effectiveness. A leader's ability to cultivate knowledge from learned experiences can increase the level to which a leader will be effective given she has reflected on and learned from previous experiences and, as a result, builds on her existing knowledge base.

While Zaccaro et al. (2004) provide an overview of five categories they identified from their review of research, there are three limitations in their approach to the trait perspective. First, the authors present five generalizing categories with which to explore traits associated with effective leadership. In doing so, they fail to paint a clearer picture regarding the attributes of a leader. Second, their review of past research on leadership traits fails to generate any new theory regarding the relationship between leadership traits and leadership effectiveness. Third, while the authors conclude arguing that we have yet to fully understand the impact of leader traits and their effects on leadership (Zaccaro, Kemp & Bader, 2004), they fail to draw connections among specific traits that may contribute to leadership effectiveness as well as draw connections between leadership traits and associated behaviors.

The trait perspective in research, in its own category, is an appropriate beginning into the study of effective leadership because a primary question that is typically asked across the literature on leadership centers on determining who an effective leader is (Bennis, 1989; Fullan, 2001; Northouse, 2007; Zaccaro, 2007). However, this one perspective in research is not enough to fully conceptualize whom effective leaders are, their behavioral actions and practices, and how those behaviors and practices improve an

organization (Vroom and Jago, 2007; Zaccaro, 2007). It becomes necessary to examine the research of those whom have studied leadership from a behavioral perspective (Fullan, 2001; Goldring, Huff, May and Camburn, 2007; DeRue, Nahrgang, Wellman and Humphrey, 2011).

Behavioral Perspective

Fullan (2001) establishes five broad factors in leadership: having moral purpose, understanding the change process, relationship building, coherence making, and knowledge creation and sharing. From the phrasing of these terms, Fullan (2001) indicates that these components are what a leader *does* versus simply defining who a leader *is*. Doing so allows for traits and behaviors to be linked in a cyclical relationship. Fullan (2001) asserts these five components of leadership behaviors work to influence commitment with organizational members and resulting in either “good things happening” or “bad things happening” (p. 4). The five components of leadership behaviors, as theorized by Fullan (2001) are elucidated below.

Fullan (2001) states that the leader having moral purpose means that the leader acts or behaves with the intent to make a positive difference in the lives with whom she interacts. Having moral purpose entails treating others fairly and decently; if a leader does not treat her organizational members well she “will be a leader without followers” (p. 13). Fullan (2001) fails to provide clear and concise definitions for what it means to have moral purpose, but I refer to Northouse’s (2007) idea of possessing integrity as a closely aligned definition for having moral purpose.

Fullan (2001) also discusses the importance for a leader to understand the change process. The word “change” is ubiquitously used to denote a metamorphosis within an

organization, an individual, or a moment in time (Elmore, 2000; Spillane, Halverson, & Diamond, 2004, 2005; Senge, 1990, Argyris, 1974, 2008). For Fullan (2001), a leader must work to establish a *culture of change*. This culture of change is established and fostered by the leader involving the principal's ability to "produce capacity to seek, critically assess, and selectively incorporate new ideas and practices – all the time, inside the organization as well as outside of it" (Fullan, 2001, p. 44). Fullan (2001) does not provide concrete examples of how a leader establishes a culture of change thereby presenting a challenge of effectively illustrating this theoretical perspective within a leader's ability to understand the change process.

Fullan (2001) also asserts that a leader must be aware of the importance of building organizational relationship and that relationships are essential in working towards organizational change. Relationship building is done through establishing the human connections, which are prevalent within organizations (Fullan, 2001). Human to human interaction, especially within a school, is an act that takes place daily and, therefore, calls for special attention from the leader to ensure that relationships are built and maintained (Fullan, 2001; Northouse, 2007). From this similar viewpoint, Fullan (2001) highlights that the leader must work to develop organizational relationships that will help to yield desired results. However, Fullan (2001) does not provide concrete examples or strategies of how leaders can develop the very relationships that can help them achieve the desired results they seek. Nevertheless, the author suggests it is important that the relationships built help move the organization forward rather than stagnates or hinders it from progressing (Fullan, 2001, 2002). In essence, the role of

building relationships serves to build capacity within the organization to achieve improved results (ibid.).

Another component of effective leadership lies in the leader's ability to build knowledge (Fullan, 2001). In this category, building knowledge also involves creating, sharing and managing knowledge (ibid.). Fullan (2001) asserts that in order for leaders to effectively engage in the process of building knowledge, the organizational culture must be set up to promote knowledge creation and sharing. Individuals within the organization need to feel as though they can share their ideas and information (ibid.). Establishing knowledge sharing routines either through professional development or departmental meetings create a collaborative culture that is conducive to knowledge building (Fullan, 2001). Again, Fullan (2001) speaks from a theoretical perspective and provide no real empirical evidence that further illustrates how a leader engages in the practice of building knowledge within an organization.

Finally, Fullan (2001) asserts that a leader must also practice coherence making. The act of coherence making involves a leader's ability to navigate the chaos that is associated with change (Fullan, 2001). The author advises that leaders must be aware of the constant that is change and that the world is a complex one (Fullan, 2001). Though change is seen to be inevitable and fraught with its own share of complexities, leaders need to recognize its potential value for improvement (ibid.). Fullan (2001) presents two requirements when engaging in coherence making. First, a leader and organization must work to self-organize (ibid.). When a leader and organization self-organize, there is a focused concern on examining patterns of relationships and actions and determining new relationships and actions (Fullan, 2001). Second, a leader may select to use *strange*

attractors, which are experiences or factors that attract and influence organizational members towards a certain direction (ibid.). Strange attractors, in the process of coherence making, are not predictable, but are seen as useful in garnering appropriate support for a given practice or idea (Fullan, 2001). An example in which a leader utilizes self-organization and strange attractors in coherence making would be the creation of a school-wide vision. The leader may reflect on contextual evidence from demographics to performance data and organize that information in a way that sets up the vision for the school towards organizational improvement. The leader may then insert strange attractors that range from emotional appeals to charismatic anecdotes in an effort to attract organizational members in adopting the school-wide vision. While Fullan (2001) speaks to coherence making from a theoretical perspective and does not provide empirical evidence to support his points, he asserts that coherence making is an important practice that a leader must employ throughout the entire process of leadership in a culture of change. One large limitation to Fullan's (2001) theoretical perspective is that little empirical evidence is provided to effectively illustrate his model of the five components of leader behavior. Empirical studies, in addition to theory, are needed to understand the behavioral perspectives and practices of principal leadership. Goldring, Huff, May and Camburn's (2007) study is one that aimed to explore factors that inform a principal's behavioral practice.

Goldring, Huff, May, and Camburn (2007) explored what explained a principal's behavioral practice with their study on the role of the organizational context and how it influences leadership practice. Goldring et al. (2007) established the following research questions in their study:

1) To what extent can principals be grouped or classified according to the time they invest across major realms of responsibility?
2) How does the context in which principals work explain how they allocate their time?
3) Do principal's individual attributes explain allocation of time across major realms of leadership?

To address their research questions, Goldring et al. (2007) selected a Southeastern school district that consisted of 29 elementary schools, nine middle schools, four high schools, and four alternative/special education schools. The sample population for this district involved 2,070 teachers and 46 principals. Goldring et al. (2007) collected data in two ways. First, surveys were sent to the sample population with the authors receiving an 87% response rate from the teachers and a 90% response rate from the principals. Second, principals were asked to keep a daily log for one week detailing their time allocation, behaviors and actions in leadership during the course of their workday. The response rate for the logs was 96% (ibid.).

In order to analyze the data and conduct their cluster analysis, Goldring et al. (2007) established nine categories that were determined by the authors to be major realms of responsibilities for a principal. These responsibilities are illustrated in Figure 1.1 on page 32 of this chapter.

Figure 1.1 Nine Realms of Principal Responsibility

Realm of Responsibility	Activities within Realm of Responsibility
Building Operations	• Schedule management • Space operations • Building maintenance • Vendor maintenance
Finances and Financial Support for the School	• Budgets • Budget reports • Researching grants • Managing contracts
Community or Parent relations	• Formal meetings • Informational Sessions • Interactions and communication to community or parent members
School district functions	• Student affairs • Attendance • Discipline • Counseling • Monitoring of halls/dining areas
Personnel Issues	• Recruiting potential new hires • Hiring and supervising of staff/faculty • Evaluating staff/faculty • Problem solving
Planning/setting goals	• School improvement planning • Developing goals
Instructional Leadership	• Monitoring/observing instruction • School restructuring or reform • Supporting teachers' professional development • Analyzing student data or work • Modeling instructional practices • Teaching a class
Personal Professional Growth	• Formal professional development • Attending classes at college/university • Reading books or articles

Figure 1.1 From Golding, E., Huff, J., May, H., & Camburn, E. (2007). School context and individual characteristics: What influences principal practice? *Journal of Educational Administration, 46*(3), p. 332-352.

From the information presented in Figure 1.1 above, Goldring et al. (2007) establish that a principal has nine major responsibilities than span across areas of human resources management, instructional leadership, professional development and fostering relationships with students, parents, and community stakeholders. Goldring et al. (2007) assert while principals assume all nine areas of responsibility during the course of a

workday, some principals spend more time in specific areas than others. The authors draw the conclusion that the school's context – the school's situation, culture, performance according to state standardized tests, and demographics – determine the behaviors and practices of the principal across the nine realms of responsibility.

From the data collected, Goldring et al. (2007) determined that there were three groups of principals among their sample: *eclectic principals, instructional leader principals, and student-centered principals*. Those who were found by the authors to be eclectic principals were found to have a more even distribution across the nine realms of responsibility and varied in the ways principals spent their time throughout their workday (ibid.). Principals identified as instructional leaders spent a majority of their time in the area of instructional improvement through monitoring and observing instruction and providing and supporting teachers' professional development (ibid.). Principals identified as student-centered spent more of their time in the area of student affairs dealing with issues surrounding attendance, discipline, student issues and hall monitoring (Goldring et al., 2007). Goldring et al. (2007) were able to conclude, according to the events written by the principals, that the school's specific situations and environments surrounding the principal influenced the way the principal allocated their time across their nine realms of responsibility.

Goldring et al.'s (2007) study sheds light regarding the factors that provide a more predictive measure into understanding the practice of a principal in a school. Their argument that organizational context shapes the ways in which principals exercise their responsibilities across the nine major realms provides an extension from the trait perspective described in the earlier section. One can then conclude that the organizational

context plays a larger role in influencing the practices and behaviors of a principal (ibid.). A major strength of this study lies in the large participation of principals from one entire school district. Because the findings were gathered from data collected from principals in an elementary, middle, high, and alternative education school setting, Goldring et al. (2007) are able to draw a conclusion about factors influencing principal practice in a more universal context. The organizational context that shapes principal practice and behavior is not limited to one school setting but can be seen across all school settings. However, conducting the study at only one school district also acts as a limitation because it is unclear if the results found from this study are generalizable enough to observe across similar school districts (Goldring et al., 2007). Nevertheless, Goldring et al. (2007) provide deeper insight into principal leadership and contribute to the research in the field by highlight the importance of organizational context in shaping principal behavior and practices. DeRue, Nahrgang, Wellman and Humphrey (2011) add to Goldring, May, Huff and Camburn (2007) with their meta-analytic test in understanding trait and behavior theories of leadership.

DeRue et al. (2011) present a contextual model that integrate trait and behavior theories in leadership. The integration model serves as a means to understand how trait and behavior theories in leadership can blend together to illustrate aspects of effective leadership. DeRue et al. (2011) also believe that leadership traits can be categorized, just as Zaccaro, Kemp and Bader (2004) categorized leadership traits. There is a distinction with the way DeRue et al. (2011) categorize leader traits. The authors establish three categories for grouping leadership traits: 1) demographics, 2) traits related to task competence, and 3) interpersonal attributes (DeRue et al., 2011). When it comes to

identifying specific traits within these categories, DeRue et al. (2011) provide the best list in comparison to what Northouse (2007) and Zaccarco, Kemp and Bader (2004) attempted to do. The outline of the three categories and the associated traits are displayed in Figure 1.2 presented below:

Figure 1.2 Leadership Traits Identified by DeRue et al. (2011)

Category	Traits Associated with Category
Demographics	• Gender • Age • Ethnicity/Race • Physical Traits (ie: Height) • Education Level • Experience
Task Competency	• Intelligence • Cognitive Ability • Conscientiousness • Openness to experience • Emotional Stability
Interpersonal Attributes	• Extraversion • Agreeableness • Communication Skills

Figure 1.2 From DeRue, D.S., Nahrgang, J.D., Wellman, N., & Humphrey, S.E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology, 64,* 7-52.

Figure 1.2 above highlights traits identified by DeRue et al. (2011) and the way in which the authors decided to categorize these traits. DeRue et al.'s (2011) list of traits bear some similarity and overlap to the traits discussed in Northouse (2007) and Fullan (2001). First, intelligence is a trait that is repeated and reinforces the need for a leader to have the ability to think critically and problem solve (DeRue et al., 2011; Northouse, 2007). Second, communication skills are also present with the list above highlighting the importance of the leader's ability to clearly communicate with organizational members or as Fullan (2001) calls it, coherence making. Third, the traits of openness to experience,

emotional stability, agreeableness and extraversion overlap the traits of relationship building as seen in Fullan (2001) and sociability as seen in Northouse (2007). One addition to this categorical list that is not fully expressed in Fullan (2001) or Northouse (2007) but is observed in DeRue et al. (2011) involves the category of demographics. The traits associated with the demographic category (ie: gender, age, ethnicity/race, physical traits, education level, experience) provide insight in the individual context of the leader and the background and experiences that shape the leader's perspective and influences the behavioral actions associate with leadership traits a principal possesses (DeRue et al., 2011).

While DeRue et al. (2011) believe traits to be an important element in understanding effective leadership, the authors assert leadership behavior versus leadership traits explain more of the variance in leadership effectiveness. DeRue et al. (2011) bridge the relationship of leader traits to leader effectiveness with a model of behavioral orientation. There are four categories associated with behavioral orientation: 1) task processes, 2) relational dynamics and 3) change-oriented behaviors, and 4) passive leadership (ibid.). According to task processes, this refers to the ways in which a leader defines task roles for members, coordinates tasks and performance targets for the group, and determines standards for performance (ibid.). Relational dynamics refer to the ways that a leader engages in organizational relationship by developing members through continued professional development and considering needs of members in the group (DeRue et al., 2011). Change-oriented behavior refers to the development and communication of a vision for change while also encouraging organizational members towards innovative thinking and risk taking (ibid.). Finally, passive leadership refers to

leaders who engage in laissez-faire leadership or is not actively engage as a leader within the organization (ibid.). This may be due in part to a lack of awareness that a problem exists within the organization or a non-existent problem that does not call for leadership interference (DeRue et al., 2011). The four behavior categories presented by DeRue et al. (2011) offer four ways in which a leader can behave, which can influence the extent to which the leader can enhance or hinder organizational performance and her own level of leadership effectiveness (ibid.).

To examine their arguments, the authors referred to previously published meta-analytic estimates and conducted an analysis of primary studies on trait theories and behavior theories in leadership (ibid.). Their meta-analysis was comprised of 59 studies. 13 of the 59 studies were identified as existing meta-analytic studies and the remaining 46 were primary research studies (ibid.). The authors of the study established 11 hypotheses with which to conduct their meta-analysis of the literature on leadership traits and behaviors (DeRue et al., 2011). Three of the 11 hypotheses were concerned with testing the relative validity of leader traits in explaining leadership effectiveness and organizational performance (ibid.). Four of the 11 hypotheses were concerned with testing the relative validity of leadership behaviors in explaining leadership effectiveness and organizational performance (DeRue et al., 2011). One of the 11 hypotheses was concerned with determining the importance of leader traits and leader behaviors concurrently in explaining leadership effectiveness and organizational performance (ibid.). The remaining three hypotheses were concerned with testing the validity of an integrated model where leader behavior and leader traits, organizational member attributions and group identification processes mediated the relationship between leader

traits and the four criteria established by DeRue et al. (2011) to measure leadership effectiveness (ibid.).

To engage in their meta-analysis, DeRue et al. (2011) established four criteria for explaining leadership effectiveness. These criteria were: 1) leadership effectiveness, 2) group performance, 3) member job satisfaction, and 4) satisfaction with leader (DeRue et al., 2011). The authors gathered the data from the studies and looked for emerging correlations among the four leadership criteria (DeRue et al., 2007). Articles located for the purpose of the authors study were in the area of leadership (ibid.). After data collection, the authors engaged in coding data from articles in accordance with the four criteria they established for their study.

DeRue et al. (2011) concluded leadership behavior predicted more of the variance across a variety of the leadership effectiveness criteria they had established. In addition, one trait that was found to be the most consistent predictor of leadership effectiveness and organizational performance across the four criteria was *conscientiousness* (ibid.). However, when it came to examining the literature on leadership traits alone, traits explained between two and 22% of the variance among the leadership effectiveness criteria (ibid.). In explaining leader behavior, task-oriented and change-oriented behaviors were found to be the most important for organizational performance while relational-oriented behaviors were less important in predicting organizational performance (DeRue et al., 2011). Passive leadership, in addition, was found to be ineffective in enhancing group performance and leadership effectiveness (ibid.).

The meta-analysis completed by DeRue, Nahrgang, Wellman, and Humphrey (2011) add to Zaccaro, Kemp and Bader (2004) in that the authors were able to support

that leadership behavior is a strong predictor in explaining leadership effectiveness and its influence on organizational performance. DeRue et al. (2011) also find that leader traits do still have a place within the literature, but are not found, when studied alone, to be a large predictor of leadership effectiveness and its influence in organizational performance. Therefore, the authors present their integrated model, which is present in Figure 1.3 below:

Figure 1.3 DeRue, Nahrgang, Wellman and Humphrey's (2011) Integrated Model of Leader Trait and Leader Behavior Theories

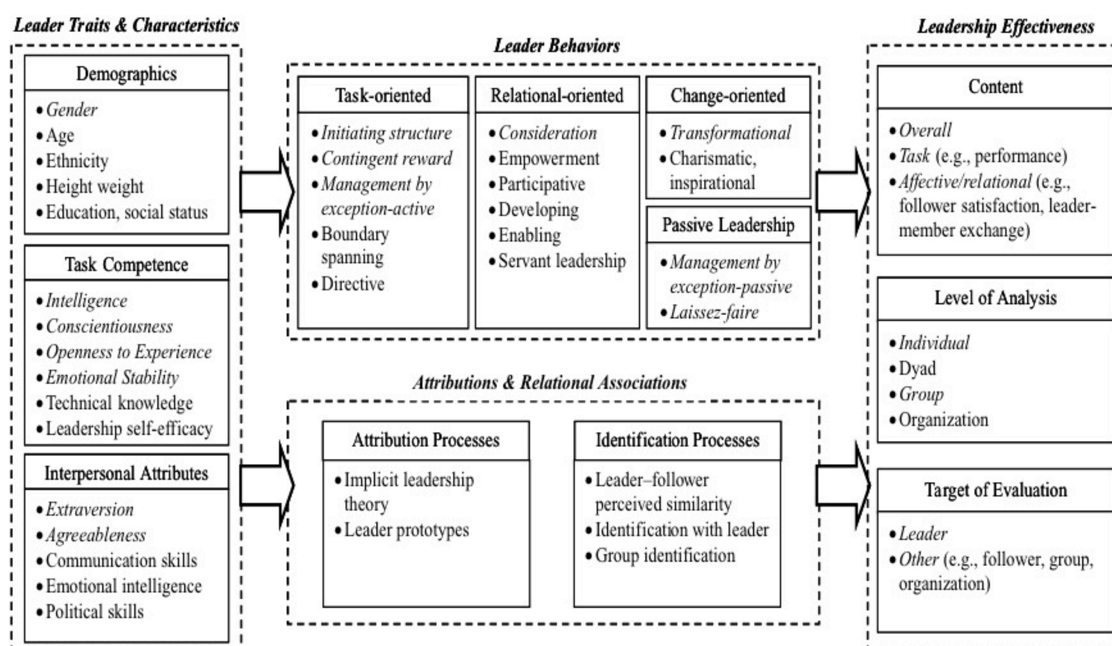


Figure 1.3 From DeRue, D.S., Nahrgang, J.D., Wellman, N., & Humphrey, S.E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology, 64,* 7-52.

DeRue, Nahrgang, Wellman, and Humphrey's (2011) model highlights one interesting outcome from their research. The authors' model highlights the discovery that the style of *transformational leadership* was found to be a consistent predictor of leadership effectiveness across the four criteria established in their study (DeRue et al.,

2011). *Transformational leadership* will be discussed in further detail in Section Two of this chapter.

While the results of the study support DeRue et al.'s (2011) argument of leadership behavior as a strong predictor of leadership effectiveness, it is not without its limitations. First, one of the hypotheses was not testable due to a lack of data on follower attributions and group identification processes (DeRue et al., 2011). Therefore, the authors were unable to determine if leader traits and behaviors exhibited a correlation between follower attributions (or the qualities or features possessed by members as a result of a characteristic or behavior exhibited by the leader) and overall organizational performance (DeRue et al., (2011). Another limitation found within the study is the lack of study on the role of organizational context and the ways it influences leadership behavior – an area that Goldring, Huff, May and Camburn (2007) explored within in their study and was discussed earlier in this section of the chapter. Despite these limitations, the authors are able to assert that their research points to a need for the level of integration among the paradigms in leadership literature relevant to understanding leader traits and behaviors and how they explain leader effectiveness and organizational performance. The strength of this study lies in its ability to provide a comprehensive meta-analysis of the leadership literature to date (DeRue et al., 2011). Most literature in the field has centered on studying either leader traits or leader behaviors separate from one another (ibid.). It is clear from DeRue et al. (2011) that leader traits and leader behaviors work in tandem towards fostering leadership effectiveness and impacting organizational performance.

The work of Fullan (2001), Goldring, Huff, May and Camburn (2007) and DeRue, Nahrgang, Wellman and Humphrey (2011) illustrate the need for understanding and integrating leader traits and leader behavior in predicting leadership effectiveness and organizational improvement. In an evolving educational climate with No Child Left Behind (2001) and Race to the Top (2010), the question surrounding the role of the principal in organizational improvement is one that needs to be addressed. However, with contrasting viewpoints from the leadership literature, it becomes difficult to pinpoint just exactly who a leader needs to be and what they need to do in order to be as effective as they are expected to be. DeRue, Nahrgang, Wellman, and Humphrey's (2011) study provides a more updated and comprehensive definition of the principal's role in organizational improvement.

Operational Perspectives

There are a group of researchers whom have examined the principal's role through operational perspectives or the ways in which the leader functions and operates within the organization (Printy, 2008; Leithwood, 2005; Scharmer, 2009; Schein, 2010; Portin, Schneider, DeArmand, & Gunlach, 2003; Wood, 2005; Rynes, 2001). There are many functions and operations that a principal exercises during the course of her workday, but in terms of working to improve the organization there are three functions that are integral to organizational improvement and change: *fostering a culture of inquiry* (Argyris, 1991, 2002, 2008); *facilitating and monitoring instructional improvement* (Halverson, Grigg, Prichett & Thomas, 2006; Portin, Schneider, DeArmand, & Gunlach, 2003); and *facilitating and managing the act of change* (Wood, 2005; Northouse, 2007;

Wahlstrom & Louis, 2008). This section of the chapter will examine literature focused on these three functions.

The foundation of a culture of inquiry centers on the process through which an individual or organization: 1) reflects on past results, 2) establishes a plan for change, 3) implements that plan and 4) evaluates the results in accordance with the established improvement plan (Argyris, 2002, 2008; Dufour, 2002; Fullan, 2005; Halverson, Grigg, Prichett & Thomas, 2006). This process of inquiry, however, is not one that is found within many organizations (Argyris, 2001).

Argyris' (1974, 1991, 1999, 2002, 2008) work on organizational learning centers on the dilemmas of learning experienced within an organization. Argyris (2001) states organizations tend to make two mistakes when attempting to become an organization centered upon learning. First, organizational members typically define the practice of learning as the practice of solving problems (ibid.). Second, leaders and organizational members tend to make the assumption that getting people to learn is largely dependent on levels of motivation (ibid.). To avoid making these two mistakes, Argyris (1991) states individuals need to look within themselves and reflect on their own behavioral practices that may be contributing to the issues identified within the organization and then change the way they act. Argyris' (1991) argument is best explained in his *single-loop* and *double-loop* learning theories.

In order for a leader to be considered effective in facilitating and monitoring organizational change, she must be able to engage her members in what Argyris (2008) calls *double-loop learning*. Double-loop learning is defined as the practice when "errors are corrected by changing the governing values and then the actions," (Argyris, 2002, p.

206). In double-loop learning, there is a process of reflection that begins with the leader and organizational members diagnosing a particular problem from the presentation of various data brought forth by the leadership (ibid.). The organization works to devise a solution to address the identified issue and begins to implement the solution (ibid.). Once the solution has been implemented, the organization evaluates the effectiveness of the implementation of the solution and designs appropriate courses of action aimed at changing the underlying practices and beliefs of the organization and organizational members (Argyris, 2008). It is through the cyclical process of identifying the problem, devising a solution, implementing the devised solution and evaluating the solution's effectiveness that the leader is able to engage the organization in continuous reflection – or a culture of inquiry (Argyris, 2008). The leader's ability to foster and develop a culture of inquiry through the practice of double-loop learning (Argyris, 2002) allows the leader to facilitate and monitor change within the organization's beliefs and values and the resulting change in organizational practice. However, when a leader is not effective in fostering a culture of inquiry within her organization, she runs the risk of the organization persisting in a state of *single-loop learning*.

Argyris (2002) states single-loop learning occurs "when errors are corrected without altering the underlying governing values" (p. 206). During single-loop learning, the individual tends to avoid reflecting on himself when addressing organizational issues and will resort to blaming other organizational members or individuals for the reasons as to why he was unable to perform a certain task well (Argyris, 2002). The individual may correct actions or behaviors as recommended by the leadership, but does not change his own underlying or inner beliefs thereby allowing the corrected action to be merely

superficial in nature and one that will not be made a more permanent part of the individual's inherent practices (Argyris, 2002). Most of Argyris' (2008) theory behind single-loop versus double-loop learning resides with the individual's cognitive process of reflection. However, in an organizational context, individuals who engage in single-loop learning as a collective can prevent the organization from moving forward.

The research highlighted by Argyris (1974, 1991, 1999, 2002, 2008) is highly theoretical in nature in defining the principal's operational function of *fostering a culture of inquiry*. However, it is through the principal's ability to foster a culture of inquiry that a school is able to begin the process of organizational and practice change because members are engaged in a continuous cycle of data analysis and reflection (Argyris, 2002). The operational function of fostering a culture of inquiry does present its share of challenges for the principal given the organizational climate and managing the myriad of responsibilities a principal has (Portin, Schneider, DeArmand, & Gunlach, 2003). Halverson, Grigg, Prichett and Thomas (2006) sought to determine what principals actually do to promote a culture of inquiry and foster instructional improvement in an organizational setting. Their study is discussed in the next paragraphs.

Halverson, Grigg, Prichett & Thomas (2006) considered how principals engaged in levels of inquiry and *facilitating and monitoring instructional improvement* with their study focusing on how leaders "build data-driven instructional systems to systematically improve student learning" (Halverson et al., 2006, p. 159). The concept of data-driven decision-making (DDDM) aligns with what Argyris (2002, 2008) discussed in terms of utilizing data as a means of devising plans for creating and implementing change within

an organization. In their study, Halverson et al. (2006) aimed to address the following research questions:

- Did school leaders create practice to collect, acquire and store data? If so, how?
- Did school leaders create practices to reflect on data and set goals? If so, how?
- Did school leaders create interventions based on the data? If so, how?
- Did school leaders create practices to learn from their interventions? If so, how?

To address the research questions above, the authors selected four school sites that had demonstrated strong practices in DDDM according to the reputation of the schools' ability to raise student achievement scores (Halverson et al., 2006). The authors gathered data at the four school sites for one year, which included data from school artifacts such as school site improvement plans, budget information, staffing charts, and various handouts (Halverson et al., 2006). The authors also gathered data in the form of field note observations (ibid.). The data was coded and analyzed to examine practices aligned with DDDM and Data-Driven Instructional Systems (DDIS).

Halverson, Grigg, Prichett and Thomas (2006) identified six organizational functions from their data collection examining DDIS: data acquisition, data reflection, program alignment, program design, formative feedback and test preparation. With these six organizational functions, connections can be drawn between the study conducted by Halverson et al. (2006) and Argyris' (1991) theories in double-loop learning. Halverson et al. (2006) observed that the school sites engaged in the practice of gathering and storing various achievement data, such as test scores, and engaged in the practice of data reflection examining areas of need according to the data analyzed. From the data analysis, the organizations worked to devise solutions that were aligned with the school's

mission of improving student achievement through their identified practices of "program alignment and program design" (Halverson et al., 2006, p. 166). Once the schools implemented their designs, they evaluated their designs through formative feedback (ibid.). These very practices are what Argyris (2002) outlines in double-loop learning. The one differentiating factor found by Halverson, Grigg, Prichett & Thomas (2006) was that the organizations focused their feedback and analyses on test preparation where the organizations linked "their instructional program to explicitly summative testing practices" (Halverson et al., 2006, p. 166). Since the schools' focus was on improving student achievement, measured by state exam scores, all the analyses of data and solutions derived were aimed at meeting this particular goal.

Northouse (2007) presents a theory to explain how leaders build relationships within their organization as a means of *facilitating and managing change*. This theory is known as the Leader-Member Exchange Theory (LMX). According to LMX, the focus is placed on the interactions between the leader and the members. LMX asserts that in relationship building there are typically two groups: the in-group and the out-group (Northouse, 2007). The *in-group* typically refers to the types of relationships between leader and member that are "expanded and negotiated role responsibilities (extra roles)" (Northouse, 2007, p. 152). These responsibilities that are negotiated between the leader and the member are not typically found to be contractual agreements between the two parties but are supplemental duties that may be delegated by the leader depending on the relationship formed (ibid.). Individuals found to be in the *out-group* are individuals whose relationship with the leader solely consists of "defined roles" as outlined in their "formal employment contract" (Northouse, 2007, p. 152).

Within these two groupings, a leader has the opportunity to build relationships with individuals that are enriching (particularly in the in-group) and can work to serve the interests of the organization (Northouse, 2007). On the other hand, a member identifying herself in the out-group may not feel wholly part of the organization, which opens up criticism for the level of fairness associated with the manner of relationship building by identifying or categorizing members in an in-group or out-group (ibid.). Northouse's (2007) discussion of the LMX Theory serves to highlight not only the importance but also the potential consequences associated with varying levels of the leader's relationship building capacity. In addition, the LMX Theory (Northouse, 2007) supports the idea that leadership is a process that takes place within a group context with the leader working to influence organizational member towards the pursuit of goal attainment.

Portin, Schneider, DeArmand and Gunlach (2003) examined the espoused practices of principals using in-depth interview data from 21 principals. Portin et al (2003) drew five major conclusions after analyzing the data. First, the core job of the principal was to diagnose problems and organizational needs and make decisions about how to best meet them. Second, school leadership was found to be critical in seven areas: instruction, culture, management, human resources, strategic leadership, external development, and micro-politics (Portin et al., 2003). Third, the authors found that the principal is responsible for ensuring leadership exists and occurs in all seven areas (ibid.). Fourth, the authors determined that school governance mattered and that a school's governance structure affected the ways in which key leadership functions were performed (Portin et al., 2003). Finally, the authors concluded that principals master their role in leadership through actual practice and on-the-job experience (ibid.). Portin et al (2003)

assert “the ability to understand and deliver lies at the heart of school leadership” (p. 9) and the ways in which a principal is able to diagnose the needs of the organization is a key measure of their success as a principal (ibid.).

In continuing to examine key traits of effective leadership, Wahlstrom and Louis (2008) contribute to the literature on leadership attributes with their study, which found that a leader’s ability to establish a sense of trust within a teacher becomes less important when there is a large presence of shared leadership and professional community. Arriving at this conclusion, the authors’ quantitative study gathered data from a database that retained results from a survey developed for the national research project Learning from Leadership (Wahlstrom & Louis, 2008). From the database, the authors were able to obtain 4,165 surveys that had been completed and stored (ibid.). The information obtained from the surveys highlight teachers’ reflective responses from grades K-12 taken from a sampling of schools across the United States. From the results of the surveys, the authors were able to focus on the relationships established between the leadership and teachers interactions and how it influenced their improvement in instructional practices (Wahlstrom & Louis, 2008).

Wahlstrom and Louis (2008) established several variables as a means for examining the relationship between leadership and the teacher’s perceptions of the leadership in influencing their instructional practice. The first two variables that were found to reflect the teacher’s perceptions of a school site leader’s behavior involved trust and shared leadership (Wahlstrom & Louis, 2008). Three factors were determined to be indicative for examining a teacher’s instructional practice: the idea of shared contemporary practice through teacher collaboration; focused instruction centered on

management of classroom and content; and flexible grouping where instructors are able to utilize student groupings as a means of enhancing the learning experiences within the classroom (Wahlstrom & Louis, 2008). From the results of the survey, the authors concluded that these three variables of instructional practice were influenced when there was an increased sense of shared leadership and collaboration in addition to an established professional learning community (Walstrom & Louis, 2008). Trust in leadership, as a result, was not a point of focus for faculty in a middle or high school setting when the organization engaged in more collaborative practices (ibid.).

While the study is useful in deepening one's understanding of how principal-teacher interactions lead to changes in instructional practice, its limitations stem from the fact that the study is limited to survey-only based forms of data. Such a limitation, as Wahsltrom and Louis (2008) point out, does not paint an accurate picture of the true behaviors of teachers and their actions towards instructional improvement since what one responds to on a survey question may not be wholly reflective of the actual practices a teacher may engage in while in front of their students. In addition, Wahlstrom & Louis (2008) also point to another limitation involving the fact that the responses from the survey largely reflect the teachers' *perceptions* of the behaviors of the leadership as opposed to the authors actually measuring the behaviors of the school site leadership and their influence on changing a teacher's instructional practice.

Wahlstrom and Louis (2008) believe that while a principal can create an environment in which there is trust, the principal may not be decisive in determining the appropriate instructional strategies teachers can utilize to improve their practice. The authors, then, reinforce the point that leaders have the potential capacity to influence the

instructional decision making teachers will engage in, when all stakeholders are made part of that decision making process (Wahlstrom & Louis, 2008).

The studies conducted by Portin, Schneider, DeArmand, & Gunlach (2003), Halverson, Grigg, Prichett & Thomas (2006), Northouse (2007), and Wahlstrom & Louis (2008) shed light into the perceptions of the operational functions of the principalship and how a principal establishes goals and influencing organizational members to pursue and achieve their goals in a shared setting. Whatever the situation faced by the school-site, the principal's role centers on the idea that they must work with all organizational members to foster a culture of inquiry (Argyris, 2002, 2008); facilitate and monitor instructional improvement (Halverson, Grigg, Prichett & Thomas, 2006); and facilitate and manage the act of change (Argyris, 2002; Elmore, 2000, 2002, 2005; Wood, 2005). These practices are essential and foundational in facilitating organizational change.

Conclusions

This section of the chapter focused on the principal's role in organizational change and instructional improvement. Researchers have sought to examine the principal's role in organizational change from the trait, behavioral, and operational perspectives (Northouse, 2007; Argyris, 2002, 2008; Halverson, Grigg, Prichett, & Thomas, 2006; Fullan, 2001, 2002; DeRue, Nahrgang, Wellman, & Humphrey, 2011). After reviewing the literature from these three perspectives on leadership, I draw four main conclusions. First, a leader's cognitive abilities, motivation to lead, problem solving skills, relationship building skills, and expertise may bear influence on the types of behaviors and practices she will employ (Zaccaro, Kemp, & Bader, 2004). Second, the individual leader context and the organizational context may influence not only the types

of practices employed by the leader, but they may also influence the extent to which these practices are employed in working to achieve organizational change (DeRue, Nahrgang, Wellman, & Humphrey, 2011). Third, one major leadership practice a principal can employ involves promoting and fostering a culture of inquiry where all organizational members frequently engage in processes like double-loop learning (Argyris, 2002, 2008). Finally, one major leadership practice that is essential in leading to the possibility of organizational change involves the principal's ability to cultivate and maintain organizational relationships through increased collaboration (Halverson, Grigg, Prichett, & Thomas, 2006) and through utilizing in-group and out-group relationships (Northouse, 2007). These two leadership practices can bear a great deal of influence on the possibility of achieving organizational change specific to instructional improvement. However, the styles in which a principal will select to lead may vary. The next section of this review of the literature will focus on several stylistic approaches a leader may choose to lead in organizational improvement and instructional practice change.

Approaches to Leadership: Stylistic Practice

The first section of this chapter focused on the principal's leadership role in organizational improvement from the trait, behavioral, and operational perspectives. I will now shift my focus towards the stylistic models a leader selects within an organization to facilitate and cultivate organizational change. From the literature reviewed, three prominent stylistic models in leadership will be examined: *instructional leadership* (Hallinger, 2003, 2005; O'Donnel and White, 2005), *transformational leadership* (Marks & Printy, 2003; Hallinger, 2003, 2005; Letihwood, Wahlstrom, Louis and Anderson, 2010), and *distributed leadership* (Elmore, 2005; Spillane, Camburn, &

Pareja, 2007; Spillane & Healy, 2010; Harris, Leithwood, Day, Sammon, & Hopkins, 2007). These three leadership styles have been chosen for focus in this section because each style of leadership incorporates two primary leadership practices identified from the first section of this review. Each of the leadership styles incorporate the practices involving promoting and fostering a culture of inquiry (Argyris, 2002, 2008) and cultivating and maintaining organizational relationships (Northouse, 2007). The examination of these three stylistic models of leadership will deepen my understanding of the stylistic models a leader can choose to lead an organization.

Instructional Leadership

Hallinger (2003) asserts instructional leadership centers upon a strong leadership that directs its focus on curriculum and instruction. Typically, the principal would bear sole responsibility for overseeing, coordinating, supervising and developing all items related to curriculum and instruction for the school site (Quinn, 2002). Because the role of the instructional leader tends to rest with the principal, there is a large component where the instructional leader is seen as decisive and strong (Hallinger, 2003; Quinn, 2002). Furthermore, the instructional leader is typically goal-oriented with a focus placed upon improving student achievement outcomes and, as a result, is very much involved in the decision-making processes surrounding curriculum selection and design (Hallinger, 2003). Hallinger's (2003) review of the literature surrounding instructional leadership will be reviewed in this section first before presenting the findings of Quinn's (2002) study.

Hallinger (2003) asserts there are three dimensions centered on instructional leadership: 1) defining the school's mission, 2) managing the instructional program, and

3) promoting a positive school-learning climate. The first dimension involves the principal's ability to define and clearly communicate the school's mission (ibid.). Typically, the school's mission under the model of instructional leadership is goal-oriented with the focus placed on improving students' academic outcomes, which are usually demonstrated on state accountability exams such as the California Standards Tests (CSTs). The school's mission focused on improving student outcomes is seen to be a much more focused vision than a broader goal of, for example, preparing students to be socially responsible and global participants (ibid.). The second dimension involves the principal managing the instructional program (Hallinger, 2003). Principals who employ the model of instructional leadership manage the instructional program by working with the faculty on improving teaching and learning. This can be done with the development and implementation of various professional development selected by the principal as most appropriate to achieve the organizational goal of improving teaching and learning (ibid.). The principal leads from a combination of expertise with curricula and charisma in working with teachers to improve instructional practice (Hallinger, 2003). The instructional leader is known for her increased involvement and allocation of time in the area of improving instructional practice. The third and final dimension highlighted by Hallinger (2003) involves the principal promoting a positive school-learning climate. The principal, as an instructional leader, is one who seen as a culture-builder (ibid.). As a culture builder, the principal creates an environment that promotes and fosters high expectations and standards for both students and teachers (Hallinger, 2003). Practices involved fostering and support a school-learning culture involves frequent reflection on various data as highlighted in the work on Data Driven Decision Making (DDDM) and

Data Driven Instructional Systems (DDIS) conducted by Halverson, Grigg, Prichett & Thomas (2006) discussed earlier in this chapter.

Though Hallinger (2003) did not conduct a study where the practices and attributes of instructional leadership were observed in an educational setting, the author does point to some specific challenges that may be experienced by the principal under this stylistic model of leadership. One specific challenge Hallinger (2003) points to involves the difficulty in a principal's ability to allocate sufficient time to devote to improving learning and teaching – particularly at the secondary level. The challenge with time allocation involving instructional leadership at the secondary level is attributed to school context – particularly the size of student population (ibid.). The larger the school, the more challenging it becomes to track the progress of a student population size of, for example, 2,000 students versus a student population size of 450 (ibid.). Hallinger (2003) offers his rationale that a principal cannot be solely one type of leader due to the fact that principals assume numerous roles in managerial, political, instructional, institutional, human resource, and symbolic contexts in leadership. Principal behavior, especially within the model of instructional leadership, is further explored in the study conducted by Quinn (2002).

Quinn (2002) asserts there are four primary dimensions associated with instructional leadership that involves a leader being: 1) a resource provider, 2) an instructional resource, 3) a clear communicator, and 4) a visible presence. These four dimensions expand upon Hallinger's (2003) initial three dimensions of developing a school's mission, managing the instructional program, and promoting a school-learning climate as they are specific to the behaviors a principal employs under the instructional

leadership model. According to Quinn (2002), when the leader is a resource provider, she works to gather any and all appropriate resources within the organization, the district and the community in an effort to assist her organizational members towards improvement of practice. As an instructional provider, the leader is focused on establishing goals for instructional improvement and works to provide the necessary resources through professional development to assist in the improvement of classroom instruction (ibid.). As a communicator, the leader is focused on maintaining consistency in articulating the organization's goals while clearly communicating the practices that are to be implemented in achieving the established goal. An example of this could involve the principal clearly articulating appropriate accountability measures and standards for performance with regard to instructional practice (Quinn, 2002). Finally, as a visible presence, the leader is focused on being a presence on campus through conducting classroom visits and observations, attending departmental meetings, engaging in impromptu conversations with both staff and students alike, walking the halls while greeting those present (ibid.). The four dimensions of instructional leadership expanded upon above are validated in Quinn's (2002) study.

Quinn (2002) studied the relationship between the instructional leadership behaviors of principals and the impact on teachers' instructional practice. The study examined the ways principals encourage and work in partnership with teachers to construct an environment that values and supports student engagement (Quinn, 2002). The author drew data from surveys conducted at eight elementary schools, eight middle schools, and eight high schools. Four dimensions of instructional leadership were established by Quinn (2002) to serve as categories for the survey that was sent to the

selected schools: *resource provider, instructional resource, communicator,* and *visible presence*. From these dimensions, the author associated the dimensions with the following behaviors outlined in the Instructional Practice Inventory (IPI): active-learning/active-teaching, teacher-led conversation, teacher-led instruction, student-work/teacher engagement, student-work/teacher disengagement, total disengagement (Quinn, 2002). The results from the questionnaire were analyzed to determine significant relationships between the dimensions of instructional leadership and the identified behaviors from the IPI. Of the four dimensions examined, the dimension of *instructional resource* correlated the most significance with the behaviors of active-learning/active-teaching and the behaviors surrounding engagement (Quinn, 2002). Results from Quinn's (2002) study answer her research question by highlighting the practices of instructional leadership with the author concluding that the notion of leadership possessing the ability to impact instruction is valid.

The strength of Quinn's (2002) study lies in the confirmation that when principals are strong in the area of providing instructional support, they are able to effectively lead as instructional leaders and, as a result, contribute to the increased levels of student achievement. Furthermore, Quinn's (2002) supports the argument that strong instructional leadership positively influences and impacts teaching and learning. The study also afforded an opportunity to quantitatively measure and support Quinn's (2002) assertions about the relationship between principal behaviors and the impact on instructional practice. However, the strength the of the study's quantitative nature is also its limitation. Qualitative data for this study would have provided deeper insight into the nuances of leadership that are difficult to quantify (Quinn, 2002). Individual perspectives

from the principals and teachers would have allowed for a closer look into the relationships between the leader and organizational members as they work together to improve instructional practice. Nevertheless, Quinn's (2002) study does support the dimensions described by Hallinger (2003) regarding the behaviors associated with instructional leadership.

Hallinger (2003) and Quinn (2002) highlight benefits observed through the stylistic model of instructional leadership. When a leader places focus on improving instruction, it is concluded that focus on instructional improvement will transfer into improvements in instructional practice (Quinn, 2002). Focusing on instructional improvement also has seen to bear an impact on student learning due to the increased focus on instructional methods and student learning outcomes (Quinn, 2002). Additionally, the model of instructional leadership also identifies the principal as the sole individual who is at the forefront of establishing the goals for achievement improvement in instructional practice (Hallinger, 2003). However, as school sites are introduced to new or modified accountability mechanisms seen in legislation such as No Child Left Behind (2001) and Race to the Top (2010), instructional leadership practices where the principal is solely the one who initiates the process for instructional improvement will lead to organizations where the principal will become increasingly overwhelmed. Through the model of instructional leadership, the principal is the one initiating the articulation and modification of the organizational goals pertaining to instructional improvement. With the principal as the sole initiator of the improvement plans in this model, little involvement or input is typically solicited from the teachers other than to implement the recommended tools and strategies (Hallinger, 2003). This, in turn, leads me to explore the

theories behind the idea of *transformational leadership* and the ways in which the leader works to transform the overall organization through the increased involvement by the organizational members.

Transformational Leadership

While instructional leadership allowed for the principal to direct her focus towards the improvement of instructional practice, the principal administered much of the guidance and direction in this stylistic model of leadership. The focus of *transformational leadership* for the leader rests on her ability to engage in “shared or distributed leadership” rather than operating as sole controller (Hallinger, 2003, p. 338). The building and cultivating of relationships as a practice in transformational leadership validates what Fullan (2001) argues in that organizational relationships are necessary and foundational towards accomplishing organizational change. In this section, Hallinger’s (2003) review of *transformational leadership* will be reviewed as a theoretical perspective. I will then support Hallinger’s (2003) conceptualization of transformational leadership with the findings from the conducted by Marks and Printy (2003).

Hallinger (2003) asserts there are eight components in the model of transformational leadership. These eight components involve attributes and practices such as: 1) providing individualized support, 2) developing and communicating shared goals, 3) possessing vision, 4) providing intellectual stimulation, 5) culture building, 6) establishing and communicating high expectations, 7) providing rewards, and 8) modeling (ibid.). Practices such as providing individualized support, intellectual stimulation and possessing vision highlight the need for a principal to be understanding of the needs of the organization’s members as opposed to acting as sole operator as was

suggested within the instructional leadership model Hallinger (2003) described earlier in his article. Hallinger (2003) draws the distinction between the two models of leadership by asserting transformational leadership involves a *bottom-up* approach versus the *top-down* approach with instructional leadership.

Furthermore, transformational leadership depends on the principal's ability to foster and manage existing organizational relationships while moving towards achieving established or predetermined goals (Hallinger, 2003). This differs from instructional leadership where the focus is heavily placed on instructional improvement. The model of transformational leadership works to achieve the organizational goals through what Hallinger (2003) defines as *second-order changes* (ibid.). Hallinger (2003) states that when it comes to organizational change, there are two types of changes: first-order change and second-order change. Hallinger (2003) defines first-order change as changes that have a direct impact on the quality of curriculum and level of instruction that is delivered to students. First-order changes within an organization can also include establishing school-wide goals, the principal directly supervising teaching, and the principal's direct coordination of curriculum (ibid.). The preliminary practice of creating first-order changes comes from an instructional leadership model as the leader is first focused with determining improvement plans based on the monitoring of teacher and student work. First-order changes are meant to have a direct impact on implementation, but do not necessarily change the organizational culture or motivational behaviors of those participating in the organization (Hallinger, 2003).

Once the leader determines the appropriate goals for instructional improvement, the leader can then focus on achieving the three goals associated with transformational

leadership which involve helping organizational members cultivate and maintain a professionally collaborative culture; fostering professional development; and helping organizational members engage in more effective problem solving (Hallinger, 2003). Second-order change, as described by Hallinger (2003), emphasizes the creation of a climate where organizational members become increasingly committed in accomplishing the school's established mission. Teachers believe in the mission communicated by the principal and, in turn, become self-motivated to work towards organizational improvement without specific or persistent guidance from the principal (ibid.). The organization works together in a process of continuous learning with increased professional collaboration that includes sharing of practices and results as a means of monitoring progress towards improved practice. Second-order changes exemplify the construct of transformational leadership because the organization is, in essence, transformed within their practice. The principal is no longer acting solo but has influenced organizational members to work alongside the principal as they work towards organizational improvement. It is the combination of enacting first-order changes with second-order changes that permit a leader to engage in the act of transformational leadership.

The strength of transformational leadership resides in its focus on transforming the organization whereby the practices employed by the leader work to influence organizational members to pursue one direction or implement one type of practice in place of another (Hallinger, 2003). While transforming the organization and the organizational culture is an admirable and desirable effect, the focus placed on implementing a desired level of change may not always be tied to impacting student

learning especially if most of the organizational change centers upon changing the organizational members themselves (Hallinger, 2003). This is not to say, however, that transformational leadership does not have a place in the context of leadership. There is an evolutionary point of reference to make here between instructional leadership – where the principal was the sole director of change regarding the selecting, articulating and designing strategies for improving instructional practice (Hallinger, 2003) – and transformational leadership – where the principal attempts to influence the organization through the establishment of more interpersonal relationships that foster a collaborative environment conducive to engaging in problem-solving and professional learning (Hallinger, 2003). Engaging organizational members in activities associated with accomplishing the shared goals established by the leader increases the level of involvement and collaboration that is needed in transformational leadership. The leader is no longer the sole participant in cultivating and facilitating organizational change, but helps to influence the members to participate in activities that will promote the desired change. Marks and Printy (2003) examine the level of collaboration between principals and organizational members within the model of transformational leadership in their study, which is discussed in the following paragraphs.

Marks and Printy (2003) examined the relations between principals and teachers and their level of active collaboration pertaining to matters of instruction and improving the quality to teaching and student learning. Their study was grounded in the two conceptualizations of leadership already discussed: instructional and transformational. Marks and Printy (2003) established the following research questions:

1) What is the relationship between transformational and shared instructional leadership in restructuring elementary, middle and high schools?
2) How do schools with varying approaches to leadership differ according to their demographics, organization and performance?
3) What is the effect of transformational and shared instructional leadership on school performance as measured by the quality of pedagogy and the achievement of students? (Marks & Printy, 2003, p. 378).

To answer the three research questions established by Marks and Printy (2003), the authors conducted a mixed-methods study where they gathered a sample of eight elementary, eight middle, and eight high schools for a total of 24 sites. The researchers gathered their data during the course of two weeks during the school's study year: one week in the fall and one week in the spring. Teachers were asked to complete surveys that included questions about their instructional practice, professional practices and perceptions about their school and the organization. The survey yielded an 80 percent response rate with 910 teachers participating in the survey (Marks & Printy, 2003). The authors then conducted interviews with 25 to 30 staff members at each school and also conducted interviews with school and district administrators. Marks and Printy (2003) also conducted observations at each school where they say in on faculty and school governance meetings. Documents were also obtained and analyzed examining the schools' efforts towards restructuring (ibid.). Classroom observations were also conducted with the authors sitting in on core class instruction from three mathematics and three social science teachers from each school (ibid.). Observations were stated to have occurred for at last half of a class session and teachers were observed at least four times

(ibid.). Finally, the authors collected documents from student work, which was rated by "trained researchers and practitioners according to established standards for authentic achievement" (Marks & Printy, 2003, p. 379).

Dependent and independent variables were established for the study conducted by Marks and Printy (2003). The independent variables for examining the relationship between leadership and school performance were *leadership* and *school demographics* (ibid.). The dependent variables established were *pedagogical quality, assessment task,* and *academic achievement* (ibid.). From their results from the collected data, the authors determined the following:

- Nine schools out of 24 scored "low" on both forms of leadership (instructional and transformational)
- Six schools out of 24 scored "high" on transformational leadership but "low" on instructional leadership
- Seven schools out of 24 scored "high" on both forms of leadership

Two schools from the sample of 24 schools were dropped from the data analysis due to missing data pertaining to measures of leadership (Marks & Printy, 2003). From their data, the authors concluded that a principal who lacks capacity for demonstrating prominent elements of transformational leadership (e.g., communicating vision, providing individualized support, building relationships) is also likely to be poorly equipped to share and distribute responsibility with teachers in matters pertaining to curriculum and instruction (Marks & Printy, 2003). Schools that were found to have scored low on both forms of leadership were found to not benefit from the principal's leadership influence either in a transformational or instructional leadership model (ibid.).

The schools that demonstrated strong measures in transformational leadership, but not instructional leadership, were found to have principals who placed their focused in areas outside of instruction (ibid.). This supports Hallinger's (2003) assertion that in order for instructional leadership to be effective, a larger focus must be placed on improving the quality of teaching and learning in the organization.

One major finding from Marks and Printy (2003) lies in the integration of both transformational and instructional leadership as a means of enhancing organizational performance. From their results, the authors found that schools that integrated both transformational and instructional leadership models (with instructional leadership "shared" between leadership and organizational members) provided evidence of enhanced pedagogical practice in addition to increased levels of student achievement. However, Marks and Printy (2003) do not provide details about how principals and teachers "shared" instructional leadership (p. 392). Nevertheless, the study finds that a strong transformational leader is essential in garnering support and commitment from the organizational members towards organizational improvement (Marks & Printy, 2003).

Strengths that reside within the study conducted by Marks and Printy (2003) involve the discovery of the collaborative power of leadership shared among principals and teachers in the organization. Furthermore, the study highlights the importance of integrating both instructional and transformational leadership suggesting that the two models of leadership work in tandem to support and promote organizational improvement. One weakness observed within the study is the lack of longitudinal data to fully measure the impact of the integrated models of leadership over longer spans of time. The two-week data collection period provided only a snapshot of analysis for the authors

to examine the relationship between leadership and school performance. Nevertheless, the study does point to the suggestion that both models of leadership, when integrated, yield positive results for the organization.

From transformational leadership, it is clear that the leader plays an important role in shaping the organizational culture providing opportunities for organizational change (Hallinger, 2003; Marks and Printy, 2003). Transformational leadership, however, is limited by the mere act of influence on the part of the leader and does not fully explore how the leader monitors the actions of the organizational members in progressing towards desired change. It is not enough to have a leader persuade organizational members to believe in the mission and believe in the practices that will help accomplish the mission, but there is a level of shared responsibility that needs to be assumed by all parties. From the literature on instructional leadership and transformational leadership one thing is clear – the leader, alone, cannot make every significant change necessary towards accomplishing the established goals (Hallinger, 2003). The next section will address the idea of *distributed leadership* (Elmore, 2000, 2002, 2005; Spillane, Halverson & Diamond, 2004, 2005) and how a leader works to allocate responsibilities across the various organizational roles.

Distributed Leadership

Elmore (2000) presents an argument for the concept of *distributed leadership*. He asserts that distributed leadership involves a leader creating multiple roles and responsibilities for various organizational members that establishes a chain of command exhibiting a clear “division of labor” (Elmore, 2002, p. 24). As a result, the knowledge base and institutional practices within the organization become spread among the roles

established versus being compartmentalized within one individual – the leader (ibid.). Thus, leadership does not reside within one individual, but within the collective group through the guidance and support of the leader (ibid.).

Elmore's (2000) conceptualization of leadership extends from the trait leadership perspective (Northouse, 2007). Distributed leadership focuses on the actions taken by the leader, not the "traits" possessed by the individual (Elmore, 2000). In fact, Elmore (2000) asserts the trait perspective on leadership is romantically antiquated. American culture subscribes to the belief that there are traits inherent in an individual that qualifies them as an "effective" leader (Elmore, 2000). He argues we internalize such interpretations of trait theories in leadership because we are fond of the idea that an individual possessing key traits we deem admirable will be paramount in solving our problems with that individual becoming our subsequent "hero" (Elmore, 2000, p. 13). From this position, the author is able to argue that change and organizational improvement involve all participating members via the support and guidance of the leader delineating responsibilities according to the relevant talents and abilities of the members rather than the leader acting as a one-woman show (Elmore, 2000).

Spillane, Halverson and Diamond (2004) add to Elmore's (2000) theory of distributed leadership with their definition that leadership is an activity that is "constituted – defined or constructed – in the interaction of leaders, followers, and their situation in the execution of particular leadership tasks" (Spillane, Halverson, & Diamond, 2004, p. 10). The authors argue that we must consider the underlying cognition in leadership that a leader engages in through the creation of interacting roles between leaders and organizational members (ibid.). Doing so allows for deeper understanding

regarding how leaders behave within the distributed leadership model. It becomes necessary to redefine the elements that exist in the practice of leadership (Spillane et al., 2004). Spillane et al. (2004) assert that leadership should no longer be seen as a function of an individual's knowledge base, skill set, or persona but, rather, as a practice that is circulated amongst leaders, members and the very situations they collectively face. However, the authors' theoretical perspective on distributed leadership does not illustrate the use of this model in an educational setting. Timperley's (2005) study provides a richer illustration of the practice of distributed leadership within an educational setting. The findings of Timperley's (2005) study are described below.

Timperley (2005) studied the distributed leadership model in an elementary school setting where schools were involved in school improvement plans centered on improving student literacy. Using interview and observation data from seven schools with 21 teachers and the school principals over the course of four years, Timperley (2005) found a school's organizational context influenced the ways in which a principal was involved in distributing leadership roles among organizational members.

Timperley (2005) directed her focus on the principal's role in distributed leadership with her profile on two principals from the seven schools in her study. Timperley (2005) found that the first principal's belief in his role in distributed leadership involved his ability to build and maintain trust within his teacher leaders especially in situations where the principal was not familiar with certain content areas such as the literacy program implemented at their site. The principal believed trust was a major component in ensuring success within his employment of distributed leadership. Though the principal was encouraging of teacher leaders to assume leadership roles within the

literacy program, he still provided support when needed to ensure effective implementation (Timperely, 2005).

The second principal profiled in Timperley (2005) believed personal involvement was key in her utilization of the distributed leadership model. The principal took part in the professional development that her teachers attended for the literacy program. The principal's attendance at the professional development allowed the principal to gain a stronger understanding of the instructional program that was planned for school-wide implementation. The principal's participation in the professional development also allowed her to be a stronger support source for teacher leaders who worked to implement the literacy program school-wide. In contrast to the first principal who explicitly trusted teacher leaders to lead program implementation in a content area with which he was unfamiliar, the second principal decided to participate in the same professional development so that she may gain content knowledge of the program in order to further support members when needed (Timperely, 2005). It was not clear from Timperely's (2005) study if the second principal exhibited a lack of trust, but the principal's organizational focus in the distributed leadership model involved allocating leadership roles among members and ensuring that the principal had enough content knowledge to support her teacher leaders in their assigned roles (Timperley, 2005).

Timperley's study (2005) highlighted the ways in which a principal may distribute leadership. A principal's ability to delegate or distribute leadership responsibilities allows for the allocation of time to additional responsibilities that consume the principal's workday (Timperley, 2005). Furthermore, the longitudinal data over the course of four years is strength to Timperley's (2005) study. The length of the

study by Timperley (2005) provided deeper insight into interactions among principals and teachers within certain organizational contexts. One limitation found with the study involves a lack of secondary schools in the sample Timperley (2005) selected. The focus on elementary schools does not illustrate how principals engage and utilize distributed leadership models at the secondary school level.

Conclusions

The three stylistic models of *instructional leadership* (Hallinger, 2003; Quinn, 2002), *transformational leadership* (Hallinger, 2003; Marks & Printy, 2003) and *distributed leadership* (Elmore, 2000, 2002; Spillane, Halverson & Diamond, 2004; Timperley, 2005) illustrate various models a leader may employ when leading an organization. Four conclusions are drawn after reviewing the literature on these three leadership styles. First, each of these leadership styles highlights a place of focus for the leader in determining the type of organizational change that is desired (e.g., improving instruction, transforming the underlying beliefs and practices, or distributing leadership across roles). Second, all three of these leadership styles share a common idea that collaboration is crucial in working towards achieving potential organizational change. Third, leadership style is one that is chosen by the leader and may be dependent on the organizational context and what the leader is seeking to accomplish in her role. Finally, whichever model a principal chooses to implement will influence and determine the overall focus and vision of the principal and the organization.

Cognitive Elements of Leadership: Mental Models, Leader Self-Efficacy, Immunities to Change and Leader Creativity

I will now turn my attention to four cognitive elements of leadership that inform the research question for my study: mental models, leader self-efficacy, immunities to change, and leader creativity. In this section I begin with Senge's (1990, 2006) theoretical constructs of "mental models." I then present findings from a study conducted by Ruff and Shoho (2005) where the authors studied the influence of mental models in the principalship. Next, I will turn my attention to literature on leader self-efficacy as discussed in Machida and Schaubroeck (2011) and Hannah, Avolio, Luthans, and Harms (2008). I will then present results from a study conducted by Leithwood and Jantzi (2008) where the authors examined the contributions of leader efficacy on student learning and organizational improvement. I will then speak to Helsing, Howell, Kegan, and Lahey's (2008) work on immunities to change and will speak to the results of their case study findings. I will conclude with a presentation of Sternberg's (2007) theoretical conceptualization of creativity in leadership. The literature reviewed in this section will shed light on the ways in which a leader's mental constructs may influence her leadership practices and how her mental constructs are further influenced by her confidence about her ability to be a successful leader.

Mental Models

Senge's (1990, 2006) work highlights the concepts of mental models and the role they play in a leader's practices and decision-making processes. Senge (2006) defines mental models as a system of thought whereby what an individual thinks and believes influences that individual's actions, decisions, and practices within an organization.

There are four key disciplines of the system of mental models. These disciplines include the extent to which one can:

- Admit differences between one's espoused theories and her actual practice
- Recognize and identify moments when one moves from making observations to generalizations
- Articulate what one tends not to overtly communicate, and
- Foster and balance practice of inquiry and advocacy (Senge, 2006, p. 176).

Mental models are systems of evolving thought that "shape how we act" (Senge, 2006, p. 164). Mental models are derived from one's own experiences and observations, which have the capacity to shape one's perceptions about the way she sees and interprets the world (ibid.). In turn, an individual's mental models have the capacity to shape the very actions and behaviors that individual may employ (ibid.). This is especially true within organizational settings. Similarly, the mental models of a leader within an organization also bears influence in the various organizational practices employed in order to perform at a desired level (ibid.). Furthermore, the underlying assumptions and beliefs, or mental models, of individual organizational members can also shape and determine the ways in which that organization performs or behaves (Senge, 2006).

Mental models become an integral piece in understanding organizational learning because if a leader is able to understand the underlying assumptions and belief systems within an organization, she may be able to navigate a pathway towards determining potential gaps and design a plan for organizational improvement (Senge, 2006). Furthermore, understanding the mental models espoused within a school site can help determine why the school functions the way that it does as well as investigating what

allows or does not allow for the principal to affect instructional improvement. While Senge's (2006) theoretical construct of mental models is convincing in understanding the systems of thought employed by leaders in an organization, there are no studies presented to illustrate how mental models operate within an educational setting. In support of Senge's (1990, 2006) argument, Ruff and Shoho's (2005) study of mental models in the principalship serve to illustrate the concept of mental models observed in an educational setting.

Ruff and Shoho (2005) examined the mental models of three elementary school principals at various stages in their profession. Through a mainly qualitative study, the authors interviewed and observed three principals: one male and two female. The male principal was in his first year as principal, one of the female principals had 6 years of experience and the second female principal had more than 20 years of experience and had received national recognition as an outstanding leader. Ruff and Shoho (2005) sought to address the following two research questions:

1) What are the mental models used by urban elementary school principals to construct their role as instructional leaders? and

2) How, if at all, do the mental models of urban elementary school principals vary with differences in reputation and job experience?

A three-month study included observations of the three principals in addition to interviews with both the principals and the teachers with whom the principals worked. Observations were conducted in naturalistic and structured settings to examine principal actions and behaviors in both planned and unplanned settings. Data analysis included examining what was written and spoken in interviews and observations with the authors

focusing on what was "consistently unsaid, commonalities in causal reasoning processes, the ways in which metaphors are used, and the repetition of the same network of ideas" (Ruff & Shoho, 2005, p. 560). Patterns were determined from the data analysis and the authors determined a common cognitive structure, which reflected the use of mental models (Ruff & Shoho, 2005). However, the stages of experience for each the three principals also reflected the types of mental models with which each leader operated.

Each of the principals interviewed and observed for Ruff and Shoho's (2005) study illustrated different types of mental models in accordance with their present experience in the principalship. The "rookie" principal's mental model involved a deep belief in the importance of looking to data to determine the appropriate improvement plan and using that data to drive instructional and organizational improvement goals. His reference to data and research was observed in his instructional planning, teacher evaluation, and problem solving with teacher and parent stakeholders (Ruff & Shoho, 2005).

The principal with 6 years of experience also focused on improving instruction and providing instructional leadership, but her mental model was directed more towards team building and conflict management through fostering member interaction and maintaining organizational relationships. This principal's mental model was tied to personal involvement. She was quoted as frequently asking herself the question: "How should I be involved?" (Ruff & Shoho, 2005, p. 566). The principal's mental model involved a deep desire to be personally involved and interact with faculty, staff, parents and students and she was known to be a visible presence within the school (ibid.). Unlike the first-year principal whose mental model focused on the use of data for organizational

and instructional improvement, the six-year principal believed that her role involved creating an environment where *everyone* – students and faculty – is successful (ibid.).

Finally, the nationally recognized principal, who had led her school site for the past 23 years, exemplified a mental model that was more of a "transformative" instructional leader model. She sought to improve the organization's instructional practice through a student-centered vision (Ruff & Shoho, 2005). The award-winning principal believed in the value of fostering individual relationships and in being a visible and enthusiastic presence at the school, but that leadership involved all organizational members, not just the principal alone (ibid.). The principal's interactions with students, parents, and teachers were found to be individualistic in nature as she worked with each individual and tailored interaction according to his or her needs. As a result, the principal was found to be in a constant interaction within her own mental model as she would "routinely question preexisting assumptions and adjust her perception of what is important to be observed" (Ruff & Shoho, 2005, p. 571). This constant level of awareness allowed the principal to become more in tune with the faculty, staff, parents, and students with whom she interacted frequently (ibid.).

The findings from this study suggest that the mental model with which a principal operates can influence the level to which he or she is able to work to improve instructional practice within an organization. Furthermore, while the issues, organizational contexts and routines were similar within the generalized role of the principal, the individualized meaning a principal associated with the various issues, organizational context and routines were different and, therefore, demonstrated differing mental models. Strength from this study resides in the authors' ability to delve deeper

into the mental models or cognitive systems that influence practices observed in leadership and how principals choose to operate within their leadership roles in a school.

While Ruff and Shoho's (2005) work sheds light into the importance of examining mental models in school leadership, there are several limitations found within this study. First, the timeline of the study was only three months. The brief glimpse into the mental models of the principal's leadership does not fully illustrate how the principals' mental models aid in organizational and instructional improvement during the entire course of the academic year. One can only make an assumption that the mental models exhibited by the principals could have a positive affect on the overall improvement of the organization and student performance. A second limitation involves the principal selection. While the selection of solely elementary principals illustrates principal leadership within an elementary school context, the authors did not include principals at the secondary school level. Therefore, it is not clear if such mental models are consistent across all grade levels or if mental model vary at the secondary level. Finally, the qualitative focus on only three elementary school principals provided limited data in terms of recurring mental models. Each of the three principals had differing mental models, which raises the question as to whether or not mental models are solely unique to the individual or if there are recurring patterns in mental models that can be seen in groups of principals are differing grade levels across the K-12 educational setting.

Leader Self-Efficacy

Research on the role of leader self-efficacy in organizational improvement and leader development is limited (Machida & Schaubroeck, 2011; Hannah, Avolio, Luthans & Harms, 2008). Machida and Schaubroeck (2011) provide a theoretical examination in

the ways self-efficacy beliefs influence leader development and assert that leader self-efficacy is key to understanding the ways a leader develops in effective practice. Furthermore, the authors assert that the varying levels of a leader's self-efficacy influence the extent to which a leader is effective in organizational improvement and personal professional development (Machida & Schaubroeck, 2011).

Machida and Schaubroeck (2011) define leader self-efficacy as: "a leader's confidence in his or her attributes, knowledge and skills in areas need to lead others effectively" (Machida & Schaubroeck, 2011, p. 2). Machida and Schaubroeck (2011) draw from self-efficacy literature and social cognitive theory to develop and present a model of leader development in relation to a leader's self-efficacy. An illustration of this model is presented in Figure 1.4 on page 77 of this chapter. Essentially, there are four self-efficacy models the authors believe are relevant to leader development: preparatory self-efficacy, efficacy spirals, learning self-efficacy, and resilient self-efficacy (ibid.). All four concepts discuss the process in which a leader works to cultivate practice, combat challenges, and learn from her practice in order achieve optimal leader development and organizational improvement (ibid.). These concepts are explored in more detail in the paragraphs below.

Preparatory self-efficacy centers on a leader's belief in his ability to learn the skills needed to perform required tasks associated with the professional position in leadership (Machida & Schaubroeck, 2011). Preparatory self-efficacy may develop from an individual's participation in a mentorship program, leadership credential program, or other forms of professional development where the individual is involved in skill acquisition (ibid.). Through the development of skills, a leader may then reflect on his

learning self-efficacy. Machida and Schaubroeck (2011) assert that learning self-efficacy involves the leader's judgment about her own ability to learn and master a new skill and essentially use that skill to accomplish a certain task within a situation that centers on a leader's performance.

Figure 1.4 Machida and Schaubroeck (2011) Model of Leader Development through Lens of Leader Self-Efficacy

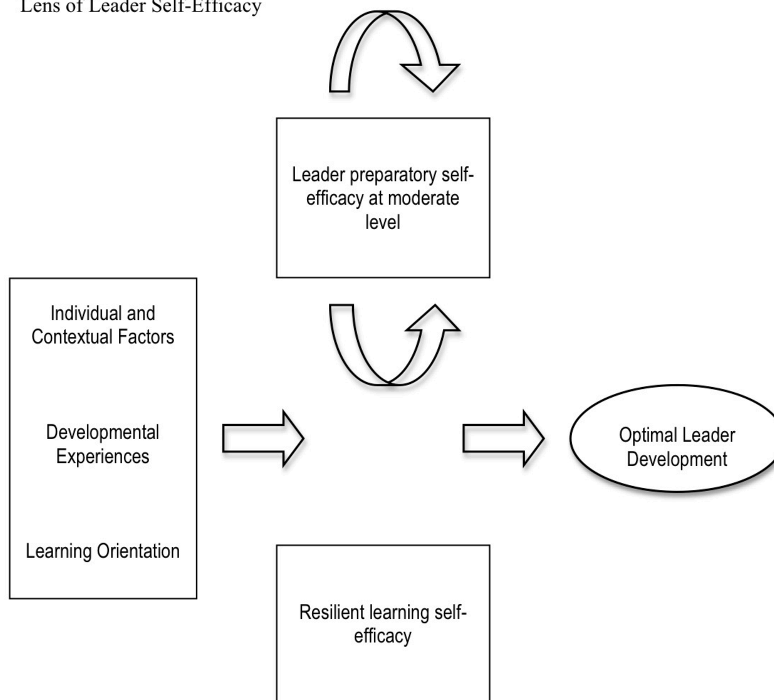


Figure 1.4 from Machida, M. and Schaubroeck, J. (2011). The role of self-efficacy beliefs in leader development. *Journal of Leadership and Organizational Studies, XX*(X), 1-10.

The leader's belief in her ability to learn a certain task that will help in her leadership performance will allow for her to engage in the necessary preparation to be able to accomplish that task or learn a particular skill (Machida & Schaubroeck, 2011). During the learning process, a leader may experience various challenges, which prompts the leader to refer to her resilient self-efficacy (ibid.). According to the authors, resilient self-efficacy centers on an individual's beliefs that, despite obstacles or challenges she

may face, the leader believes she can learn and thrive from these experiences and will grow as an individual and as a leader (Machida & Schaubroeck, 2011).

During the process of learning and skill acquisition, the individual leader may experience what Machida and Schaubroeck (2011) refer to as "efficacy spirals". Efficacy spirals refer to fluctuations in self-efficacy beliefs where the leader may begin with high levels of self-efficacy and experience decreases in self-efficacy beliefs based on experiences gained through learning leadership skills and challenges experienced (ibid.). Machida and Schaubroeck (2011) assert that leaders need to maintain a cycle of self-correction where the individual reflect on learning experiences and determine areas for growth. There is a caution to the extent of efficacy spirals in that "when leaders are learning to lead, repeated and uninterrupted failure will tend to decrease self-efficacy and encourage downward efficacy spirals" (Machida & Schaubroeck, 2011, p. 4). As a result, a leader who experiences what she believes to be persistent failure may feel demoralized and may experience a cycle of "learned helplessness" (ibid.) where the leader believes she no longer has control over her ability to improve performance. While downward efficacy spirals are ones to be avoided, Machida and Schaubroeck (2011) emphasize that self-correcting cycles are necessary for maintaining and improving preparatory self-efficacy, learning self-efficacy, and resilient self-efficacy.

Machida and Schaubroeck (2011) also address what they assert are two key influences on leader self-efficacy: developmental experiences and learning orientation. The authors illustrate developmental experiences for leaders as experiences that contain: feedback, challenges, and support (ibid.). Feedback for developing leaders can come from various sources such as supervisors, peers, mentors and the individual leader (ibid.).

Feedback for developing leaders is seen to be incredibly important in leader development because feedback has the capacity to clarify changes a leader needs to make in order to close certain performance gaps. Feedback can also increase a leader's self-efficacy – particularly for those who may have initially had low self-efficacy. Feedback, finally, has the potential to enhance a leader's learning self-efficacy as the leader may examine alternative strategies that may have been originally overlooked prior to receipt of feedback (Machida & Schaubroeck, 2011). Second to feedback, the authors discuss how challenges serve as development experiences (ibid.). Machida and Schaubroeck (2011) assert challenges are necessary to leader development and can include: a) unfamiliar responsibilities, b) establishing and moderating change, c) working across boundaries where she may not have authorization, and d) managing diversity. Challenges within the four categories mentioned above afford leaders with opportunities to examine differing perspectives thereby contributing to her learning self-efficacy. Support is the final element in developmental experiences that support leader self-efficacy. Machida and Schaubroeck (2011) discuss support as strategies and people who assist the leader in development. This can include mentorships, vicarious experiences through the use of modeling, and talking to others about developmental experiences to confirm or clarify lessons learned (ibid.). A support system where a leader has individual with whom she can discuss her experiences and challenges is essentially to her leader self-efficacy and leadership development.

Machida and Schaubroeck (2011) also highlight that learning orientation, in addition to developmental experiences, bear influence on a leader's self-efficacy. The authors describe learning orientation as emphasizing learning, mastery and increasing

one's level of competence (ibid.). Machida and Schaubroeck (2011) assert that those with high learning orientation exhibit a desire to investigate and learn new methods that may improve one's capacity for the long term. This is different from a performance orientation where the individual is more concerned with seeking methods that will aid in increasing immediate performance (ibid.). In the context of leader development, a leader with a high learning orientation is more likely to build and maintain learning efficacy in an effort to acquire methods and skills that will improve her leadership capacity for the long term (ibid.). Furthermore, leaders with a high learning orientation are more inclined to be more reflective about their practice through self-evaluation and setting goals for self-improvement in leadership (ibid.).

Machida and Schaubroeck (2011) provide a comprehensive overview of the elements and key factors associated with leader self-efficacy. The authors theory on leader self-efficacy is extremely useful in understanding how a leader's beliefs about her capacity to lead and manage organizational change may ultimately influence the extent to which she is effective in her own practice and development. However, there is a limitation to Machida and Schaubroeck's (2011) theoretical exploration. Their definitions of leader self-efficacy are generally based in theory. The absence of an empirical work from the authors fails to provide an illustration of what leader self-efficacy really looks like in an educational setting. While the authors make a convincing argument about the importance of leader self-efficacy in leader development, it is not clear what practices or elements found within an educational setting are most effective in contributing to increasing or decreasing levels of leader efficacy and, ultimately, leader development and effectiveness (Machida & Schaubroeck, 2011).

Hannah, Avolio, Luthans and Harms (2008) also contribute to the theoretical literature on leader self-efficacy. The authors define leader self-efficacy as leaders' "beliefs in their perceived capabilities to organize the positive psychological capabilities, motivation, means, collective resources, and courses of action required to attain effective, sustainable performance across their various leadership roles, demands, and contexts" (Hannah, Avolio, Luthans, & Harms, 2008, p. 2). The authors believe that in order for leaders to move organizational members towards collective or group performance, they have to exercise high levels of personal agency (or action) and foster similar levels of personal agency in those members whom they are leading (Hannah et al., 2008). The authors go on to draw a distinction among *leading* versus *leadership* (ibid.). Hannah et al. (2008) define *leading* to be the behaviors and actions employed by individual leaders. The authors, on the other hand, see *leadership* as the positive influences occurring within an organization of which the leader is part (ibid.). From their distinction of *leading* versus *leadership*, the authors suggest that there is great value in developing a more comprehensive understanding of the contributions and actions derived from a leader's self-efficacy in building a collective leadership efficacy (Hannah et al., 2008). Building a collective leadership efficacy requires interacting with organizational members and fostering organizational relationships, which is aligned with Northouse's (2007) Leader-Member Exchange Theory discussed earlier in this chapter.

Hannah et al. (2008) also speak to the concern of limited literature on leader self-efficacy and present a multi-level framework for illustrating the interactions within leader efficacy and its impact on building collective leadership efficacy, which is presented in Figure 1.5 on page 82 of this chapter.

Figure 1.5 Hannah, Avolio, Luthans, and Harms (2008) Framework for Leader Self-Efficacy and Leadership Efficacy

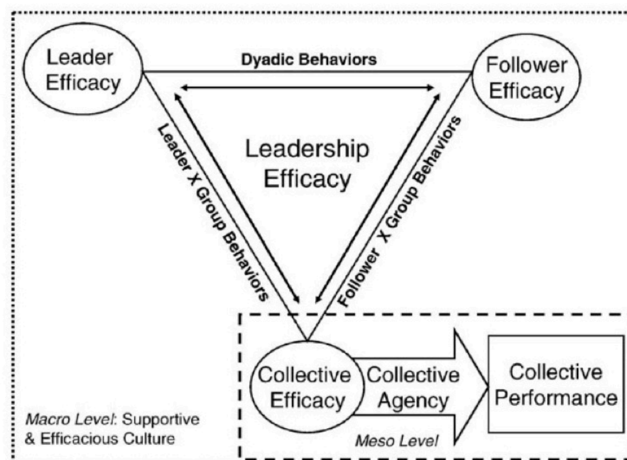


Figure 1.5 from Hannah, S.T., Avolio, B.J., Luthans, F., & Harms, P.D. (2008). Leadership efficacy: Review and future directions. *The Leadership Quarterly,* 1-25.

From Hannah et al.'s (2008) conceptual model, it is understood that there is a dyadic relationship between a leader's self efficacy and an organizational member's self-efficacy. The interactions that occur between the leader and member are influenced by each participating party's level of self-efficacy, which, in turn, translates into behavioral actions taken by both individuals (Hannah et al., 2008). This level of interaction between leader and follower(s) aids in fostering a collective efficacy among the leadership and organizational members, which leads to collective action and increased organizational performance (ibid.).

Hannah, Avolio, Luthans, and Harms (2008) make several key propositions as a result of their review of research for leader self-efficacy: 1) Higher levels of leader self-efficacy (LSE) will result in higher levels of leader emergence and performance, 2) LSE will be moderated in its impact on leader emergence and performance by the extent to which the LSE matches the demands of the task and the context in which the leader is embedded, 3) leaders with a greater breadth of generalization of their LSE will be more

adaptable across contexts and situations, 4) a leader's level of thought efficacy will be related to the leader's ability to learn and formulate leadership solutions, 5) higher levels of leader thought efficacy are expected to result in higher levels of leader development, emergence and performance and 6) a leader's level of self-efficacy for self-motivation will be related to the level of effort they allocate to both thinking through and performing in challenging circumstances (Hannah, Avolio, Luthans, & Harms, 2008). The strength from Hannah et al.'s (2008) propositions is that they align to the theoretical arguments made by Machida and Schaubroeck (2011) pertaining to leader self-efficacy. The propositions also highlight that there is a need to study leader self-efficacy in an organizational setting. However, the authors do not support their propositions with an empirical study in an educational setting, making it difficult to see how these propositions may or not be true in an applied setting. The limitation identified within Hannah et al. (2008) is one I plan to address within my study and will discuss during the presentation of my conceptual framework at the end of this chapter.

The theoretical perspectives on leader self-efficacy presented in Machida and Schaubroeck (2011) and Hannah, Avolio, Luthans, and Harms (2008) address an underlying element that was not fully addressed in past literature on leadership attributes from either the trait, behavioral or operational perspective. From the work of Machida and Schaubroeck (2011) and Hannah et al. (2008), an assertion can be drawn that an principal's belief in her ability for building organizational capacity may influence the extent to which she is able to employ in practices associated in either the stylistic approaches of instructional, transformational or distributed leadership. This is an assertion that I wish to explore within my overall study.

Immunities to Change

Helsing, Howell, Kegan, and Lahey (2008) argue for the need to make professional development programs more developmental and introduce a framework for addressing a concept they call *immunities to change*. The authors define *immunities to change* as the "underlying barriers that prevent an individual from making progress towards a desired professional goal" (Helsing et al., 2008, p. 441). The framework developed by Helsing et al. (2008) was tested employing single-case study methodology where they examined the professional and personal development of one participant as she navigated her process for increasing her capacity to ascertain her own mental models, belief systems, and expectations and understanding how to use those internal constructs to mediate her personal and professional responsibilities and relationships.

Helsing et al. (2008) stated they were facilitators of a professional development program that was implemented for school and district leaders where the goal involved guiding and supporting school and district leaders as they engaged in widespread organizational change. Over the course of two years, Helsing et al. (2008) engaged 16 program participants in examining issues surrounding leadership capacity through a series of action-oriented exercises. The goal of the exercises was to help the participants understand and address systemic change and identify their immunities to change. Of those 16 participants, 14 participated in follow-up activities during the course of a year to work on mitigating their immunities and change their underlying behaviors and beliefs that they were unconsciously demonstrating through their leadership practice. After examining the data collected, Helsing et al. (2008) proceeded to conduct a single case

study with one of the program participants to follow her developmental journey in more detail.

Interviews with the participant and focused reflection activities offered insight into the beliefs the participant had about her capacity to complete the tasks and responsibilities assigned with her professional role. The focused reflection activities are what, according to the authors, raise the immunities to change to the level of the individual's conscious mind (Helsing, Howell, Kegan, & Lahey, 2008). The authors believe that their framework on immunities to change provide an opportunity for individuals to consider "they do not just hold their fears in a passive way; they also actively (if unconsciously) work to prevent what they are afraid of from occurring" (Helsing et al., 2008, p. 448).

The concept of immunities to change is an important one to consider in that Helsing et al. (2008) assert that the behaviors enacted by educators and educational leaders may affect student achievement. Therefore, identifying and altering the underlying behaviors and constructs that are preventing educators from reaching an optimal performance level within the organization is important in ensuring that the desired level of organizational change and improvement can be reached (Helsing et al., 2008). When those beliefs and assumptions are not brought out in the open for an individual to acknowledge, levels of practice and performance will remain where they are because individuals will remain unaware of the underlying expectations and assumptions that are consequently affecting their behaviors and practices (ibid).

Helsing, Howell, Kegan, and Lahey's (2008) work makes two important contributions to the field of research and the field of professional development. First, the

authors have now called attention to the need for more effective opportunities for professional development that take into consideration theories of learning and development, especially for adults. Second, Helsing et al.'s (2008) framework for identifying and addressing an individual's immunities to change is one that bears potential fruit in the reframing of professional development programs for educators and educational leaders. Identifying and mitigating the mental models and underlying beliefs that negotiate leadership behaviors and practices is a practice not readily seen in many leader development programs (Helsing et al., 2008). However, given the limitation of presenting only one case study, more research would need to be conducted in order to substantiate the authors' assertions.

Leader Creativity

According to Sternberg (2007), creativity in leadership is important and is the component whereby a leader generates the ideas that organizational members will (hopefully) follow. The author argues that the organizational environment powerfully influences the extent to which an individual is able to develop and use whatever potential skill sets he has and it is important for a leader to exercise creativity in problem solving by devising ideas that can move the organization forward (ibid.). Sternberg (2007) cautions "organizations that do not transform themselves risk stagnation and dying" and that an organization "lacking creative leadership is unlikely to be prepared to face the challenges rapid change entails" (Sternberg, 2007, p. 39). The author presents a systems model of leadership focusing on how one originates, makes, and acts on decisions (Sternberg, 2007). Key components in Sternberg's (2007) model include: wisdom, intelligence, creativity, and synthesis. The key components in Sternberg's (2007) model

are focused upon the individual leader. Sternberg (2007) argues that effective leadership involves a synthesis of the leader's characteristics surrounding wisdom, intelligence and creativity.

From his perspective, a leader needs wisdom to balance and navigate the interest of all stakeholders in an organization and ensure that the actions taken by the leader and the organization seek a common goal. Furthermore, a leader must use academic and practical intelligence (Sternberg, 2007). Academic intelligence is needed to evaluate and determine whether ideas generated are good (ibid.). Practical intelligence is needed in order to devise strategies for implementation of an idea or program in addition to devising ways to persuade organizational members of the value of that idea or program (ibid.). Creativity, as stated earlier in this section, is needed to generate new ideas to improve organizational performance (ibid.). Creativity, especially creativity in leadership, can take on many forms (Sternberg, 2007). Sternberg (2007) focuses his discussed on eight forms of creative leadership. The eight approaches to creative leadership are discussed below.

Sternberg's (2007) eight approaches of creative leadership are broad organizational models that involve a leader's selection of organizational direction and movement. The eight approaches are highlighted in Figure 1.6 on page 89. Of the eight creative approaches to leadership, I would like to address the following two approaches in more detail: *forward incrementation* and *redirection* (Sternberg, 2007). First, the forward incrementation approach is considered to be the most easily recognized form of creative leadership as most approaches to leadership, according to the author, fall into this approach (ibid.). In forward incrementation, the leader attempts to continue the

momentum of the organization in the direction it is already going (Sternberg, 2007). The leader works to extend the previous ideas held by the preceding leader or leadership team with the promise of progress through the use of continuity (ibid.). The leader keeps the original ideas and may update or upgrade small elements of a particular program or practice, but does not radically change the original product or idea (Sternberg, 2007). As a result, the leader's methods are seen as creative and are not rejected by the organizational members (ibid.).

In *Redirection*, the leader makes an attempt to take an organization from the direction it is currently heading and redirect it towards a different direction (Sternberg, 2007). Sternberg (2007) cautions that leaders who employ a redirection approach in leadership need to match their leadership style with the organizational culture and its environment. If a leader is not able to match their leadership style to the organizational context, even "their best intentions may go awry" (Sternberg, 2007, p. 35). The approach of *redirection* fits closely with the model of transformational leadership in that a leader works to transform an organization from its original starting point and move it in an entirely new direction from where it was once headed. One large component involved within this leadership approach is the importance of fostering and maintaining organizational relationships. As Sternberg (2007) cautions, a leader who does not recognize the organizational context and works to cultivate and maintain organizational relationships, the leader will experience challenges in trying to redirect the organization towards its new path.

Figure 1.6 Outline of Sternberg's (2007) Eight Approaches to Creative Leadership

Approach	Description
Conceptual Replication	• Leader believes organization is in the right place at the right time • Role of leader is to maintain current performance level of organization • May be limiting because approach requires the leader to only apply techniques that have been used before
Redefinition	• Leader believes organization is in the right place but not for the reason(s) that others, including previous leaders, think it is • Role of leader is to find an alternative use for preexisting ideas or programs • Potential issue with approach is that Redefining Leaders often end up taking credit for ideas of others because they find a better reason to implement others' ideas
Forward Incrementation	• Leader attempts to lead organization forward in the direction it already is going with the idea of advancing the leadership program of whomever one has succeeded • Most leadership is probably considered to fall under this approach • Creativity through forward incrementation is likely the kind that is most easily recognized and appreciated • Because it extends existing notions, it is seen as creative • Because it does not threaten the assumptions of such notions, it is not rejected as useless or even harmful
Advance Forward Incrementation	• Leader attempts to move the organization forward in the direction it is already going but by moving beyond where others are ready for it to go • Leader moves followers in an accelerated way beyond the expected pace of progress • If followers in organization are not ready to go where the leader wants to lead, they may form an organized and sometimes successful source of resistance
Redirection	• Leader attempts to redirect an organization from where it is headed toward a different direction • Redirective leaders need to match their style of leadership to their environmental circumstances to succeed; if not, their best intentions may go awry.
Reconstuction and Redirection	• Leader attempts to an organization back to where it once was (reconstruction) • Leader then moves organization onward from that point but in a direction different from the one it took previously
Reinitiation	• Leader attempts to move organization from a new starting point in a direction that is different from what the organization had previously pursued
Synthesis	• Leader integrates two ideas that previously were seen as unrelated or even as opposed • Integration is a key means by which progress is attained in the sciences • Approach represents neither an acceptance nor a rejection of existing paradigms but a merger of them.

Adapted from Sternberg, R.J. (2007). A systems model of leadership. *American Psychologist, 62*(1), 34-42.

Sternberg (2007) also makes the argument that individuals decide to be creative – whether as a leader or an organizational member. He asserts that in order to be creative,

an individual should exhibit the following elements for a creative attitude in leadership: 1) redefine problems, 2) analyze ideas and problems, 3) devise and sell solutions, 4) recognize how knowledge can both help and hinder creative thinking, 5) be willing to take sensible risks, 6) be willing to tackle obstacles, 7) believe in one's ability to accomplish goals and tasks, 8) be willing to allow uncertainty, and 9) be willing to find extrinsic types of rewards for things that one is intrinsically motivated to do (Sternberg, 2007).

Finally, Sternberg (2007) adds three skills that a leader should employ in any of the eight approaches to creative leadership: *selective encoding, selective comparison*, and *selective combination*. In *selective encoding*, the leader must be able to differentiate relevant information from irrelevant information within their field of experience (ibid.). In *selective comparison*, the leader must be able to relate new information to older pieces of information (ibid.). In *selective combination*, the leader must be able to take encoded information and combine it to create new and productive uses (ibid.). The three skills that Sternberg (2007) highlights here speak to the notion that a leader must cognitively engage in various thought processes as the leader makes his way towards locating, creating and implementing novel ideas aimed at organizational improvement. Such skills are what Sternberg (2007) refers to as "(Successful) Intelligence," which he defines to be the "skills and dispositions needed to succeed in life, given one's own conception of success, within one's socio-cultural context" (Sternberg, 2007, p. 37). He ends by stating that the reasons that leaders often fail is not because they are lacking intelligence and creativity, but because they do not take advantage to use the intelligence and creativity that they have (ibid.).

The strength in Sternberg's (2007) article lies in his descriptive approaches to creative leadership. Creativity is such a broad element in cognition and can vary in different contexts. Sternberg (2007) does well to illustrate the levels of creative thought associated with certain approaches in leadership. Furthermore, his work highlights the importance of creativity in organizational improvement and reminds the reader that organizations and leaders need to avoid the pitfalls of stagnation. However, Sternberg's (2007) lack of an empirical study fails to fully illustrate how these approaches in creative leadership could be observed in an applied setting – especially in an educational setting. This limitation in Sternberg's (2007) article is one I plan to address within my study and conceptual framework.

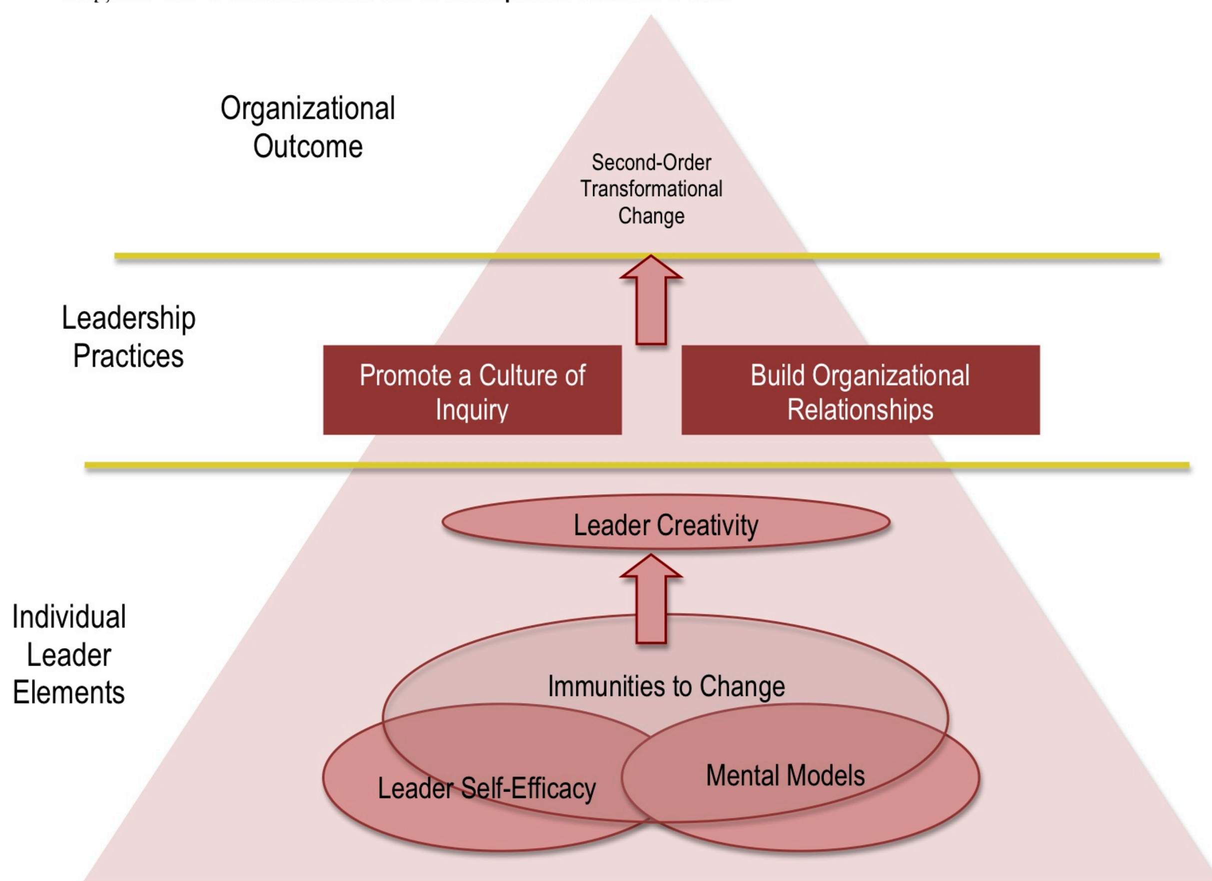
Conclusions

The literature reviewed in this section speaks to a need for further investigation surrounding how a leader's mental models, leader self-efficacy, immunities to change, and leader creativity, influence the type of leadership behaviors and practices she will choose to employ. This need for further investigation surrounding these four elements is due to the limited literature exploring the ways that leader self-efficacy, mental models, immunities to change, and leader creativity can potentially influence leadership practice and the possibility of achieving organizational change (Machida & Schaubroeck, 2011; Sternberg, 2007; Ruff & Shoho, 2005). These four elements are ones that I am choosing to explore in greater detail within my study. They are also the elements that will serve as a foundational construct as part of my conceptual framework which is presented on the following page.

Conceptual Framework

The earlier sections in this chapter reviewed the following bodies of literature: 1) trait, behavioral, and operational perspectives on the current role of the principalship, 2) leadership styles, and 3) the individual elements of leadership involving mental models, leader self-efficacy, immunities to change, and leader creativity. These three bodies of literature reviewed have influenced what will serve as my conceptual framework for my study, which is presented in Figure 1.7 below:

Figure 1.7 Presentation of Conceptual Framework



Drawing on literature from organizational learning theory, leadership theory, socio-cultural theory, and the social and psychological constructs influencing leader behavior and capacity for leadership, I assert there exists an intersection between a

principal's own mental models and their beliefs about their capacity for leadership. This intersection is mediated by the principal's immunities to change, which in turn translates into levels of creativity that will propel the principal to adopt prominent leadership practices and a set of behaviors that are then demonstrated within the organizational environment. The types of organizational behaviors demonstrated by the leader and organizational members are believed to lead the organization towards the possibility of fostering and achieving organizational improvement. I explore these elements in further details below. I will begin the presentation of my conceptual framework by discussing my conceptualization of mental models, leader self-efficacy, immunities to change, and leader creativity. I will then direct my focus to the set of behaviors that I argue are influenced by these four elements and will present my conceptualization of how a leader promotes a culture of inquiry and builds organizational relationships. I will end the presentation of my conceptual framework with my conceptualization of how I will define organizational change for the purpose of this study.

Individual Leader Elements: Mental Models

Drawing on the work of Senge (2006), for the purpose of this dissertation I define mental models as *the underlying assumptions and unspoken beliefs influencing a principal's behavior and actions that are visibly demonstrated within the organizational environment*. These unconscious assumptions and beliefs are not espoused or explicitly stated, rather a principal's own mental models live in her demonstrated leadership practices and behaviors. The ways in which such constructs and assumptions are formed derive from the images we carry from experiences and observations and are also images in which we make sense of the environment around us, which ultimately lead us to act in

ways that are consistent with our unconscious assumptions. The caveat to examining leadership behavior in the context of mental models is that a principal's espoused belief may differ from the theories-in-use whereby what the principal says she wants to accomplish or her explicit statements about how she views herself in her role as principal may, in fact, differ from the mental models she demonstrates within her organization. For the purpose of this dissertation, I examined the behaviors and practices a principal enacts and how those behaviors demonstrate the underlying beliefs and assumptions she possesses about her leadership as well as how they impact her ability to enact organizational change (Senge, 2006).

Individual Leader Elements: Leader Self-Efficacy

Drawing on the work of Machida and Schaubroeck (2011) and Hannah, Avolio, Luthans, and Harms (2008), for the purpose of this dissertation I define leader self-efficacy as *a leader's belief in her capacity to effectively improve organizational practice as perceived by her own psychological capabilities, leader attributes, and developmental experiences*. Operating as an extension from traditional definitions of self-efficacy, I argue that because a leader is in a unique position whereby she is responsible for the ultimate success or demise of an organization through instructional improvement she must be able to estimate her ability to fulfill her role in instructional leadership. The principal's perceived ability to fulfill her instructional leadership role is influenced by three factors: 1) her perception of prior developmental experiences as a prior teacher, 2) her perceived level of knowledge and leader capacity involving instructional improvement, and 3) her perceived leader attributes involving her ability to communicate

clearly, manage relationships, and reflect on her own practice (Machida & Schaubroeck, 2011). I elucidate on these factors below.

Developmental experiences are the experiences acquired by the leader that work to shape her practice (Machida & Schaubroeck, 2011). Drawing on the framework presented by Machida and Schaubroeck (2011), I believe developmental experiences can occur in three areas: feedback, challenges, and support. Feedback can occur in both formal and informal contexts. Feedback in a formal setting may occur during a performance evaluation with supervisors where the assessment clarifies changes that need to be made to close certain performance gaps. Feedback can also occur in an informal setting with peers or mentors where performance is not evaluated but guidance is given for a specific challenge or experience shared by the leader (Machida & Schaubroeck, 2011). Feedback can increase a leader's self-efficacy as the leader is able to obtain information that she may find helpful to her and may choose to incorporate feedback obtained as she works on her own development as a leader. For the purpose of this dissertation, I examined the type of feedback a principal receives in her role as a leader in addition to examining the feedback the principal received in her role as a teacher. The principal's developmental experiences as a teacher and the feedback received regarding her prior instructional practice can influence the level of leader self-efficacy she possesses in her belief in her ability to lead in instructional improvement.

Challenges are events that every leader experiences and usually come in the form of unfamiliar professional responsibilities, receiving higher levels of responsibility, and working across boundaries where a leader might not usually have authority (Machida & Schaubroeck, 2011). These kinds of challenges are necessary towards leader development

because challenging events provide opportunities for reaching beyond previously perceived limits of one's own leadership capacity. Challenges, once met and mastered, provide opportunities for increasing a leader's self-efficacy as the experiences gained from meeting the challenges serve to further cultivate her development. For the purpose of this dissertation, I focused on the challenges a principal has experienced with regard to improving instruction. Challenges experienced can be discussed from both perspectives involving the principal's current leadership role in instructional improvement and from the challenges she experienced as a teacher improving her own instructional practice. The ways in which the principal approached the challenges she experienced can influence her level of leader self-efficacy in working to improve instructional practice in her role as principal.

The support a leader receives, both early in and throughout her career, can have a large impact on improving a leader's self-efficacy, especially in the early stages of leader development (Machida & Schaubroeck, 2011). Support in the form of mentorships allow a developing leader to share experiences with her mentor in addition to obtaining advice from her mentor through the sharing of vicarious experiences where her mentor shares experiences as a means of sharing a lesson learned that can benefit the leader in her current stage of development. The sharing of experiences can help improve a leader's self-efficacy as she begins to see that the experiences and challenges she is facing is not new and that others have been in her position, lived through those experiences, and have lessons to share that can help her navigate through similar circumstances. For the purpose of this dissertation, I focused on the different types of support the principal received both in her role as principal and in her previous role as a teacher. It is believed that the level of

support the principal received as a teacher can influence her level of leader self-efficacy in being able to support instructional improvement at her own site. Furthermore, the level of support the principal received as a teacher may influence the ways in which she provides instructional support to her teachers to improve their practice. Lastly, the feedback the principal receives in her role as a principal specific to instructional improvement can influence her level of leader self-efficacy in her belief in her ability to support instructional improvement at her site as an instructional leader.

In addition to developmental experiences, I argue that leader self-efficacy is also influenced by the principal's perceived level of knowledge and leader capacity. A leader's perceived level of knowledge and leader capacity will involve her perception of skills, acquired through educational or professional experiences, that she believes equip her to lead her organization. In order to capture insight into the leader's perception of her level of knowledge and leader capacity, I asked questions surrounding the leader's learning orientation – or the psychological construct emphasizing learning, mastery, and increasing one's competence (Machida & Schaubroeck, 2011). Individuals with a high learning-orientation possess a desire to investigate new methods and strategies that can enhance their own capacity (ibid.). From a leadership perspective, it is believed that a leader's learning-orientation, in conjunction with developmental experiences, can influence the extent to which a principal develops her own leader self-efficacy (Machida and Schaubroeck, 2011). For the purpose of this dissertation, I directed focus on the principal's learning orientation with respect to the ways in which the principal worked to improve her own instructional practice as a teacher and to improve her practice as an instructional leader. The ways in which the principal has worked to develop her own

learning with respect to improving instruction, both as a former teacher and as a current principal, can influence the principal's level of leader self-efficacy in being able to achieve improvement in instruction at her own site.

Finally, I argue that leader self-efficacy is influenced by the principal's perceived leader attributes involving the perceived extent of her ability to communicate, manage, and reflect during the course of her workday. Drawing on the literature from the trait, behavior and operational perspectives of the role of a leader (Northouse, 2007; Fullan, 2001, 2002; Hallinger, 2003; Argyris, 2002, 2008), I argue that within leader attributes, the most important attributes a leader can possess to promote organizational change involve her ability to communicate clearly, manage relationships, and reflect on her practice surrounding the improvement of instruction. With respect to leader self-efficacy, the extent to which a leader believes she is effective in employing these behaviors in her own practice can enhance her belief in her ability to lead her organization in achieving instructional improvement. For the purpose of this dissertation, I placed focus on the principal's ability to communicate with her faculty with regards to conversations centered on instructional practice and instructional improvement. I also focused on the ways in which the principal manages relationships in instructional leadership that involve working with faculty members to discuss potential strategies for improving instructional practice. Finally, I directed my focus on the ways in which a principal reflects on her leadership practice in improving instruction through her ability to self-reflect on the practices she employs towards promoting and supporting instructional improvement.

Individual Leader Elements: Immunities to Change

I assert a principal's own mental models intersect with her levels of leader self-efficacy, which would theoretically influence the leadership practices she chooses to employ. However, that relationship is not as linear as one might postulate because of the mediating factor of a principal's own immunities to change. Drawing Helsing, Howell, Kegan, and Lahey's (2008) work, I define immunities to change as *the underlying barrier and beliefs that inhibit a principal from working to achieve her espoused desired level of change.* It is the mediating element of a principal's immunities to change that will determine the extent to which a principal is able to recognize areas of weakness and room for personal and professional growth so as to determine the appropriate strategies and practices necessary to enact organizational improvement. Because these immunities are unconscious to the principal, I examined behavioral patterns and practices that demonstrate her established immunities to change. Though it may be suggested that immunities to change is strikingly similar to Senge's (2006) conceptualization of mental models, I argue that, for the purpose of this dissertation, immunities to change reside solely within the individual and the extent to which she is able to develop in her own professional practice whereas mental models are operational constructs illustrating how a principal demonstrates her leadership.

Individual Leader Elements: Leader Creativity

Drawing on the work of Sternberg (2007), for the purpose of this dissertation I define leader creativity as *the skills or dispositions necessary to generate ideas that influence strategies and practices employed to improve instructional practice.* For the purpose of this dissertation, I focused on leader creativity with respect to the leader's

ability to engage in selective encoding, selective comparison, and selective combination (Sternberg, 2007). Selective encoding refers to the leader's ability to examine information and distinguish relevant information from irrelevant information within a specific field of experience. The principal's ability to selectively encode will allow her to engage in the process of focusing on information that is most relevant to addressing the task or issue at hand. Selective comparison refers to the leader's ability to relate old information to new information. The principal's ability to selectively compare allows her to engage in the process of comparing differing sources of information in order to examine changes of performance over time and determine next steps for continued growth and improvement. Selective combination refers to the leader's ability to take information that was selectively encoded and combine it in a fresh and inventive way that is also productive for the improvement of the organization. These three skills highlight the process of creative thinking as the leader works to generate new ideas from information obtained that is relatively fresh and new while also being appropriate for the task or goal that a leader is trying to accomplish. For the purpose of this dissertation, I placed focus on the ways in which a principal engaged in any or all of the skills in creative thinking (selective encoding, selective comparison, and selective combination) and how they translate into strategies, devised practices, and solutions centered on improving instructional practice.

From this perspective, I argue there is an intersection among the elements of leader self-efficacy, mental models, and leader creativity that lead a principal towards a set of behaviors that are then demonstrated within the organizational environment that can lead to the possibility of organizational change surrounding instructional

improvement. I will now focus on two specific behaviors in leadership that I believe are influenced by the three leader elements presented within my conceptual framework.

Leader Practice: Promoting a Culture of Inquiry

Drawing on the work of Argyris (2002, 2008), for the purpose of this dissertation I define promoting a culture of inquiry as *the organizational process whereby the leader fosters and facilitates double-loop learning centered on improving instructional practice*. For this study, I referred to Argyris' (2002, 2008) definition of double-loop learning involving the practice when "errors are corrected by changing the governing values and then the actions," (Argyris, 2002, p. 206). In double-loop learning, there is a process of reflection that begins with the leader and organizational members diagnosing a particular problem from the presentation of various data brought forth by the leadership (ibid.). The organization works to devise a solution to address the identified issue and begins to implement the solution (ibid.). Once the solution has been implemented, the organization evaluates the effectiveness of the implementation of the solution and designs appropriate courses of action aimed at changing the underlying practices and beliefs of the organization and organizational members (Argyris, 2008). It is through the cyclical process of identifying the problem, devising a solution, implementing the devised solution and evaluating the solution's effectiveness that the leader is able to engage the organization in continuous reflection – or a culture of inquiry (Argyris, 2008). The leader's ability to foster and develop a culture of inquiry through the practice of double-loop learning (Argyris, 2002) allows the leader to facilitate and monitor change within the organization's beliefs and values and the resulting change in instructional practice.

For the purpose of this dissertation, I placed focus on the ways in which a principal engages her faculty in double-loop learning specific to improving instructional practice. I examined the extent to which both the principal and the faculty members look to various forms of data identify problem pertaining to instructional practice. I also examined the ways in which the principals worked to devise solutions to improve the problem(s) identified with respect to instructional practice and how those solutions are implemented.

Leader Practice: Building Organizational Relationships

Drawing on the work of Northouse (2007), for the purpose of this dissertation I define building organizational relationships as *the process whereby a leader recognizes, cultivates, and maintains in-group and out-group relationships in an effort to manage instructional improvement.* I drew upon Northouse's (2007) Leader-Member Exchange Theory (LMX) as a means of illustrating the use of in-group and out-group relationships within organizations. LMX asserts that in relationship building there are typically two groups: the in-group and the out-group (Northouse, 2007). The *in-group* typically refers to the types of relationships between leader and member that are "expanded and negotiated role responsibilities (extra roles)" (Northouse, 2007, p. 152). These responsibilities that are negotiated between the leader and the member are not typically found to be contractual agreements between the two parties but are supplemental duties that may be delegated by the leader depending on the relationship formed (ibid.). Individuals found to be in the *out-group* are individuals whose relationship with the leader solely consists of "defined roles" as outlined in their "formal employment contract" (Northouse, 2007, p. 152).

For the purpose of this study, I sought to examine the extent to which a principal recognizes the existence of in-group and out-group organizational groupings. I also examined the extent to which the principal is able to cultivate these relationships for the purpose of building relationships with individuals that are enriching while working to serve the interests of the organization in improving instructional practice. A principal's ability to build organizational relationships through the recognition, cultivation, and maintenance of in-group and out-group member relationships is thought to bear an influence on the extent to which a principal is able to facilitate organizational change surrounding the improvement of instruction.

Desired Organizational Outcome: Second-Order Transformational Change

Within my conceptual framework, I argue that there is an intersection among the elements of mental models, leader self-efficacy, immunities to change, and leader creativity that lead a principal towards a set of leadership behaviors and practices. It is through the interaction between leader elements and leader behavior demonstrated within the organizational environment that a principal could increase the likelihood of achieving organizational change.

For the purpose of this study, I define second-order transformational change as *the transformation of organizational practice whereby members alter the behaviors and underlying practices that were previously employed so as to yield organizational improvement.* I expected to see organizational practices associated with promoting a culture of inquiry involving collaborative discussions among faculty and the administration surrounding reflections on professional and instructional practice. However, within the construct of this study's design (discussed in Chapter 3), I could

only infer whether this organizational outcome was possibly achieved in this study due to the limitations of my data collection timeline that will prevent me from conducting data collection for the entire school year. As a result, data collected from this study will only allow me to infer whether or not the organizational outcome would be theoretically achieved given the data I collected examining leader elements and organizational practices.

Conclusion

Research presented in this chapter demonstrated there are various perspectives on the role of the principal and the ways in which a principal can foster and achieve instructional improvement in organizational change. Trait, behavioral, and operational perspectives of leadership have been an extensive focus for empirical study (Northouse, 2007; DeRue & Wellman, 2009; Portin, Schneider, DeArmand, & Gunlach, 2003). Furthermore, a large body of research has focused on the stylistic practices of leadership surrounding instructional, transformational, and distributed leadership (Hallinger, 2003, 2005; Marks & Printy, 2003 Spillane & Healey, 2010) with connections drawn between two predominant leadership practices involving promoting a culture of inquiry and building organizational relationships. Lastly, much of the literature reviewed on the role and practices of leadership discuss the role of change in an organization as an ever-appealing goal (Argyris, 2002, 2008; Hallinger, 2003; Fullan, 2001, 2002) and one that can be transformative – or second-order – in nature.

One large limitation discovered from the literature review is the lack of empirical literature surrounding aspects of leadership involving leader self-efficacy (Machida & Schaubroeck, 2011; Hannah, Avolio, Luthans, & Harms, 2008); leader creativity

(Sternbern, 2007), immunities to change (Helsing, Howell, Kegan, & Lahey, 2008), and mental models (Senge, 2006; Ruff & Shoho, 2005) and the demonstrated interactions between these elements. This is an area of literature that has been limited in its empirical exploration and is one area that I desired to gain further insight within my study. The conceptual framework presented near the end of the chapter highlights the bodies of literature that have influenced the very ideas I explored within my study. The next chapter will discuss the selected methodology for my study that was employed to address my established research question.

Chapter 3: Research Methodology

Individual leader elements surrounding one's mental models, level of leader self-efficacy, immunities to change, and leader creativity – and the confluence of those elements – are believed to influence the extent to which a principal is able to engage in practices involving promoting a culture of inquiry and cultivating organizational relationships. The level or extent to which the principal enacts these practices is thought to translate into the likelihood of fostering and achieving organizational change. The conceptual framework presented in Chapter 2 guided the course of this study examining the interactions surrounding a principal's individual leader elements and her demonstrated behaviors leading to the likelihood of the possibility of achieving organizational change. The following question guided my study:

- To what extent does a principal's own mental models, level of leader self-efficacy, her immunities to change, and her level of leader creativity influence the principal's ability to enact her style of leadership in fostering and achieving organizational improvement?

This chapter reviews the study's research design, site and participant selection, instrumentation, and the procedures for data collection and analysis.

Research Design

A qualitative multi-case study methodology was employed for this study and was most appropriate because it allowed for an "in-depth description and analysis of a bounded system" (Merriam, 2009, p. 39). Merriam (2009) defined a *bounded system* as a "single entity, a unit around which there are boundaries" (ibid.). In this context, the researcher narrowed the focus of study around a single unit of analysis – the individual

principal as she operated within the organizational context of her school. This qualitative case study methodology was selected because I was deeply interested in investigating the "holistic and meaningful characteristics of real-life events" (Yin, 2009, p. 4) as they occur in an organizational setting.

A multi-case study method served the purposes of my study for several reasons. First, case study research is *particularistic* meaning it is focused on a certain situation, event or phenomenon (Merriam, 2009). As a result, the cases chosen for the subject of study is integral as it can reveal information that can lead toward a deeper understanding of certain phenomena and what it might mean on a larger scale (ibid.). Second, case study research is *descriptive* meaning that the presentation of the data collected and analyzed will entail an intensely "rich, thick description of the phenomenon" studied (Merriam, 2009, p. 42). Merriam (2009) defines *thick description* as being a "complete, literal description of the incident or entity being investigated" (ibid.). Third, case study research is *heuristic* meaning it will elucidate the reader's understanding of the phenomenon studied (ibid.).

With respect to my study, the case study method served the purpose of deepening my understanding, and my readers' understanding, of the phenomenon surrounding the extent to which a leader's interpersonal and psychological factors influence her leadership practice. Furthermore, the descriptive nature of this case study and the fact that I chose to focus on the principal at each of the two schools where I gathered data will allow for a rich analysis of the phenomenon I expressed in my Conceptual Framework.

Site Selection Criteria

The case study for this dissertation took place at two high schools within one district. School selection involved the selection of one independent charter high school and one non-charter high school. I chose to select two differing schools, contextually, to afford a more interesting comparative analysis. Furthermore, choosing two schools to examine afforded an opportunity to represent the "*critical case* in testing a well-formulated theory" (Yin, 2009, p. 47). As a critical case, my multi-site case study served to "confirm, challenge, or extend the theory" (ibid.) postulated in my Conceptual Framework. Furthermore, focusing my case study at one site allowed for more in-depth investigation in studying the extent to which a leader's practice is influenced by the individual elements discussed in my conceptual framework, thereby creating depth in my subsequent analysis. The school sites selected for this study exhibited the following criteria:

1. Two high schools within same district (Independent Charter versus Non-Charter)
2. Principals of the two high schools had beginning or emerging experience as principal (0-5 years)
3. Both organizations underwent some form of change (ie: new principal, new leadership structure)

The criteria for site selection were important, as I wanted to select schools that were exhibiting a need for organizational change and instructional improvement. Furthermore, the fact that I chose to conduct my case study at a high school versus an elementary school is important because most studies that have sought to examine elements such as mental models have typically taken place in an elementary school setting (Ruff & Shoho,

2005; Youngs, 2007). The limited number of studies in this area of study at a high school is a reason for choosing to conduct my multi-case study in a high school setting. While organizational structures and student population sizes may differ between elementary and secondary school settings, it is important to examine the ways in which a principal, in a high school setting, is able to engage in practices that will lead to organizational change.

Participant Selection

This study focused on the principal at the selected school sites. Because the study examined the extent to which individual leader elements influence engagement in leadership practice, the principal was a prominent participant for this study. However, I also recruited participants from the school faculty in order to examine the impact of the leader's leadership practices in influencing organizational change. Faculty participants were recruited, with the help of the principal. The following criteria was used for participant selection:

Principal Selection Criteria

1. A principal who was an emerging principal with 0 to 5 years of administrative experience as a principal
2. A principal who was leading her organization under some form of change

Faculty Participant Criteria

1. Faculty participant was a member of an established Leadership Team
2. Faculty participant was a teacher at the school site; not part of an established Leadership Team

I chose to focus on a principal who was leading her members through some type of organizational change because I wanted to see how her leadership behaviors,

demonstrated as a result of the intersection of her individual leader elements, led her to the likelihood of achieving her desired level of organizational change.

I chose to select faculty participants from two different groups: those who participate in the leadership team and those who do not. Having participants from both groups provided insight into faculty members' perceptions of the impact of the leadership practices on their own professional practice in achieving instructional improvement. Furthermore, having participants from both groups also provided insight into the impact of in-group and out-group relationships, as faculty members who participated in a leadership team resembled the closest ideal to being a part of the in-group as outlined in Northouse (2007).

Data Collection

The primary instrument of data collection and analysis was myself – the researcher (Merriam, 2009). Within a case study, data collection methods can vary and can take on many forms such as the following six sources outlined in Yin (2009): 1) documentation, 2) archival records, 3) interviews, 4) direct observations, 5) participant-observation, and 6) physical artifacts. Yin (2009) asserts that for a case study to be a "good" representation of the phenomenon studied, "multiple sources of evidence" are needed to create the most comprehensive illustration in order to answer the research questions posed for this study (Yin, 2009, p. 103). As the primary instrument of collecting data for my study, I collected data from three of the six sources of evidence outlined by Yin (2009). With the exception of a participant observation, I collected data in the form of documents, archival records, in-depth interviews, direct observations, and physical artifacts. These five sources of data were collected to examine the extent to

which the individual leader elements influence the principal's leadership practices in promoting a culture of inquiry and building organizational relationships in an effort to support organizational improvement.

The primary source of the data collected was from the principal. Collecting data from the individual participant allowed for cultivating a deeper understanding into the individual's behavior, attitudes, and perceptions that influenced the actions and practices associated with leadership to support organizational improvement (Yin, 2009). Furthermore, data collected from the individual participant also shed light in explaining how and why the organization works the way that it does from the lens of the principal (Yin, 2009). Supplemental data was collected from faculty participants as a means of interpreting the impact of the principal's leadership practices from the lens of the organizational members. Each of the five sources of data collection for this study is described in further detail below.

Interviews

Interviews are considered one of the most important sources for data collection within a case study (Yin, 2009; Merriam, 2009). In a case study, interviews may take the form of "guided conversations rather than structured queries" (Yin, 2009, p. 106). This allows the interviewee to divulge information in a fluid manner (ibid.). Questions posed during interviews served to address the "why" behind a particular process or decision that occurred in the manner that it did (ibid.). Two interview formats were utilized during the course of the study. The first involved *in-depth interviews* (Yin, 2009). In-depth interviews contained open-ended questions that allowed for the interviewer to ask key respondents "about the facts of the matter as well as their opinions about events" (Yin,

2009, p. 107). In-depth interviews took place at the beginning and the end of the study where the principal was able to discuss in greater detail her insight into various aspects of her perceptions about her leadership within the organizational context (See Appendix B).

For the purpose of this study, I also posed interview questions surrounding a leader's developmental experiences from feedback received, challenges experienced, and support received both in the principal's role as a leader working to improve instructional practice and her formal role as a teacher where she worked to improve her own instructional practice. This data was gathered from one-on-one interviews conducted with each principal individually. Collecting data from interviews where the principal shared her developmental experiences from the three areas discussed earlier helped elicit insight on how these developmental experiences shaped the principal's own level of leader self-efficacy in leading her organization.

In-depth interviews with faculty participants were also conducted with one scheduled at the beginning of the study and a follow up email at the end due to the circumstances surrounding faculty members' hectic schedules. These in-depth interviews were conducted to obtain insight into faculty members' perceptions about the principal's leadership practices and the extent to which faculty members' believe those practices have influenced their own professional practice towards achieving instructional improvement. While the interviews conducted offered an opportunity to gain insight into the perspectives of the faculty members, my findings did not incorporate this data as it did not contribute wholly to my understanding of the intersection of the individual leader elements and leadership practice as proposed in my conceptual framework. Furthermore, the data gathered from the faculty interviews did not aid in my ability to answer the

research question addressed in this study. Interview protocols for both the principal and faculty member participants were developed with some influence from the interview protocol outlined in Ruff's (2002) dissertation work (See Appendix).

In addition, I used in-depth interviews to gather data surrounding a leader's perceived level of knowledge and leader capacity through the presentation of questions aimed at learning about the leader's educational background as well as her professional and developmental experiences that she believed assisted in her leader development and instructional practice. Collecting data from interviews where the principal shared her experiences from her educational background, professional development, and her perceived learning orientation provided insight on how the leader's mental models, perceived level of knowledge, and perceived leader capacity have worked to shape the principal's own leader self-efficacy in leading her organization towards instructional improvement.

Direct Observations

Direct observations afforded an opportunity to examine the unit of analysis in a case study in its most "natural setting" (Yin, 2009, p. 109). Observations allowed me to see the principal's behaviors and leadership practices in action. Observations, in conjunction with interviews and documentation, enriched my illustration of how a principal's individual leader elements influence the extent to which he or she engages in promoting a culture of inquiry and building organizational relationships. For the purpose of this study, direct observations were conducted at faculty meetings and leadership team meetings where the principal was either the primary facilitator or a participant. I conducted observations in these two settings in order to identify the underlying beliefs

and assumptions the principal makes with respect to her role as a leader while examining the ways in which her behaviors and practices demonstrate those mental models.

In addition to observing the principal in action at faculty meetings, I also conducted two shadow days at each of the high schools. Each shadow day consisted of an 8-hour observation where I essentially observed the principal in action during the course of a normal workday. These observations offered rich data sets where I was able to examine the principal's leadership practices and checked for consistency in the manners in which she behaved on a given day. Each of the shadow days allowed me to see the principal engage in meetings with her leadership team, her faculty, individual teachers, as well as impromptu student interactions. The shadow days ultimately provided me the opportunity to see the principal as she operated and enacted her leadership within the organizational context.

The use of observations allowed me to examine the attributes of the principal within the organizational context. When I observed the way the principal communicates, I observed the way she communicates with faculty on strategies and practices for improving instruction. When I observed the way the principal managed relationships, I focused my observation on the interactions between the principal and the faculty members and how the principal worked to cultivate relationships centered on improving practice. I relied upon my conceptual framework as a reference during the observations to examine the extent to which the principal's individual leader elements influenced the ways in which the principal enacted leadership practices that lead to the possibility of achieving the desired organizational outcome she sought out.

Documentation

Documents collected in case studies can take on many different forms (Yin, 2009). For the purpose of my multi-case study, I collected documents chosen by the principals that both believed represented they ways in which they engaged their leadership. Documentation collected spanned from PowerPoint presentations to Excel spreadsheets indicating a formal observation schedule for the principal's teachers to worksheet and exercises the principal used with her faculty. Documentation is important in a case study because it can be used to substantiate and supplement evidence from other sources collected (Yin, 2009). Furthermore, inferences can be made according to the information presented within the documents gathered (ibid.). Such inferences made can offer clues and generate additional questions in an effort to cultivate a deeper understanding of the principal's leadership practices and how the principal works to achieve instructional improvement.

Case Study Data Analysis

I relied on several theoretical propositions within this multi-case study, which were illustrated within my study's conceptual framework presented at the end of Chapter 2. The first involves the assertion that there exists an intersection among a principal's mental models, leader self-efficacy, and leader creativity, and that a principal's immunities to change serve as mediating factors for understanding the extent to which a principal is able to enact practices associated with organizational change (Machida & Schaubroeck, 2011; Hannah, Avolio, Luthans, & Harms, 2008; Helsing, Howell, Kegan, & Lahey, 2008; Sternberg, 2007; and Senge, 2006). The second assertion within my study's conceptual framework is that the two prominent leadership practices involve a

principal promoting a culture of inquiry and building organizational relationships (Argyris, 2002, 2008; Northouse, 2007). The extent to which a principal employs these practices is influenced by the individual leader elements stated in the first assertion. Finally, the confluence of a leader's individual elements and the leadership practices employed influence the likelihood to which organizational change (Hallinger, 2003) is achieved. This case study, however, only sought to infer the extent to which transformational organizational change could be theoretically achieved due to the time constraints associated with the data collected period that did not afford me the opportunity to see whether or not the principal was able to achieve the goals she established for her organization.

Each of the theoretical frames discussed observed influenced my study's conceptual framework and it is these theoretical frames that were used when engaging in my data analysis. Relying upon the previously stated theoretical frames, I engaged in data analysis surrounding *explanation building* (Yin, 2009) where my goal was to "analyze the case study data by building an explanation about the case" (p. 141). Data was transcribed and coded looking for patterns that were related to the relationship between individual leader elements and the extent to which the leadership practices are employed to support the possibility of organizational change. The patterns determined from the data were to explain the phenomenon surrounding the possibility of instructional improvement achieved through the ways in which a principal promotes a culture of inquiry and the ways a principal cultivates and maintains organizational relationships.

Validity and Reliability

To increase the validity within this study, I employed several case study tactics (Yin, 2009). First, to increase *construct validity*, or the operational procedures for the theories to be studied, I used multiple sources of evidence in my data collection process. To increase *internal validity*, I engaged in pattern matching and explanation building during the data analysis of the two case studies. To increase *external validity*, I referred to the theoretical frames anchored in Chapter 2 and used them to develop the conceptual framework for the multi-case study. Validity in a qualitative study is important as the use of multiple strategies in a case study's data collection process can assist in increasing accuracy among the findings (Yin, 2009; Merriam, 2009; Creswell, 2009).

When came to increasing the reliability in my multi-case study, it was important that the methods for data collection were consistent between both the researcher (me) and the study participants (the principals) (Merriam, 2009; Yin, 2009). Therefore, to address the study's reliability, I clearly outlined the operational procedures taken for my data collection so that future researchers may replicate the same data collection process with the expectation of producing similar results (Yin, 2009). Operational procedures included my being present for every observation, conducting equal amounts of observational time between the cases, and utilizing the same observation and interview protocols during each school site visitation.

Conclusion

This study focused on the intersection between individual leader elements surrounding the principal's own mental models, level of leader self-efficacy, her immunities to change, level of leader creativity, which were believed to influence the

extent to which a principal is able to engage in practices that lead to the likelihood of achieving organizational change. The school principal served as the unit of analysis for each of the two case studies. In-depth and focused interviews with both the principal and the faculty participants took place at the very beginning and at the end of the study. Though faculty interviews were conducted at the beginning of the data collection process, the data collected from the interviews did not aid in addressing the research question set forth for the purpose of this study and, as a result, are not reported in the findings. Direct observations took place at faculty meetings and leadership team meetings during the principal will either facilitate or be an active participant. Direct observations were also conducted in the form of shadow days that consisted for two 8-hour observations at each of the two high schools where I was able to see the principal operate and enact her leadership within the organizational context. Documentation served as a supplemental method of data collection. The conceptual framework presented in Chapter 2 guided the course of this study examining the interactions between individual leader elements, leader practice, and the possibility of organizational change. Finally, data collection commenced upon passing the Qualifying Exam and successful completion of IRB.

Chapter 4: Findings

The purpose of this study was to examine the intersection of a principal's individual leader elements involving the principal's own mental models, level of leader self-efficacy, creative thinking, and her immunities to change, as well as how those individual elements influenced leadership practices enacted leading to the possibility to foster organizational improvement. The first three chapters of this dissertation offered an introduction to the problem surrounding leadership capacity and development, a review of the literature surrounding principal leadership, and the methodological design that was utilized for this study. This chapter will now present the findings that emerged from the data collected and analyzed using the conceptual framework that was constructed for the purpose of this study.

A qualitative study employing a multi-site case study methodology was conducted with data collected from observations, interviews and document collection (Yin, 2008; Merriam, 2009). Pseudonyms for the school sites, principals and faculty participants were created to ensure that all participants' identities were kept private. The findings for each case study will be presented separate from one another within this chapter. First, the background of the case will be presented followed by the case study's findings in relation to the research question (Yin, 2008). Finally, a cross-case analysis will be presented following the presentation of the findings for each case study. All findings presented served to answer the following research question for this study:

- To what extent does a principal's level of self-efficacy, creative thinking, and own mental models, as well as one's immunities to change, influence the principal's ability to enact her style of leadership in promoting organizational improvement?

Case Study 1: Principal A - Crystal Castle Academy

Crystal Castle Academy is an independently run charter school operating within Morcheeba Unified School District. The student population consists of approximately 350 students of which 95% are Hispanic/Latino. Approximately 94% of the student population is categorized as socio-economically disadvantaged; approximately 31% of the students enrolled are English Language Learners and approximately 3% are students with disabilities. The school's API score for the 2010-11 academic year was 723 and their similar schools rank is 4 while their statewide rank is 5. Located in an urban neighborhood, this independent charter shares space with a Christian church where their auditorium space doubles as the school gym and is also where Sunday Services are held for the church. Upon first glance, it is easy to miss this school while driving down the street upon which it is located. Industrial shops face the school and a local burger eatery is within walking distance on the corner.

Crystal Castle Academy's banner is the only thing that assists a visitor in identifying the school's location within the small building complex. Double French doors serve as the entrance to the office. Upon first entering, one will immediately see a Biology class taking place to the right in one classroom where students are taking copious notes as the teacher lectures them on DNA structures. Just a few feet across from the Biology class, an enthusiastic art teacher walks around monitoring students as they work on their next artistic piece. Alternative rock music emanates from the art classroom and quietly fills the lobby and reception area, breaking up the silence of a couple of students sitting in chairs working on homework. Chairs surround the perimeter of the front office space and the walls are decorated with student-produced art ranging from abstract

paintings to a charcoal sketch portrait of Albert Einstein. A glass case is located to the right side of the office lobby and contains more student artwork, school apparel, and several photos. Another glass case mounted to the wall displays the charter school's accreditation and credentials. To the left of the office, a large bulletin board is displayed and updated monthly with important student announcements ranging from the lunch menu to club meetings and homework lab hours.

Classrooms are immediately seen down either hallway on the left and right side of the receptionist desk. The school contains two floors of classrooms with the majority of the classrooms located on the second floor. With the various staircases and doorways, it is easy to become lost and Principal A often referred to the layout of the school as a "labyrinth" (personal communication, November 4, 2011). The receptionist desk is decorated with a banner saying "Falcon Pride." The Principal's office is located right behind the receptionist desk; though slightly tucked away in a corner, the windows from the door make the Principal readily visible.

Research Question #1: To what extent does a principal's level of self-efficacy, creative thinking, and own mental models, as well as one's immunities to change, influence the principal's ability to enact her style of leadership in promoting organizational improvement?

An examination of the data collected revealed that when it comes to the relationship between a principal's leadership and organizational change, high levels of leader self-efficacy and well-intentioned mental models are not enough to influence practices associated with organizational change when these two elements intersect with a principal's own immunities to change in addition to some external constraints. This, as a

result, leads to low levels of creative thinking with the principal ultimately enacting traditional approaches in conducting professional development and practicing leadership.

Individual Leader Elements: Mental Models, Leader Self-Efficacy, Immunities to Change, and Leader Creativity

Individual Leader Element: Mental Models

According to Senge (2006), mental models refer to the unconscious constructs and assumptions individuals possess. These unconscious beliefs and assumptions are what drive overt behaviors and actions. More importantly, mental models are not espoused or explicit statements that an individual makes, but mental models are demonstrated in the behaviors and actions living within the individual's own professional practice. An examination of the observations of Principal A's words and behaviors across the data set revealed three prominent mental models in relation to her perception of her role in leadership: 1) the principal is an instructional leader; 2) the principal uses data with teachers; and 3) the principal models the behaviors and practices she expects from her faculty.

Mental Model 1: "The Principal Is An Instructional Leader"

One instance where Principal A's first mental model is on full display is during a pre-observation meeting she conducted with a teacher. Throughout the meeting, the teacher and Principal A engaged in a dialogue where the teacher shared what she was planning to do for an upcoming lesson that Principal A would observe. Principal A asked the teacher several questions such as, "What are you planning to do to measure the learning that you're anticipating will take place?" (personal communication, November 4, 2011). As the teacher continued to share ideas and plans for her lesson, Principal A

offered feedback and suggestions to help the teacher enhance her lesson, especially when it came to help the teacher with strategies for Checking for Understanding:

> Something you can try using… you know the sheet protectors? The clear ones. Every kid can have one with a white board marker and then put the sheet of the questions in there and then have the kids circle answers or work on problems and then hold them up. You can then quickly see who's got it right and who doesn't. Then you can target the kids who did not get it right and then give them corrective feedback immediately. (Principal A, personal communication, November 4, 2011)

Principal A's mental model of a principal being an instructional leader is evident here in her pre-observation meeting with the teacher. Hallinger (2003) and Quinn (2002) identify prominent practices associated with instructional leadership that include the principal serving as: manager of the instructional program, resource provider, climate builder, and vision setter. In the example provided above, Principal A is acting as a resource provider to the teacher by offering suggestions for the teacher's exercise in Checking for Understanding when she recommends the use of sheet protectors and markers for use with her students. Principal A uses the pre-observation time to not merely go through the motions of the pre-observation form, but to advise the teacher as Principal A recommends that the teacher has the students circle answers and hold them up so that she can quickly see who is understanding the material and who is not. Additional data that came out of this same interaction included Principal A offering advice on the level of questioning the teacher could employ with respect to questions involving identifying subject matter terms and questions aimed at promoting more critical thought. Principal A advising the teacher on the various types of questions to use when Checking for Understanding further supports the principal's desire to act as a resource provider.

This behavior is consistent with the literature offered by Quinn (2002) whereby the author asserts that the principal manages the instructional program by working with faculty to improve teaching and learning via various professional development selected by the principal. Furthermore, the level of involvement of Principal A in the dialogue with the teacher by offering strategies and ideas demonstrates her desire and focus to help teachers improve their instructional practice, which is an indication of instructional leadership as noted by Hallinger (2003) and Quinn (2002).

Additionally, Hallinger (2003) argues that instructional leadership requires a great deal of time a principal must devote to defining and managing the school's vision and managing the instructional program by providing appropriate resources and professional development. Quinn (2002) adds to the list of instructional leader responsibilities by asserting a principal must be a visible presence, which requires the principal to conduct frequent classroom visits and observations – formal or informal – and greeting various students and staff in the halls and engaging in impromptu conversations. There were a number of instances where Principal A was observed enacting practices associated with instructional leadership. For example, the following were activities in which Principal A carried out: 1) Principal A conducted classroom observations of 2 teachers; 2) Principal A conducted a pre-observation meeting with one teacher and a post-observation meeting with another teacher; 3) she met with the ELL Facilitator to discuss a restructure of the program to support student learning; 4) she worked on a presentation where she planned to share benchmark results on assessment data; 5) she met with her directors to discuss teacher observations and devise strategies to support improvement in instruction; and 6) she led a professional development meeting where she led teachers through a community

building exercise that they could use with their students during class. Each of these activities represents the practices associated with instructional leadership, discussed by Hallinger (2003) and Quinn (2002), as Principal A worked to define and manage the school's vision, manage the instructional programs, provide resources and support via professional development, and maintained a visible presence on campus by conducting classroom observations and engaging in impromptu conversations with both staff and students.

Ultimately, Principal A's demonstration of her mental model that *the principal is an instructional leader* is a finding that is consistent with Senge's (2006) theory pertaining to the idea that mental models lead an individual to adopt and employ various behaviors and practices unconscious to them. There are unspoken beliefs and assumptions Principal A is making regarding her role as principal and her role to lead her faculty instructionally. As result, this first mental model is demonstrated in the behaviors and practices she employs.

Mental Model 2: "The Principal Uses Data With Teachers"

Principal A's second mental model identified from the data – *the principal uses data with teachers* – was evident from the examination of observations of the Principal and documents collected. For example, one form that Principal A provided involved a "benchmark analysis" where she worked with teachers to examine results from the first periodic assessment. The types of questions Principal A created and posed to her teachers in this "Benchmark Analysis" are illustrated in Table 1 on page 126 and 127 of this chapter.

Table 1

Inductively Developed Thematic Categories Emerging From the Benchmark Analysis Worksheet – Crystal Castle Academy, Principal A

Category	**Thematic Category**	**Questions Asked By Principal**
Student Achievement Data	Focus on External Outcomes	What are your initial takeaways about the overall student performance on benchmark one? What performance band(s) do the majority of students fall into? Are there any classes that stood out in the overall glance of data? Open up the school exam report and examine student performance by standard. What do you notice? Look horizontally by standard. Look at the data by class and overall. What do you see? How many standards did your students achieve mastery on? Which standards? Use the graphic organizer on the next page to determine which standards are areas of concern and what is an appropriate action plan to address these standards. Was mastery missing across the board or just with a few students? Examine the "bubble students." That is, the students who are on the verge of moving up or down a performance band. (Principal refers to this group as "Good to Great Students") Do you notice any trends in grade levels? Classes? Did the students perform as expected or were you surprised? How did the students feel?

Table 1: Continued

Instructional Practice	Focus on Internal Reflection of Instructional Practice	Can this standard be addressed through cumulative work? Does this standard need to be retaught completely? Can this standard be mastered through strategic repetition, do nows, etc.? How will you address the good to great students? What will this look like in your classes? What are your successes for this first round? What would you do differently next round? Reflection on your practice. What was most effective that you implemented to master a standard or help your students prepare for benchmark 1? Where do you go from here?

Principal A asking her teachers to look at the data is consistent with what Halverson, Grigg, Prichett and Thomas (2006) speak to in their study on data driven decision making (DDDM). According to the authors, there are six predominant practices associated with DDDM that include: gathering various forms of data, engage in data reflection, align school-wide or instructional programs to goals set according to data, design programs in according with targeted goals, obtain formative feedback on results, focus on test preparation.

From the data set, it is evident that Principal A is a frequent practitioner of the DDDM model that Halverson et al. (2006) espouse. For example, Principal A frequently gathered various forms of data, engaged in reflection on that data, and worked to establish school-wide programs and goals in accordance with the data acquired. Principal A collected and analyzed data focused on student achievement to improve learning

outcomes. She then offered feedback on results in the form of a PowerPoint presentation to her staff. The evidence collected demonstrates that collecting and looking at data is a large part of Principal A's own leadership practice.

The way this second mental model is demonstrated indicates that Principal A is focusing more on the actual data than the relationship between the data and actual practice. That is seen in the types of questions that are asked with Principal A placing a majority of the emphasis on the data and very little on practice as demonstrated by the final set of questions on the worksheet. Much of the questioning posed by Principal A through this worksheet places focus on the student learning outcomes and the tangible data that resulted from teachers' instructional practices; however, Principal A does not press upon teachers to really examine their own practice.

As a result, Principal A's behaviors, as demonstrated in the questions she derived for the worksheet, exemplify the mental model *the principal uses data with teachers.* The key here is that both the principal and the teachers are *looking* at data rather than actually discussing the practices that get them the quantitative or measured result. This is not to say that such conversations are not taking place, but considering the level of questioning presented within the document, it is not likely that the quality of conversation is high surrounding actual reflection of practice.

Mental Model 3: "The Principal Models the Behaviors and Practices She Expects From Her Faculty"

The third and final mental model identified from the data – *the principal models the behaviors and practices she expects from her faculty* – was demonstrated across the various data sources. One instance where Principal A exemplified the behaviors and

practices she expects from her faculty occurred during a professional development session. During this meeting, Principal A asked Ms. Connor to lead the meeting. Ms. Connor asked teachers to conduct a formative evaluation on the principal where they were asked to write down things they believed Principal A was doing well in addition to offering suggestions for improvement in Principal A's practice. While Principal A said she planned to look at the data at a later date and use it to reflect on her practice (personal communication, December 5, 2011), this was a behavior that I was not able to visibly observe. In asking teachers for feedback, Principal A demonstrated the practice of gathering data – a practice that she expects her faculty to employ.

Modeling is a leadership practice that is discussed consistently across the literature (Hallinger, 2003; Fullan, 2001; Northouse, 2007). Here, Principal A possesses a level of knowledge and beliefs that she desires to impart on her faculty in an effort to encourage school-wide adoption of a particular practice. Here Principal A is modeling that data collection for the purpose of improving practice is important by asking them to give her feedback about her own performance. This behavioral practice is one that she wants her teachers to adopt.

Principal A's three prominent mental models that emerged from the data set – *the principal is an instructional leader; the principal uses data with teachers; and the principal models the behaviors and practices she expects from her faculty* – are all unspoken beliefs and assumptions that are well intentioned. Furthermore, these three mental models, and the behaviors that are demonstrated from them, are all consistent with the literature on effective leadership practices (Northouse, 2007; Hallinger, 2003, 2005; Marks & Printy, 2003; Leithwood, Wahlstrom, Louis, & Anderson, 2010; Fullan, 2001;

Argyris, 2002, 2008; Halverson, Grigg, Prichett, &Thomas, 2006). As Principal A enacts her mental models, the observed behaviors involving goal setting and adoption, relationship building, knowledge creation and sharing, and reflection are ones in which the aforementioned authors have indentified and defined in various ways as practices associated with effective leadership at its most basic and superficial level. Based on the evidence examined, Principal A's well-intentioned mental models would appear to have the initial capacity to propel her organization towards the desired level of change or improvement. However, Principal A's mental models are not enough, alone, to create the desired level of change and are influenced further by the intersection of Principal A's level of leader self-efficacy.

Individual Leader Element: Leader Self-Efficacy

Machida and Schaubroeck (2011) assert that leader self-efficacy is defined as a principal's beliefs in her abilities, skills, and knowledge level to lead others effectively. The authors add that the level of the leader's own beliefs in self-efficacy influence the extent to which the leader is able to achieve organizational improvement as well as developing personally as a professional (ibid). An examination of her responses during several interviews provide evidence that Principal A possesses a high level of self-efficacy in her capacity to do well, especially in her new role as principal. There are many experiences Principal A shared that speak to the level of confidence she has in her ability to do well in a specific role or on a specific task despite any obstacles she may encounter. Principal A, a former Mathematics teacher, shared her experience in high school when trying to take more advanced math courses after moving to a town in Northern California:

> I ended up getting to high school really far ahead in math because I had to take classes at the community college since they did not offer any of the kinds of math that I needed at the high school level. (Principal A, personal communication, October 27, 2011)

Principal A taking advanced math courses at the college level while still in high school would eventually lead her to pursue a preliminary double major in Mathematics and Dance at a public state school in California. While she took a year from school to pursue a dancing opportunity with Sesame Street Live, she returned to the school where she was studying, dropped the dance major and focused on finishing her Bachelor's in Mathematics. When it came to deciding to pursue a career in teaching and education, Principal A recalls

> I knew that I loved math and I knew I could teach dance really well so I was like 'oh I'm sure I can be a teacher. (Principal A, personal communication, October 27, 2011)

Given the experiences Principal A had in teaching dance and her feelings of confidence in being able to teach dance and, in her opinion, teach it well, she definitely possessed a high level of self-efficacy in being able to teach. Such high levels of confidence and conviction in her ability to do well stem from past experiences of success she has had that lead her to think and believe that if she was successful in a previous circumstance, then she can expect to do well in the next endeavor. Such thoughts about her ability to do well are also evident in her decision to enter school administration given the experiences she had at a former site:

> It was one of those schools that you would say was "dysfunctional"…. I felt very frustrated there and I was the department chair there, but I just felt like stifled because the leader that was running that school was not good; [they] didn't know some of the things about a charter school. It was like they just took someone from the district office and it was like crumbling. And then I thought, "I can do way better than her. I can do much better than her. I think I should just get my admin credential." At the time, I was struggling with the decision of "Am I going to get

> my pure Ph.D. in Math or do admin credential?" (Principal A, personal communication, October 27, 2011)

Principal A deciding to enter administration seemed to derive from the experience of having a model leader whose practices and ideas were different than her own. As a result, if Principal A observes an area where she believes she can do better, then she finds a way to do so.

Principal A has had various experiences where her ability or level of competency to fulfill a certain role has been questioned. The first significant experience comes from her undergraduate and graduate work in Mathematics:

> Did I ever fit in there? Noooo. I got asked to leave a class the first day because I didn't "*look*" like I was supposed to be in Abstract Algebra… I mean I'm used it. It was really bad in my Master's program too. A professor once asked if I was a [exotic dancer]. My own professor! "No. Actually I teach at this university. You know. The same one you teach at?" It was funny. I'm not like one of those people who says "Oh they don't think I'm this…" where I let it affect me. I'm like "whatever. I'll show you." This isn't something that is new to me nor is it something that I allow to define me. (Principal A, personal communication, October 27, 2011)

Principal A is still questioned about her ability to lead after having entered her new role as Principal at Crystal Castle Academy. Having started her first year in her doctoral program at a highly reputable university in Southern California, Principal A says she has been facing a lot of questioning by her colleagues and her colleagues at her own district:

> I deal with it every day. Every day. It's gotten better. When I met with the teachers at the beginning of the year they were like "oh what do you teach?" And I would respond, "No. Actually, I'm your boss."… I deal with this in my cohort where they judge me in saying things like "just cause at Charter schools they can hire whomever they want."… I deal with it when I go to the district too. At BTSA meetings, all the principals are saying things like "Really? You look a little *young*." And I respond with things like, "Thanks for the compliment. I'm not that young." I deal with it every day…. If I was ten years older and I met people and told them what my position way, I don't think they're reaction would be like "*you*??" (Principal A, personal communication, October 27, 2011)

Principal A has faced a great deal of doubt and disbelief at the fact that she is principal. However, the comments of past professors, former and current colleagues, and fellow administrators, did not impact her own confidence in her ability to succeed in her role as Principal. Thus, her level of leader self-efficacy is high as seen in her actions of persistence and remaining determined to do succeed in her role as principal. Her self-efficacy acts as a barrier of protection from those who doubt her abilities and she finds strength in her beliefs about her capacity to lead.

Leader self-efficacy, according to Machida and Schaubroeck (2011), is key to understanding the ways in which a leader cultivates her leadership practice. The authors asserted that an individual's level of leader self-efficacy influences the extent to which a leader is effective in organizational improvement and their personal professional development. Furthermore, much of Principal A's level of leader self-efficacy derives from what Machida and Schaubroeck argue is preparatory self-efficacy, which refers to the belief in one's ability to learn the required skills necessary to perform the tasks associated with the leadership position. Much of what Principal A discussed about her beliefs in her ability to lead were reinforced from the administrative credential program through which she acquired the skills she believed would be useful to her to enact her leadership.

Hannah, Avolio, Luthans, and Harms (2008) also proposed that higher levels of leader self-efficacy translated into higher levels of leader emergence and performance. While the data examined did show Principal A's higher levels of leader self-efficacy and how such levels influence the extent to which Principal A believes in her capacity to succeed in her role as Principal, her ability to develop as a leader and improve her

performance is limited to other constraints, contrary to what Machida and Schaubroeck (2011) and Hannah et al. (2008) theorize. As it turns out, the relationship between leader self-efficacy and levels of performance and improvement is not as linear as the authors have postulated.

Individual Leader Element: Immunities to Change

As Helsing, Howell, Kegan, and Lahey (2008) argue, individuals possess "underlying barriers that prevent an individual from making progress toward a desire professional goal" (p. 411). These underlying barriers are what Helsing et al. (2008) refer to as "immunities to change" (ibid). In order to alleviate one's immunities to change, Helsing et al. (2008) suggest that the individual work to solve "adaptive problems" versus "technical problems" (Helsing, Howell, Kegan, & Lahey, 2008, p. 438). The authors define "technical problems" as ones in which an individual can implement tactics and procedures that will lead to externally driven results that are outside of the individual (ibid). "Adaptive problems" are ones in which the individual often makes "fundamental changes to their values, beliefs, habits, ways of working or ways of life" (Helsing et al., 2008, p. 438). "Adaptive problems" are more challenging to identify and solve, as opposed to "technical problems," because they require the individual to look deep within themselves and identify ways to change the internal constructs and behaviors that are preventing them from achieving an espoused goal (Helsing et al., 2008). Similar to Senge's (2006) work on mental models, these hidden assumptions must be raised to the level of one's conscious mind in order to create the level of cognitive dissonance needed to understand how the barrier prevents an individual from improving and subsequently

looking for the appropriate strategies necessary to mitigate these barriers in an effort to achieve desired change.

An examination of the data for Principal A at Crystal Castle Academy revealed that while she has well-intentioned mental models and though her level of leader self-efficacy is high, her ability to enact the desire level of change in addition to improving within her own leadership practice is limited by the levels of her own immunities to change, which she may not be fully conscious of as Hannah et al. (2008) assert. Analysis of the data set revealed two prominent immunities to change exhibited by Principal A: 1) Principal A's level of reflection is more technical than adaptive and 2) Principal A's level of self-efficacy is contrary to what she espouses.

Immunity to Change: Principal A's Level of Reflection is More Technical than Adaptive

One of Principal A's immunities involves her process for problem solving. Principal A spoke to the importance of having sources of support and mentorships to help her develop as a leader as well as to help her solve problems of practice (personal communication, October 27, 2011). During our conversation, she reflected on the different experiences she had where she went from having no support in her previous roles to a great deal of support in her present role as principal:

> When I first moved down here I didn't have anybody. I had people I looked to for math content knowledge when I was getting my master's like my professors and such but I did not have an instructional mentor. At all. That's a bad thing about charter schools is that it's not provided to you within the structure of the organization. Usually. You usually have to find it. So when I entered my admin program, I met Paul Estevez; he was the first person that I was like "oh my god! Yes! You are inspiring! I want to be like you!" And then when I was in the program, I wasn't getting it professionally at work but I was in school with the CEO of another organization and I had Paul and I was with all these power charter people. I felt like I could really look to them when I needed guidance for any question I had professionally as well as personally. Things like how do you deal with being a charter leader – it's very hard. It's tiring. It's hard. But, then I

> came here. This is the first time in my entire career that I actually have mentors that are embedded in the actual organization. One of them, his name is Edward Donaldson. He was the principal here for like three years. He was the one that really developed the school into what it was and he – I think he's like the director of teachers at [private university]. So it's like – he was here. He created it. He knows it. So he's like a mentor to me and I talk to him. He's helping me with this "Teaching the Road to Mastery" thing. So teachers are getting observed by me, by Edward, and also Brenda Norris. She is the Principal Emeritus. She was the first principal of this school back when it started with seven kids. (Principal A, personal communication, October 27, 2011)

Principal A appeared excited at the opportunity of having several individuals whom could act as mentors. The ways in which she described how her mentors help her align to what Helsing et al. (2008) refer to as solving "technical problems" rather than "adaptive problems" as is illustrated when she shares that one of her current mentors helped her as she worked to implement her "Teaching the Road to Mastery" program. Because she focuses on acquiring strategies to solve a given problem and does not always internally reflect on the internal constructs – or "adaptive problems" – preventing her from achieving her espoused goals, she consequently focuses on the externally directed solutions rather than those that are internally directed. As a result, Principal A demonstrates an inability to recognize or ask for the supports she truly needs. This was especially evident during an observation in which Principal A met with Brenda Norris and the Executive Director of Crystal Castle Academy.

During this meeting, Principal A, the Executive Director of Crystal Castle Academy, and Brenda Norris sat down to discuss operational issues involving campus activities, student progress, instructional issues, and teacher induction with BTSA. Two interesting conversations took place during this meeting. The first involved Principal A's current level of capacity and her potential for "burn out,"

> Principal talks about how there was a lot of resistance from students initially during her first few weeks as principal. Ms. C talks about how kids are now wanting to meet with Principal A and are becoming more open to sharing issues about other students, other teachers, personal issues. Executive Director says they'll talk about it more during the retreat since they'll have more time to talk. Executive Director tells Principal A, "I'm saying that from a place of not-burning you out and how to figure out the climate change within the school" to which Principal A replies, "it's not a bad thing. It's good." Students say she's "awesome" and they're feeling like they can come talk to her more but that it's a lot of face time. Executive Director says, "So the open door, not that you have an open door, but the open door is wearing out."
>
> Principal says, "Well… it's not really wearing me out. There are legitimate issues that I need to know about like 30 students coming together and advocating that they're not getting what they need. Not in a malicious way. But saying that they need more from their teacher. Things like that I want to be involved in. But right now it's like a give and take where I look at my schedule. It's a color of the rainbow. Right now I'm not able to see every teacher or be in the classrooms. We're going through the cycles that we've been talking about with the teacher observations."
>
> Principal talks about how grateful she is that Edward and Brenda are there to help with them. Principal says, "it's not like I can't handle it. But there's a lot of like face time." Executive Director says, "There's more than just you. And we need to talk. Your capacity is high but your capacity to gauge your ability is also low because you seem to be able to handle more than most people. I'm saying that in the nicest way possible."

During this conversation, it is clear that the Executive Director is trying to offer some feedback to Principal A regarding Principal A's ability, or lack thereof, to gauge her threshold for how much she is able to take on at a given moment. At the beginning of this meeting, Principal A repeats that she feels "fine" and that she is "doing fine" (personal communication, November 17, 2011). Here, Principal A's immunity to change is evident in that she either is not conscious of or does not want to recognize that there is a limit to what she is able to handle all by herself.

Her inability to reflect on what is an "adaptive problem," as demonstrated by the Executive Director advising Principal A that she needs to learn to gauge her capacity in

what she is able to handle, is also leading to her inability to recognize that the Executive Director is offering constructive feedback on how Principal A is coping in her new role as principal. The Executive Director offers to talk with Principal A about this in more detail during their scheduled leadership retreat, but it cannot be determined whether or not Principal A will take heed of the advice the Executive Director may have to offer. Therefore, Principal A's receptivity to the feedback she is offered from her mentors influences the extent to which Principal A is able to engage in true reflection of her practice and identify the necessary and appropriate measures to develop and improve upon her own leadership.

Immunity to Change: Principal A's Level of Self-Efficacy is Contrary to What She Espouses

The previous example offered also lends itself to Principal A's second immunity to change involving her level of leader self-efficacy and the revelation that it is contrary to what she espoused. During the meeting between Principal A, the Executive Director, and Brenda Norris, Principal A made certain comments such as "it's not really wearing me out," "I'm fine," and "it's not like I can't handle it" (personal communication, November 17, 2011). These comments demonstrate Principal A's desire to demonstrate strength because in making statements such as "I'm fine," she is trying to show everyone that she is capable of handling everything that is directed her way and that she does not require much help. This outward perception of "I can handle it" thereby creates a false sense of high self-efficacy (her perceived high level of self-efficacy was identified and discussed earlier in this chapter) because while the outward perception points to

confidence, it is clear that Principal A believes that she cannot and must not demonstrate weakness:

> This may not be a good mindset but my mindset is like "I only have one shot to be the principal here for the first year." I want to do as much as I possibly can and fill in as many holes as I possibly can 'cause I don't want to lose any time. And maybe that's not smart of me. Maybe I should have been like "maybe I want to focus on just two things this year." That's probably better… There's a lot of pressure particularly right now because it's my first year that I don't want to run the risk of something bad happening. I want to over exert myself and make sure that I do everything in my power to not let it happen. I think I'll relax a little bit after my first year. (Principal A, personal communication, December 5, 2011)

Principal A's comments above suggest that all eyes are on her and what she is able to do or not able to do in her first year as principal. Therefore, Principal A believes that she must work exceedingly hard and not appear to show any sign of weakness for fear that she will "lose time" or not be able to "fill in as many holes." Consequently, Principal A's desire to not show weakness will inevitably limit her ability to ask for help when she really needs it.

The interesting thing about Principal A's comments is that there appears to be some recognition of behaviors that she is currently engaging in that she thinks are not entirely good for her leadership performance, but she is going to continue employing such behaviors in an effort to do as well as she can in her first year as principal and then "relax" after the first year is done. However, considering that, from the data set, Principal A has always employed an exceedingly strong work ethic, along with a constant feeling that she is "never satisfied" (personal communication, December 5, 2011) this idea of trying to "relax" after her first year seems like a distant dream because Principal A will always find something to strive for. The problem is that if her external supports like her mentors and Executive Director are trying to warn Principal A about her potential for

burn out and Principal A is not heeding the warning signs, the consequences are worrisome for all those who are under her leadership.

Each of Principal A's immunities to change - 1) Principal A's level of reflection is more technical than adaptive and 2) Principal A's level of self-efficacy is contrary to what she espouses – is also seen within the intersection of her mental models and the behaviors and practices she employs to enact her style of leadership. As a result, the behaviors and practices Principal A employs play themselves out in way she leads her faculty. For example, her focus on solving "technical problems" is evident in the externally directed questions she poses to her staff where she asks questions focusing on results or elements that are outside of the individual faculty members rather than asking questions targeting "adaptive problems" which are more internally constructed and driven. Additionally, Principal A's unwillingness to be vulnerable to show weakness lends itself to the extreme ways Principal A tries to show she is efficacious as she presents a front of being "fine" and her inability to recognize and heed constructive feedback offered to her. The intersection of Principal A's perceived levels of her mental models, her perceived levels of leader self-efficacy – coupled with her immunities to change – impact the extent to which she is able to think creatively in her leadership.

Individual Leader Element: Leader Creativity

Sternberg (2007) defined creativity as having the "skills and dispositions for generating ideas and products that are: a) relatively novel, b) high in quality, and c) appropriate for the task at hand" (p. 34). With respect to leadership, creativity is important as it enables the principal to generate the ideas that her faculty will eventually follow. Sternberg (2007) also cautions that a leader who lacks creativity may be able to

get her members to go along with her ideas but the ideas that her members subscribe to may be mediocre or antiquated ideas (ibid). This implies that the extent to which a principal is creative in her leadership is reflected in the mental constructs and beliefs she possesses about the ways she thinks about, engages in, and enacts her leadership. Therefore, leader creativity can be thought of as working in confluence with a principal's own mental models, her level of leader self-efficacy and the mediating factor of her immunities to change.

An examination of the data set revealed two points. First, Principal A exhibits low levels of creativity and tends to implement traditional leadership practices. Second, Principal A, from the surface, exhibits a style of creative leadership that Sternberg (2007) defines as "Re-initiation" whereby she is attempting to move her organization forward towards a performance level that her faculty had not previously pursued. When asked about what it meant to be creative in her leadership, Principal A responded:

> I think you have to be creative here. I think you have to be more creative here in a charter school because there aren't things mandated – well I mean there are some things mandated like NCLB; there are certain things you have to do. But the difference is the way you get to the non-negotiable is completely up to us – as long as we're compliant and acting in the best interest of the students. I think creativity is best when you utilize different stakeholders' abilities most effectively… I guess I just don't use the word creative. I think you have to be crafty. When you have limited resources you have to be crafty because if you don't find a way to do it it's not going to get done and has the potential to impact our students negatively. Everyone has a genuine love for the students that whatever we need to do to get it done whether it's me driving to a group home or someone that's in a transitional living program and showing up and her doorstep and making her get in the car to come school – I'll do whatever it takes. (Principal A, personal communication, October 27, 2011).

Principal A's perception of creativity is consistent with what Sternberg (2007) describes to be more problem solving than actually generating and enacting novel approaches towards achieving organizational improvement as seen in Principal A's description of

picking students up from their homes and bringing them to school to solve the problem of attendance. This is not to say that Principal A is not creative, but rather her levels of creativity are low given the various constraints she faces within her own level of leadership, which are made further complex within the confluence of her mental models, levels of leader self-efficacy and the mediating factors of her immunities to change.

Furthermore, the data revealed that when it came to creative thinking, Principal A implemented traditional problem solving approaches and leadership practices rather than taking what Sternberg (2007) referred to as sensible risks. This was evident during three different instances where Principal A was observed talking with her Director and Executive Director about supporting teachers' improvement in practice. During these conversations, Principal A was observed sharing concerns about several teachers' instructional practice and the methods she thought of to support teacher improvement involved additional observations, conferences with teachers, and offering strategies for improving classroom practice. While these are all traditional ways of acting as a support provider to her faculty (Hallinger, 2003; Quinn, 2002), it is not clear how these traditional approaches are helping Principal A achieve the goal of helping her teachers to improve their own practice.

Principal A's desire to help her organization improve is reflective of a style of creative leadership that Sternberg (2007) refers to as "Re-initiation." In this style of creative leadership, the principal attempts to move the organization in a direction that had not been previously pursued and then strives to move the organization forward from that new point. This style of creative leadership is especially applicable for Principal A as she is in her first year at Crystal Castle Academy. Principal A's vision to improve

instructional practice through the use of data was not a vision that the organization previously had especially given the high turnover rates of administration in previous years:

> We just did our first benchmark analysis… coming in blindly, I come from another [organization] where it's like "you analyze data this way and you look at data that way" and you look at the bubble kids and you look at the distracter questions you know what I mean? And I really had to take a step back because the teachers here had never really analyzed data by standard. And I was like "Whoa." I swear I learn something new everyday here. And it's nothing bad about the teachers. It's just that they have not been given that tool yet. (Principal A, personal communication, October 27, 2011)

Here, Principal A recognized that in order for her to move the organization forward in the direction she desired, she first had to give her faculty the "tools" to engage in practices that Principal A believes are required to continue progressing in the direction she wants to take the organization. Therefore, Principal A was attempting to re-initiate the organization towards adopting new behaviors and practices is consistent with the style of creative leadership offered by Sternberg (2007). Once those practice and behaviors were successfully adopted, Principal A could then direct the organization to focus on increasing performance and moving forward in organizational improvement.

In this style of creative leadership, Principal A's adopts technical solutions to solve external problems. For example, the benchmark analysis worksheet (discussed earlier) is an attempt at having her teachers look at data in ways she believed they had not looked at data before. The worksheet attempted to solicit reflections from teachers about the data and think about solutions for improving the externally derived results via improving student scores. Additionally, in the quote presented above, Principal A believes that her teachers simply need a "tool" to solve the problem of a lack of knowledge in analyzing data. Furthermore, since Principal A possesses an immunity to be

internally reflective, she does not ask the same of others and, unbeknownst to her, imparts her technical problem solving response skills onto her teachers thereby teaching them to behave similarly. Thus, the analysis of data that Principal A *thinks* she is having her faculty engage in is merely a surface level examination or just *looking* at data as opposed to doing something more internally reflective with it. As a result, the extent to which Principal A's faculty is able to improve at the level to which she desires is reflective of the extent to which Principal A is able to recognize her own needs of improvement. Principal A's surface level practices translate into surface level practices within her faculty, which in turn lead to surface level results thereby negating any real change in adaptive problems of practice.

Individual Leader Elements: Conclusion

The relationship between Principal A's mental models, her level of leader self-efficacy, leader creativity, is an increasingly complex yet relational one that is made further complicated by her own immunities to change - a finding not anticipated at the conception of the framework utilized for the purpose of this study. Furthermore, the intersection of these individual leader elements leads Principal A to adopt and implement leadership practices that, at the surface, are consistently demonstrating the mental models she initially possesses.

Leadership Practices

As initially postulated in my Conceptual Framework, the intersection of a principal's own mental models, level of leader self-efficacy, and leader creativity were thought to serve as the foundational catalyst in influencing a principal towards a set of leadership practices. While the findings presented in an earlier section also add the

element of a principal's immunities to change, the data set revealed that the leadership practices employed by the principal is derived from the underlying constructs and beliefs she possesses. In the case of Crystal Castle Academy and its principal, Principal A, the confluence of all four elements influence the extent to which Principal A's engages predominantly in the follow two leadership practices: promoting and fostering a culture of inquiry and building and maintaining organizational relationships.

Leadership Practice: Promoting and Fostering a Culture of Inquiry

Argyris' (2002) work on *single-loop learning* and *double-loop learning* focuses on the argument that individuals need to look within themselves and reflect on their own behavioral practices that may be contributing to the issues prohibiting the organization's improvement process. In order for a leader to be considered effective in facilitating and monitoring organizational change, she must be able to engage her members in *double-loop learning*, which Argyris (2002) defined as the practice when "errors are corrected by changing the governing values and then the actions," (Argyris, 2002, p. 206). There is a process of reflection that begins with the leader and organizational members diagnosing a particular problem from the presentation of various data brought forth by the leadership (ibid.). The organization works to devise a solution to address the identified issue and begins to implement the solution (ibid.). Once the solution has been implemented, the organization evaluates the effectiveness of the implementation of the solution and designs appropriate courses of action aimed at changing the underlying practices and beliefs of the organization and organizational members (Argyris, 2008). It is through the cyclical process of identifying the problem, devising a solution, implementing the devised solution and evaluating the solution's effectiveness that the leader is able to engage the

organization in continuous reflection – or a culture of inquiry (Argyris, 2008). The leader's ability to foster and develop a culture of inquiry through the practice of double-loop learning (Argyris, 2002) allows the leader to facilitate and monitor change within the organization's beliefs and values and the resulting change in organizational practice.

However, when a leader is not effective in fostering a culture of inquiry within her organization, she runs the risk of the organization persisting in a state of *single-loop learning*, which Argyris (2002) states occurs "when errors are corrected without altering the underlying governing values" (p. 206). During single-loop learning, the individual tends to avoid reflecting on himself when addressing organizational issues and will resort to blaming other organizational members or individuals for the reasons as to why he was unable to perform a certain task well (Argyris, 2002). The individual may correct actions or behaviors as recommended by the leadership, but does not change his own underlying or inner beliefs thereby allowing the corrected action to be merely superficial in nature and one that will not be made a more permanent part of the individual's inherent practices (Argyris, 2002). Most of Argyris' (2008) theory behind single-loop versus double-loop learning resides with the individual's cognitive process of reflection. However, in an organizational context, individuals who engage in single-loop learning as a collective can prevent the organization from moving forward.

In the case of Crystal Castle Academy, the data revealed Principal A espoused a deep desire to "create a culture of inquiry" (personal communication, October 27, 2011). For Principal A, this meant having teachers and staff use and analyze various forms of student achievement data:

> We're looking at all of the data standard by standard – using Data Director of course – ad then identifying standards of concern, percentage of mastery, what are they going to put into action for it. And also looking at bubble students and asking "who are our bubble students?" This way we can make sure in every single one of our classes we know who they are and how we can try to help them – not only focus on them, but it's good to know. (Principal A, personal communication, October 27, 2011)

Principal A presents a belief that a culture of inquiry focuses heavily on outcome data from student scores and other types of quantitative data. Principal A instructing her teachers on how to look at data in ways that they were not previously familiar with is evident of an attempt at changing the underlying values and actions as suggested by Argyris (2002).

At the surface, Principal A's behaviors and activities she is engaging in with her faculty demonstrate the beginnings of the *double-loop learning* process. This was evident during a professional development meeting where teachers met within their departments to look at data from observations they conducted within their departments. The questions Principal A asked her faculty to reflect upon with their groups included:

> Questions on board for teachers to answer in groups: 1. What was the most interesting/impressive/exciting thing you saw? 2) What was one technique/lesson that you saw that you would like to use? 3) What is one way that the teacher you observed is similar to you? 4) What is one way that the teacher you observed is different from you? 5) What was one item or area you have a question about regarding your partner's teaching? 7) What do you appreciate most about your partner's teaching? Teachers are to spend approximately 10 minutes discussing then will share out as a whole group. (Professional Development Observation, personal communication, December 8, 2011)

While there are questions that Principal A offers to her teachers to get them to begin a process of reflection, the level of questioning focuses only on external and superficial responses rather than delving deeper into examining the teacher's instructional practice. Similar to the types of questions presented in Principal A's Benchmark Analysis

worksheet (see Table I), the level of questioning demonstrates Principal A's limitation in promoting and fostering a culture of inquiry as demonstrated by the generic level of questioning she presents to her faculty on more than one occasion. Yet, the questions in the reflection section of the worksheets are limited in the level of inquiry that represents true reflection of practice.

Much of what Principal A asked of her teachers in this document reflects a traditional approach in examining external data or looking at the "results" and engage in some form of discussion pertaining to the results. Such conversations are consistent with the types of "Data Drive Decision Making" that was discussed in Halverson, Grigg, Prichett, and Thomas (2006) whereby much of the focus is placed on collecting, interpreting and reflecting on data to inform decision making. However, asking questions where the focus is only on what the teacher observed in the peer observations and asking questions where answers can be written in few words leaves little room for true "double-loop learning" as argued by Argyris (2002, 2008). Rather, the cycle of double-loop learning becomes much more superficial to focus on the external data only and not looking at the internal practices that are delivering the results examined. The consequence of failing to engage in true *double-loop learning* is that Principal A and her faculty will continue to practice surface level examination of data and will be unable to achieve the internal level of reflection that leads to changing the governing and underlying behavior Argryis (2002, 2008) asserts as necessary towards achieving improvement.

While the level of questioning provides a start for the kind of dialogue Principal A wants to engage in with her faculty, the level of experience she has in being a principal

and an instructional leader limit her level of questioning. The gap in knowledge and skill set is something that could and should be addressed by the external supports and mentorships Principal A has started to build. However, if Principal A is not aware of this gap in knowledge, if her sources of support are not sufficient in providing Principal A with the appropriate and necessary tools she needs to close this knowledge gap, and if the principal is failing to recognize the need for these supports given her own immunities to change, Principal A will continue to employ the level of questioning she is currently using with her faculty, thereby creating a point of stagnation. This is not to say that improvement is not taking place; improvement has been made in opening the faculty's eyes about simply looking at the student achievement data, but that growth will be short-lived or will plateau if Principal A is not looking for additional strategies to take her faculty to the next level in their cycle of inquiry.

Leadership Practice: Building and Maintaining Organizational Relationships

Fullan (2001) asserts a leader must be aware of the importance of building organizational relationships and that relationships are essential in working towards organizational change. Building and maintaining organizational relationships is done through establishing the human connections, which are prevalent within organizations (Fullan, 2001). Human to human interaction, especially within a school, is an act that takes place daily and, therefore, calls for special attention from the leader to ensure that relationships are built and maintained within the organization in order to work towards achieving desired performance goals (Fullan, 2001; Northouse, 2007). A consequential formation of relationships include *in-group* and *out-group* relationships as described in Northouse's (2007) Leader-Member Exchange Theory (LMX).

According to LMX, the focus is placed on the interactions between the leader and the members. LMX asserts that in relationship building there are typically two groups: the *in-group* and the *out-group* (Northouse, 2007). The *in-group* typically refers to the types of relationships between leader and member that are "expanded and negotiated role responsibilities (extra roles)" (Northouse, 2007, p. 152). These responsibilities that are negotiated between the leader and the member are not typically found to be contractual agreements between the two parties but are supplemental duties that may be delegated by the leader depending on the relationship formed (ibid.). Individuals found to be in the *out-group* are individuals whose relationship with the leader solely consists of "defined roles" as outlined in their "formal employment contract" (Northouse, 2007, p. 152).

Within these two groupings, a leader has the opportunity to build relationships with individuals that are enriching (particularly in the *in-group*) and serve the interests of the organization (Northouse, 2007). On the other hand, a member identifying herself in the *out-group* may not feel wholly part of the organization, which opens up criticism for the level of fairness associated with the manner of relationship building by identifying or categorizing members in an in-group or out-group (ibid.). Northouse's (2007) discussion of the LMX Theory serves to reveal not only the importance but also the potential consequences associated with varying levels of the leader's relationship building capacity.

When it comes to building organizational relationships, Principal A explicitly states that she believes they are important (personal communication, October 27, 2011). Principal A discussed one of the first activities she had her faculty engage in during her first few weeks as principal:

> So the first thing I did was give the teacher aspects of the school's instruction, discipline, culture, community, plus change. And then I gave them a homework assignment where I asked teachers to reflect, "What are some things that are working here? What are some things you could change?" All of these different aspects of the school. So before they really knew me the first thing they learned about me was that I was like "I'm asking you. Tell me what you love. Tell me what you would change. What are your strengths? What support do you need?" So I'm getting information from them. They turned it all into me. I analyzed it, percentified it, and looked for common things. I was asking a lot of questions as the beginning. Also the first two weeks of school I saw down with every single teacher during their prep period individually and asked, "Talk to me about where you're at, personally, professionally. What do you struggle with most in your classroom? What are your short-term goals? What are your long term goals?" It was tiring. But I had it all written. I then had a whole group discussion where I was not telling them what I wanted to do but just really asking them questions and learning about them – not just in a fake way – but genuinely learning about them. And that helped. Also, something I do everyday is I go to classrooms after school. Not every single one. About two classrooms. I'll ask the teacher I'm visiting, "How are you today?" I'll check in with them and ask how their day is going. It's important for me to get to know them. (Principal A, personal communication, October 27, 2011)

Principal A does care about her faculty and exhibits an interest in making sure she gets to know her faculty members. Since this is her first year as principal, it was important for her to understand the needs of her faculty and organization. Last year, Crystal Castle Academy underwent drastic changes in leadership after the principal who started the year left the position after a month only to be replaced by another individual who did not appear to be a good fit for the school (Principal A, personal communication, October 27, 2011). As a result, the teachers, students, and parents worked to run the school as best they could despite the lack of leadership. Once Principal A assumed the role, it was important to her that she works to assuage the concerns of her stakeholders (personal communication, October 27, 2011).

Principal A's ability to build relationships was evident during an observation of a professional development session in which the teachers were asked to provide formative

feedback for the principal. This meeting, described earlier in this chapter, served as a reflection tool for Principal A where she could gather data based on the teachers' perceptions of her performance. Faculty responses during this meeting were highly positive with teachers saying that Principal A makes them feel "cared about," "important," "listened to," and "supported" (personal communication, December 8, 2011). Teachers also spoke to feeling as though they are learning from Principal A, especially with "learning to look at the data" (personal communication, December 8, 2011). Much of the conversation focused on how teachers were now learning the importance of looking at the data and how they now feel more comfortable approaching Principal A with concerns or questions they have. The teachers' perceptions of Principal A's performance and the relationship they feel they have with her illustrated the principal's ability to build and maintain organizational relationships as theorized in Fullan (2001) and Northouse (2007).

Leadership Practices: Conclusion

The data presented demonstrate the finding that the leadership practices employed by Principal A are derived from the underlying constructs and beliefs she possesses. These underlying constructs and beliefs are the result of the intersection of the principal's own mental models, level of leader self-efficacy, and leader creativity that influence Principal A towards a set of leadership practices. Furthermore, both Principal A's individual leader elements and the extent to which the leadership practices involving *promoting and fostering a culture of inquiry* and *building and maintaining organizational relationships* are implemented are mediated by the principal's immunities to change. Though focus has been placed on the individual constraints within Principal A's

emerging leadership capacity, it is also important to examine some of the external constraints keeping Principal A from achieving her desired level of organizational and leadership performance.

External Constraints

An examination of the data revealed an unanticipated finding of the external constraints that served as impediments in Principal A's ability to enact her desire to lead instructionally. An example of how challenging it was for Principal A to do the things associated with instructional leadership can be seen in the day to day responsibilities and issues Principal A needed to address. Principal A was observed to be a definite presence on campus. Each day I visited, I saw students greet her in the halls and Principal A also greeted students by name - even reminding a student he needed to serve detention with her later that day. Upon beginning my visits at Crystal Castle Academy, Principal A initially stated that she wanted to work on developing and implementing professional development and conduct classroom visits and observations all in an effort to meet her goals for improving instructional practice. This was evident when she said, "I'm in the classroom everyday. 90 minutes. It's something I think is so critical it's blocked off in my calendar. Every single day; it's my sacred time" (personal communication, October 27, 2011).

Principal A's commitment to block of time to conduct classroom observations as "sacred time" demonstrates her initial desire to be an instructional leader. It is evident that Principal A believed being in the classroom was important in her role to support her teachers and their practice. At the beginning of the study, Principal A shared many ideas

for improving the school's instructional program and devising ways to support the learning needs of her students. However, by the time we conducted our final interview:

> I thought that I would be able to immediately focus on instruction from the get go… I want to spend an hour and a half in the classroom. But I find myself, particularly in the last three to four weeks, getting sucked into the vortex of having to deal with issues because if I – I gotta deal with them you know? Parents, drugs, attendance contracts, kinds of things that an Assistant Principal would absolutely fill that role. But since we don't have one I have to do all that – which means it's pulling me away from the classroom. (Principal A, personal communication, December 5, 2011)

Principal A understands that in order to lead instructionally, she needs to conduct frequent visits and classroom observations in order to determine how to best support the improvement of her teachers' instructional practice. However, the fact that Principal A is the sole administrator for the school presents a significant challenge in her ability to devote the extensive amount of time require of instructional leadership as discussed by Hallinger (2003) and Quinn (2002). The various other issues that Principal A has to attend to serve as external constraints that keep her from enacting her style of instructional leadership. Therefore, while Principal A has the deepest desire to be an instructional leader, her ability to fully enact this style of leadership is limited by the myriad of other responsibilities she must meet as principal of Crystal Castle Academy.

Conclusion: Organizational Outcome

In sum, Principal A's leadership practices are a byproduct of her intersecting levels of high leader self-efficacy and well-intentioned mental models, which are mediated by her own immunities to change. The interactions of these elements lead Principal A towards more traditional pathways in leadership practices while executing a low level of leader creativity. Though her organization is seeing mild improvements in the level of their own professional practice, these improvements are superficial at best

and, if Principal A is not cognizant of her own current limitations in her present level of leadership, the organization will begin to reach a plateau in their performance thereby delaying the progress towards reaching the desired organizational change or outcome Principal A is seeking.

Case Study 2: Principal B - Elysian Fields High School

Elysian Fields High School (EFHS) is located in a primarily residential area within Morcheeba Unified School District, the same district where Crystal Castle Academy is located. The school looks incredibly polished with manicured lawns, various sports fields for football and baseball games, and large murals of the school mascot decorating various building walls around campus. Upon driving up the entrance driveway of the school, signs point in the direction of the administrative office which is nestled in a U-shape building containing offices for the Guidance department, the College and Career Centers, and various classrooms.

Walking into the administration office, a visitor is typically greeted by the front office receptionist and asked to sign in for a visitor badge. The walls of the administrative office are decorated with photographs of student athletes, marching band performances, and other student events. A large glass case showcasing trophies won and other accolades is seen to the left upon immediately entering the office. Leather couches and chairs are placed within the office entrance and allow for a place to wait if meeting with the principal or other staff. The Principal’s office is tucked away in a corner not readily visible upon entering the administrative office. The conference room where the Principal hosts a plethora of planning meetings is adjacent to her office and has an adjoining door connecting her office to the conference room.

Elysian Fields High School is comprised of approximately 2,400 students with approximately 85% of the student population consisting of Hispanic/Latino students. At least 75% of the student population is identified as socio-economically disadvantaged; approximately 35% of the student population is identified as English Language Learners; and approximately 1% of the student population is identified as students with disabilities. The school's API for 2010-11 academic year was 811 and their similar schools rank is 10 while their statewide rank is 8. EFHS is a district school that has an open enrollment "school of choice" model that defers enrollment to students residing within the community, but does require an application to enroll. Any remaining spots left for enrollment are then subject to a lottery where any student can apply to enter the lottery and, if selected, earns a spot for the following year.

EFHS has a large decision making body known as the Instructional Leadership Team (ILT). This team consists of Principal B, four Assistant Principals (Curriculum and Instruction, Activities, Student Services, and Guidance), a Lead Counselor, Athletic Director and Course Leads from each department. There are a total of 20 Course Leads in the following areas: 1 for Special Education, 4 for English Language Arts, 2 for Math, 3 for Social Studies, 2 for Science, 2 for Physical Education, 3 for Visual and Performing Arts, and 3 for Foreign Language (personal communication, October 27, 2011). The Course Leads concept is new to the ILT model, replacing the role of Department Chairs. In doing so, Principal B believed that the creation of Course Leads provided a structure where leadership is shared and more voices could be included at the decision making table. According to Principal B, the makeup for the Course Lead structure was simply on the basis of the number of faculty who applied for the role. Essentially, Principal B

"wanted to take as many people as [had] applied" (personal communication, October 27, 2011).

Research Question #1: To what extent does a principal's own mental models, level of self-efficacy, creative thinking, and her own immunities to change, enable the principal to enact her style and practice of leadership towards promoting organizational improvement?

An examination of the data collected revealed that when it comes to the relationship between a principal's leadership and organizational change, high levels of leader self-efficacy and well-intentioned mental models are not enough to influence practices associated with organizational change when these two elements intersect with a principal's immunities to change along with some external constraints. This, as a result, leads to low levels of creative thinking with the principal ultimately enacting traditional approaches in conducting professional development and practicing leadership.

Individual Leader Elements: Mental Models, Leader Self-Efficacy, Immunities to Change, and Leader Creativity

Individual Leader Element: Mental Models

As described in Case Study 1, mental models comprise of the unconscious mental constructs and assumptions individuals possess (Senge, 2006). Though not explicitly espoused, these unconscious beliefs and assumptions are demonstrated in the behaviors and actions living within the individual's own professional practice. An examination of the data set for Principal B revealed two prominent mental models in relation to her perception of her role in leadership: 1) *the principal is not personally responsible for*

building capacity in others and 2) *structural organizational change yields instructional improvement.*

Mental Model 1: The Principal is Not Personally Responsible for Building Capacity in Others

Elmore (2000) defines the style of distributed leadership as one in which the leader, or principal, creates and delegates multiple roles and responsibilities for various organizational members. Leadership, as a result, resides within the collective group with the principal guiding and supporting organizational members as they enact their roles within the distributed leadership structure (Elmore, 2000; Spillane, Halverson & Diamond, 2004; Timperley, 2005). Practices associated with distributed leadership involve the principal delegating or disseminating leadership roles among her administration and faculty, building and maintaining trust with her members, and becoming personally involved in various activities such as professional development (Timperley, 2005; Elmore, 2000; Spillane, Halverson & Diamond, 2004).

The data revealed Principal B possesses a mental model in which it is believed that leadership involves distribution of tasks rather than distribution of leadership. Evidence of this mental model is reflected in a PowerPoint presentation she created to introduce the Instructional Leadership Team (ILT) model to her team. In this document, Principal B described the goals and outlined responsibilities of the individual Course Leads which included the following: “facilitating monthly department meetings, representing department at district meetings, determining technology needs for department, assessing instructional material needs, preparing minutes of department

meetings, communicating ILT information to department members, and overseeing CST/CAHSEE success plans" (personal communication, December 12, 2011).

In the description of Course Lead responsibilities, Principal B's language denotes the delegating of tasks as she lists the various responsibilities her Course Leads will assume. In addition, while the slides also describe that administration will support teachers in "ongoing development of teacher-leaders who will provide instructional leadership campus wide" (personal communication, December 12, 2011), it is not explicitly stated what types of support will be offered, how the support will be given, or what type of professional development in which Course Leads will participate in order to build their capacity for instructional leadership.

Observations subsequent to this PowerPoint also supplement evidence illustrating Principal B's distribution of tasks versus leadership. A Principal Shadow day afforded the opportunity to observe Principal B meet with her course leads from the Math Department. During this meeting, the Course Leads updated Principal B on student progress regarding at-risk students who were failing Algebra I. The course leads also shared their concerns for the data and Principal B asked about the common trends they observed with the students who were failing. Part of the meeting also involved the course leads discussing issues pertaining to their department and what they were planning to discuss with their members at the next department meeting. During this meeting, Principal B listened to the Course Leads share their plans and would offer clarification on questions the Course Leads had regarding course offerings and student enrollment. However, no suggestions were offered in terms of supporting the course leads in their role as leaders:

> Course leads share concerns about one of the department members who is unhappy with the ILT implementation; Principals says it's normal that there is

> some resistance; Principal says, "it's more common here than at any other school I've been to." Course lead asks if there are suggestions for dealing with the teacher; Principal laughs and says "No… I think it's important to let people vent than if they don't go to either of you; if they get it off their chest then at least they're airing it out. A person who's really helped us get through this is [______] who always says, "are you looking for a solution or do you just want to complain?" Or something like that in a much nicer way. It's really about asking people to find a solution rather than continue to be a part of the problem." AP of Instruction tells Course Leads that letting the teachers vent can be helpful and that sometimes that's all they want to do. Principal says, "teaching is so isolating… you're with kids the whole day. So having that adult contact is what keeps them sane even if it's to vent." Principal isn't really offering suggestions to the Course Leads as a means of building their own leadership capacity to find ways to work with resistant or difficult teacher. Course Leads are just expected to deal or cope with the resistant teacher on their own? (Shadow Day, personal communication, November 28, 2011)

During this meeting, it was evident that the Course Leads were enacting their task responsibilities with respect to communicating instructional and departmental needs, planning minutes and agenda for their next department meeting, and discussing issues that can be communicated back to their department members. Much of the conversation between Principal B and her Course Leads centered on just structural or procedural issues rather than capitalizing on opportunities for building leadership capacity as demonstrated in Principal B's inability to offer substantial advice to the Course leads on how to assist department members who are exhibiting some resistance. Furthermore, Principal B had a great opportunity in this example to support the development of leadership with her Course Leads for the purpose of improving their practice as teacher leaders. The fact that Principal B offered limited advice to the course leads – which was also reinforced by her Assistant Principal – illustrates limitations in the ways in which Principal B believes she is trying to "distribute and share leadership" within her organization (personal communication, October 27, 2011).

Consistent with Senge's (2006) work on mental models, Principal B's behaviors demonstrate her unconscious belief that she is not personally responsible for building capacity within others. Any capacity building that is taking place focuses on structural and procedural change versus building internal capacity in her Course Leads. By assigning her Course Leads tasks to complete, Principal B implicitly exercises her belief that Course Leads bear responsibility but the administrative team still retains authority in leadership. As a result, Principal B's conceptualization of what she defines as distributed leadership is contrary to how Elmore (2000) and Spillane, Halverson, and Diamond (2004) define this leadership style.

Mental Model 2: Structural Organizational Change Yields Improvement

Hallinger (2003) argues that for any principal to generate transformational change, she must create conditions that lead to *second-order change* as opposed to *first-order change*. According to the author, *first-order change* results from the principal seeking to influence conditions that lead to outward or directly visible changes within the organization (Hallinger, 2003). In contrast, *second-order change* consists of changes that are reflected in the transformation of organizational practice whereby the members alter the behaviors and underlying practices that are keeping them in their present state of performance. The principal must work to help individuals create personal goals and then link those to the broader goals of the organization (Hallinger, 2003) while creating a climate "in which teachers engage in continuous learning and in which they routinely share their learning with others" (Hallinger, 2003, p. 338).

An examination of the data revealed that much of the change present within Elysian Fields High School, under the leadership of Principal B, is related to *first-order*

change. Evidence of *first-order change* consists of Principal B's restructuring of the organization's leadership model through her implementation of the Instructional Leadership Team (ILT). This particular model, according to Principal B, did away with the traditional Department Chair role and replaced it with the role of Course Leads, which, as described in the document submitted by Principal B and referenced in an earlier example, is no different a role than a Department Chair. The only thing that has changed is the name of the role, but the tasks that the individual Course Lead is responsible for is still the same. The level of these tasks supports the observation that much of the changes that have taken place with respect to the leadership team are structural in nature.

Additional supplemental data from Principal B's first interview further supports the idea that changes she has implemented are more structural in nature:

> The first thing we really worked on and restructured was the use of our PLCs. We always talked about PLCs and some people even went to DuFour training when the school first opened, but a couple of years ago for the first time – so that core content teachers in the same content had common preps in order to meet during the day as often as they wanted to work on designing common assessments, conducting item analysis, and other instructional tasks – we wanted to make sure there was built in collegiality. Our teachers had complained that there wasn't enough time. Nobody's getting raises right now in this economy so the commodity is time. So we decided to build that into the day. (Principal B, personal communication, October 27, 2011).

Unbeknownst to Principal B, the above example illustrates her mental model of *structural change yields improvement* as demonstrated by her decision to build collaboration time into the school day. Implicitly, Principal B believed that affording teachers time to collaborate would lead to improvement in instructional and professional practice. This change of offering common preps illustrates a *first-order* change whereby overt structural changes are made as a means of influencing outwardly visible change (Hallinger, 2003). Though Principal B creates the conditions to foster structural change,

little is observed in the ways in which she is trying to change the underlying practices and behaviors surrounding instructional improvement. As a result, the surface-level structural changes will only yield surface-level results due to the fact that Principal B is not working to create the conditions necessary to foster second-order change.

Principal B's two prominent mental models that emerged from the data set – *the principal is not personally responsible for building capacity in others* and *structural organizational change yields instructional improvement* – are both representative of the unspoken and unconscious beliefs and assumptions she possesses. These beliefs and constructs also serve to illustrate how Principal B makes sense of her role as leader (Senge, 2006). Furthermore, Principal B's mental models, and her demonstrative behaviors, also exemplify her operational and structural style of leadership as opposed to an instructional leadership focus that was observed with Principal A. Nevertheless, Principal B's mental models are not enough, alone, to understand the relationship between her leadership and organizational change. Her level of leader self-efficacy and its intersection with her mental models allow for deeper understanding into the leadership practices Principal B employs.

Individual Leader Element: Leader Self-Efficacy

As discussed in Case Study 1, Machida and Schaubroeck (2011) define leader self-efficacy as the principal's beliefs to lead other effectively given her abilities, skills and knowledge set. It is this level of belief in her capacity to a lead that influences a principal to employ practices associated with organizational improvement (Machida & Schaubroeck, 2011). An examination of Principal B's responses during two interviews offers insight into her high level of leader self-efficacy. During the conversations I had

with Principal B, she struck me as a woman who was definitely efficacious about her ability to succeed despite any and all challenges she may have faced. Principal B first provides an example dating back to her high school experience where she discussed a conflict she had about a former English teacher:

> When I was in high school I never got along with my English teacher. And he hated me. I had him for three out of four years in school. And I know why he couldn't stand me – because I didn't do the reading. In my day we didn't have computers we had Cliffsnotes. So I'd read the Cliffsnotes and would still be able to do well on the test so he could never prove that I didn't read it… and on the last day of school I had found out that he had not submitted my letter of recommendation for [private university in the northeast] thinking that if he didn't submit it that I wouldn't get in. Well I had asked for more letters than was required. So on the last day of school he told me, "Hey [Principal's Name]. Good luck at [______]. I guess you'll need it." And I flipped my 80's hair around and said, "Well (first name of teacher), at least I'm not going to be an English teacher for the rest of my life." (Principal B, personal communication, October 27, 2011).

Principal B's reflection on her high school experience with the former English teacher speaks to the level of confidence she possessed in her ability to gain admittance to the private university she attended in the northeast. Her asking for more letters than was required hints at the fact that, on some level, she knew that her English teacher, given their slightly tumultuous relationship, would not follow through on submitting a letter of recommendation. Nevertheless, Principal B appeared very efficacious in her ability to succeed despite what others may say or think.

Principal B's level of self-efficacy is further exemplified by the manners through which she obtained her administrative credential:

> I started to take classes at [private university] in [northern California] and instead found that they had an assessment you could take for I think like $500. I think it was called the SLLA. I was bored of these classes and I signed up for the test thinking, "Well I'll just take the gamble and if I don't pass then I'm still in the program. Well I passed it and then my friends in the program were saying, "Oh I can't believe you. Now you don't have to go to class or pay for the quarters." So I got it. I got a job

> right away and moved down here where my parents live. And that's when I started being an AP. (Principal B, personal communication, October 27, 2011)

The idea that Principal B learned she could take the exam for her administrative credential versus taking courses she deemed to be "boring" provides insight into the way Principal B views setting and accomplishing personal and professional goals. Some may argue that Principal B's decision to take the exam for the administrative credential instead of finishing the coursework in her credential program indicates a desire to take the shortcuts to goal completion. For Principal B, she found the path that she needed to find to help her accomplish the desired goal she set.

Whether or not Principal B's intention for taking the exam instead of finishing the program she was enrolled in is reflective of taking short cuts, she managed to circumvent various procedures and formal structures that have been established to provide students and practitioners with the level of knowledge and competency that is needed to be the effective leader necessary to implement organizational change. As a result, it would appear that Principal B never gave herself the opportunity to get the external supports from an administrative preparatory program to influence and support her leadership development. Regardless of the fact that Principal B pursued an alternative route towards entering administration, it is concluded that her beliefs in her capacity to succeed and do well only served to influence her educational and professional choices. It is also this belief in her ability to do well that enables her to believe that the choices she makes are effective with respect to her own leadership practice.

Similar to Principal A, Principal B exhibits a high level of preparatory self-efficacy in which she believes that the skills and experiences she has acquired have

prepared to perform the necessary tasks required of her as principal (Machida & Schaubroeck, 2011). This is demonstrated as she describes her feelings upon assuming the role of principal at Elysian Fields High School:

> *Researcher: When did you assume the principalship here?*
> **Principal B**: 2008.
> *Researcher: After you graduated from [___________]?*
> **Principal B**: Thank goodness I had done my dissertation and had a few months off to be a normal person and then I became principal… Nothing really prepares you for the role of principal until you are actually the principal. That's been a tough lesson… My predecessor had a long history at the district. She was what we think of as that charismatic leader. You know she could get people to do things because she was [former principal's name]. "Oh you're working for [____]. Oh [____]. Her reputation was so strong. So sharp. So it was daunting to follow her because a lot of things about her are not me. So one thing that was scary about taking over was stemming from my own dissertation in that the first step for a promising new school to go downhill is when you change principals. That would be changing to me. I was very aware that I was living my dissertation in that sense. During my interview for the job the superintendent asked, "How are you going to turn [____]'s Elysian Fields High School into Principal B's Elysian Fields?" And I said, "That's not my goal. My goal is to turn it into everyone's Elysian Fields. You can't have a school move forward based on one person." (Principal B, personal communication, October 27, 2011).

In this example, Principal B is aware that while she is not like her predecessor, she believes in her ability to move the school forward and change it in a way that affords opportunities for what she considered to be more of a distributed leadership model. Furthermore, Principal B referencing her previous research is evidence of her level of preparatory self-efficacy in that her saying that she was "living her dissertation" refers to her existing level of knowledge in how to handle the transfer of leadership from her predecessor to herself. Because she is aware of the potential challenges, Principal B believes that she has the tools necessary to embark upon those challenges.

In sum, Principal B's level of leader self-efficacy reflects her belief that she possesses the capacity to do well as principal. Though the data examined demonstrates

Principal B's high level of leader self-efficacy and the extent to which she believes in her capacity to lead, her ability to develop as a leader and improve her performance is limited by other constraints, contrary to what Machida and Schaubroeck (2011) and Hannah, Avolio, Luthans, and Harms (2008) theorize. These constraints, otherwise known as *immunities to change*, reveal that the relationship between a principal's leader self-efficacy and her levels of performance and improvement are not as linear as the aforementioned authors have suggested.

Individual Leader Element: Immunities to Change

As described in Case Study 1, the underlying impediments that prevent the principal from making desired progress and improvement are what Helsing, Kegan, and Lahey (2008) refer to as *immunities to change*. Similar to Senge's (2006) conceptualization of mental models, these barriers are unconscious to the principal and, therefore, must be raised to their level of consciousness in order to spur the level of cognitive dissonance required to devise the appropriate strategies to mitigate these impediments and improve their practice (Helsing, Kegan, & Lahey, 2008). In the case of Principal B, the data set revealed that she possesses the following two immunities to change: 1) Principal B lacks an inability to be self-reflective in recognizing areas for personal and professional improvement and 2) Principal B employs a deficit-mindset model with her teachers.

Immunity to Change: Principal B lacks an ability to be self-reflective in recognizing areas for personal and professional improvement.

The ability to be self-reflective requires an ability to engage in *double-loop learning* (Argyris, 2002) where it is argued that an individual needs to look within

themselves and reflect on the behavioral practices they employ that potential contribute to the issues prohibiting growth and improvement. The data revealed that, while Principal B looks at various forms of data, she did not engage in any level of deep self-reflection where she questioned her own actions and beliefs in order to determine whether or not such actions are supporting the achievement of her desired goals.

Evidence of Principal B's lack of self-reflection was captured during one of the principal shadow days. During that observation, Principal B worked with an educational consultant who is working with the school to support their established improvement plans and the implementation of the ILT model. During this meeting:

> Principal B shared her concerns about some members who have exhibited some form of resistance for the ILT model. Principal B says to the consultant that there is some level of distrust and that the atmosphere seems to reflect paranoia and an "admin is out to get us" feeling. Consultant asks, "how serious do you want to take this?" Principal says, "there's no contract violation here." One of the Assistant Principals says that it's really three teachers who are causing the issues. Consultant listens as Assistant Principals share concerns about the teachers who are appearing resistant and are complaining about the model. Consultant suggests inviting opportunity for teacher to feel included and asks, "Is there a way to help the people who aren't… or who didn't decide to apply for ILT. Is there a way to give them something to do to feel a part of it?" AP replies, "She's social chair." Consultant asks, "how's that going." Principal says, "fine… they give these little Jaguar of the month awards… funny little things like that." Assistant Principals talks about teachers and how they've been feeling, especially the course leads. Consultant advises, "I would caution against making bold steps to counter this model. Use this as an opportunity to reiterate with ILT that they are on the right path and that there are making signification changes; you need to let them know that they have the full confidence of their colleagues. If they are getting beat up by their colleagues… you want to reinforce that they're doing good. That they are valued. That it's about… how are you spreading decision making out to include people to have the input to make those decisions." Principal nodded head in agreement. Consultant adds, "perhaps the ILT team can reach out to [teacher] and try to find a way to include her?" (Principal Shadow Day, personal communication, November 7, 2011)

Several observations were drawn from this piece of data presented. First, the educational consultant is not asking Principal B questions that would prompt her to

reflect on her behaviors and practices that may or may not be contributing to the tension felt by the administrative team within the organization. The lack of questioning on the part of the consultant adds to the number of missed opportunities Principal B has to engage in reflection of her own practice and how her behaviors are contributing to the overall climate of her organization. Furthermore, since the consultant is not, in this example, engaging the principal in self-reflection, one cannot expect Principal B to engage in the kinds of self-reflective practices associated with double-loop learning as described by Argyris (2002). Second, the advice the consultant offers to Principal B reaffirms her beliefs that her model and approach is the right one to employ and that the teachers are the ones who need to acclimate to the structural changes she has implemented with the help of her administrative team. Since the advice does not counter what Principal B already believes is correct, there is no need for her, according to the unconscious constructs and beliefs she already possesses, for her to change the way she does things in order to alleviate some of the tension within her organization.

The problem that lies with Principal B's lack of self-reflective practices is that if she is not aware of areas in which she can afford to improve upon her own practice, she will not take advantage of the opportunities and strategies to improve. Therefore, much of the types of problems Principal B will solve will involve ones that are readily visible to her or those that are "technical problems" through which she will implement tactics and procedures that lead to externally drive results (Helsing, Howell, Kegan, & Lahey, 2008). Her lack of self-reflection, therefore, inhibits her to solve "adaptive problems" where she is unable to make changes to her underlying beliefs, values, habits and modes of operation (Helsing et al., 2008).

Immunity to Change: Principal B employs a deficit-mindset with her teachers.

Milner (2010) offers a conceptualization of the deficit-mindset specific to teachers' expectations and assumptions about students' potential for learning. In his description, he states that beliefs that result in low expectations derive from conversations teachers may have about students and teachers' interpretations about students' performance (Milner, 2010). As a result, these beliefs and interpretations translate into practices and behaviors that make it difficult to foster positive learning opportunities for students (ibid). Milner (2010) adds, "deficit thinking exists when educators hold negative, stereotypic, and counter productive news about culturally diverse students and lower their expectations of those students accordingly" (p. 36).

Though Milner's (2010) depiction of the deficit-mindset and its occurrence within the teacher-student dynamic, this mindset is applicable to Principal B's situation at Elysian Fields High School. An examination of the observation data revealed instances in which Principal B demonstrated a deficit-mindset with her teachers. This was evident during a meeting between Principal B, her educational consultant, and her administrative team:

> AP talks about one of the teachers who used to teach at another school site with her and talks about the poor attitude she had then and that she has it now. Principal says teacher is acting "bossy" and is alienating herself…. AP says "She's playing that "victim card"… AP reports that teacher said, "how would you feel if you were told you an obstacle to this school moving forward. Would that make you want to apply for leadership team?" Consultant asks if that was the word that was used and Principal says, "I don't remember if that was the exact word but I said something like " I need you guys to work with me instead of against me at these meetings." Consultant asks, "So how do you get her on board?" AP says "I've tried to move her from a complaint level to a solution level. You know "I hear your complaint but what do you think we can do to resolve this…"Consultant asks if other teachers see her as a positive or negative and Principal says she believes it's the latter. Consultant suggests, "If you could find a way to engage her that's genuine… maybe you can make some progress

> otherwise if she's shutting down every overture you make to her you'll have to give up and let her isolate herself… and if that were to happen how is that going to affect the school as a whole?" Consultant also suggests having the principal meet with the teacher and the teacher's union rep to see if they can work to find a solution to the negative feelings she has and how they can make this a better environment for her. Principal says "I don't think it would go well. (APs nod in agreement). I don't mean to be a pessimist about it but… it's what her past reactions have been like." Consultant keeps offering ideas but AP and Principal keep saying that it won't work.
>
> AP talks about another teacher with whom she just had a post-observation conference. She talks about her surprise at the fact that the teacher also expressed similar concerns to the teacher they were talking about earlier in the meeting (see above notes). Principal and admin appear surprised at the fact that this particular teacher is expressing concern over ILT model and its implementation. Principal said "well she can complain… and [____] said she was high maintenance over at [_____]. Principal then says, "Did we pick the wrong people?" Principal also asks, "Who got to her?" then names a name. APs all agree… "the buddies from [_____] or so I have been told." AP says, "I'm a little worried she's contaminated" Principal says "well put it in context… it's not surprising…" (Principal Shadow Day, personal communication, November 7, 2011)

There are two prominent observations that emerge from the example offered above, both of which illustrate Principal B's deficit-mindset. First, on several occasions, the educational consultant offers suggestions for handling the difficult teacher to which Principal B replies that she does not believe the suggestions or ideas will work to solve the issue at hand. The administrative team, who also agrees that the solutions offered by the consultant will not work to solve the problem at hand, also reinforces this belief. This immediate disregard for the suggestions offered illustrates Principal B's deficit-mindset in that she already holds the expectation that nothing will work to help this teacher improve her behavior, her attitude, or her professional practice. Second, the words used to describe the two teachers talked about during this observation denote the deficit-mindset as the principal and the administrative team use words like "contaminated", "high-maintenance", "bossy", "alienating", and "victim-card" (personal communication,

November 7, 2011) to describe what the administrative team believed to be the attitudes and behaviors of these two teachers. The word choice illustrated by Principal B and the administrative team further evoke this deficit-mindset in that the words used contribute to the "negative, stereotypical, and counterproductive views" of these two teachers, which, in turn, influence the attitudes and expectations the administrative team and Principal B have of these two teachers (Milner, 2010, p. 36).

The deficit-mindset Principal B employs in this example illustrates her own immunity to change, which is something of which she is not cognizant. Since an immunity to change, according to Helsing, Howell, Kegan, and Lahey (2008) lies within the principal's unconscious, Principal B is, therefore, unaware that her low level of expectations may, in fact, be contributing to the various conflicts experienced within the organization. As Milner (2010) advises:

> The deficit-mindset contributes to an unending cycle: educators do not teach with rigor and high expectations; students do not learn; students' scores suffer; and then all involved wonder why. I have learned that blame for failure is too often placed on students without any serious interrogation of the role that teachers and school structures play (p. 36).

In the context of leadership and the case of Principal B, the lack of clear communication and capacity building between administration and the faculty results in teachers' feelings of confusion, displeasure, and distrust; this, in turn, results in less-than-desirable cultivation of leader development and weak implementation of the ILT model. As a result, the administrative team is then left wondering why certain issues are continuously rising to the surface and why teachers are still feeling upset. As discussed in Milner (2010) much of the dialogue observed between the assistant principals and Principal B centered on placing blame on the teachers who are upset at the current climate of the

school. Rather than asking questions that reflect deeply on the current situation or engaging in some form of reciprocal dialogue with the consultant about potential strategies for working with the teachers, both Principal B and the assistant principals seems conclusive on the idea that nothing they could do would work to help the teachers feel more comfortable with the structural changes taking place within the organization.

Principal B's immunities to change: *Principal B lacks an inability to be self-reflective in recognizing areas for personal and professional improvement* and *Principal B employs a deficit-mindset model with her teachers* appear to interact with one another frequently throughout the data examined. Because Principal B lacks an ability to be self-reflective about her practice and her performance as a leader, she is unable to recognize the types of expectations she has for her teachers and her Course Leads and how those expectations influence the ways in which she behaves with her faculty. As a result, her immunities to change mediate the intersection of Principal B's beliefs in her capacity to lead and the unconscious assumptions she makes about how she enacts her style of leadership. The confluence of these elements translates into low levels of leader creativity, which is discussed in the next section.

Individual Leader Element: Leader Creativity

As referenced in Case Study 1, Sternberg (2007) states that creativity in leadership is important as it enables the principal to generate the ideas that her members will eventually follow. Furthermore, Sternberg (2007) reminds us that leaders who engage in lower levels of creativity run the risk of implementing ideas within the organization that are archaic or mediocre. In addition, levels of leader creativity and the extent to which a leader is creative is reflected in the established mental models and

beliefs about the ways a principal thinks about, engages in, and enacts her leadership. Therefore, leader creativity is believed to work in confluence with a principal's own mental models, her level of leader self-efficacy, and the mediating factor of her immunity to change.

An examination of the data revealed, similar to Principal A, that Principal B exhibited lower levels of creative thinking in her leadership. This finding is not surprising considering the identified mental models and the extent of her immunities to change as described earlier. As a result, the practices and strategies Principal B employs reflect traditional leadership practices. At the surface, Principal B exhibits a style of creative leadership that Sternberg (2007) defines as "Advance Forward Incrementation" whereby Principal B appears to want to take her organization in the direction it is already going with respect to improving the leadership structure. This is evident in the ways in which Principal B changed the structural components of her leadership team by eliminating the role of Department Chair and introducing the role of Course Leads in an effort to promote a more "distributed leadership structure" (personal communication, October 27, 2011). However, this direction may be moving at a pace her organizational members are not ready for it to go, which is an unintended consequence of the creative leadership style described by Sternberg (2007) thereby spurring feelings of resistance as was observed with the administrative team's discussion of some of the teachers in earlier examples.

Similar to Principal A, Principal B also adopts technical solutions to solve external problems. When asked about what it meant to Principal B to be creative, she responded:

> The budget is always a reflection of your priorities. We were creative with the textbooks. We don't have class sets anymore and our teachers are furious, our

> parents are furious, and our kids are furious. And we don't have lockers. So the teachers want class sets and the students want the class sets back. But the problem is that the district isn't buying any more textbooks. So what used to be class sets, surplus materials, are now going to other schools that need books. So they're not our books, they're district books. So what do we do to kind of offset this problem? That's why we started investing in more technology and with the tech department at the district they are actually funding for me a pilot program were doing with a group of AP students. There are 57 kids in one AP Lit course. They [district] have purchased Nooks and uploaded all the books and plays that the kids need and the cost is so much cheaper than buying all those books. So when we go through the year and we evaluate how this works then we can decide "should we expand it to another class?"… So we're trying to think differently and more long term about using our money more wisely. (Principal B, personal communication, October 27, 2011)

Principal B's explanation of an example where she believed she exercised "creative thinking" in her leadership supports Sternberg's (2007) idea of practical intelligence, which he defines as the "set of skills and dispositions used to solve everyday problems by applying knowledge gained from experience to purposefully adapt to, shape, and select environments" (p. 37). In this instance, Principal B demonstrates practical intelligence as she seeks a solution to the change in the environment where the district is no longer purchasing textbooks in the ways they used to. To comply with the changes, Principal B worked with the district to invest in the technological tools that would support the material needs of her organization with respect to books. At the minimal level, Principal B exercises a level of creative thinking to meet the instructional needs of both her teachers and her students.

While Principal B is able to think of immediate solutions to solve external problems, her level of leader creativity is limited in solving more complex issues like the issues she is experience with the resistant faculty members. Her lower levels of creative thinking lead her to adopt more technical and traditional practices to solve immediate and external problems of practice. Furthermore, it is expected that Principal B would maintain

a lower level of leader creativity in that her immunities to change prevent her from recognizing areas in which she improve and the intersection of her high level of leader self-efficacy and her mental models only serve to perpetuate the cycle of lower leader creativity.

Individual Leader Elements: Conclusion

Evidence presented for Principal B demonstrate that the relationship between Principal B's mental models, her level of leader self-efficacy, and leader creativity, is an increasingly complex yet relational one that is further complicated by her own immunity to change. Furthermore, the intersection of these individual leader elements lead Principal B to adopt and implement leadership practices that, at the surface, are consistently demonstrating the mental models she unconsciously possesses.

Leadership Practices

As argued in my Conceptual Framework, the intersection of a principal's own mental models, level of leader self-efficacy, and leader creativity were originally thought to serve as the foundational catalyst in influencing a principal towards a set of leadership practices. These individual leader elements are further made complex by the mediating factor of her immunities to change. An examination of the data set revealed that the leadership practices Principal B implemented were derived from the underlying constructs and beliefs she possesses. In the case of Elysian Fields High School and its principal, Principal B, the confluence of all four elements influence the extent to which Principal B enacts the following two predominant leadership practices: promoting a culture of inquiry and building and maintaining organizational relationships.

Leadership Practice: Promoting and Fostering a Culture of Inquiry

As discussed in Case Study 1, Argyris' (2001, 2001) work on *single-loop learning* and *double-loop learning* established that internal reflection of practice is needed in order to foster and facilitate improvement and changing the "governing values and then the actions" (p. 206). During our final interview, Principal B explicitly espoused that she and her organization were engaging in:

> That cycle of inquiry that we've been talking about where we look at school wide data, we cycle back to what was the instruction that needs to be adjusted and how do we reassess, um, it gives them a much broader view so they can see they are a part of the system and that the entire educational system – or the entire school in our case – needs to more forward and we can talk about how we can help make that happen. (Principal B, personal communication, December 12, 2011).

Part of Principal B's motivation behind creating a culture of inquiry involves a desire to keep her ILT members abreast of what the data is telling them. Much of the reflection, as described by Principal B, is still focused on external outcomes and the externally driven practices and strategies that produce the results they are looking at. This was further evident during a professional development meeting within the English Department:

> Teachers break out into grade level groups where they are reviewing data surrounding student grade reports. Course Leads direct teachers to meet in college prep courses first before Honors/AP groups meet. Researcher sits near group for $10^{th}/11^{th}$ grade. Course Lead sits with group and has them look through the sheets containing student grades. Asks teachers to state the trends they observe. Teachers share out but responses are brief at the beginning only directly answering the question. Some teachers in the group (2) engage in side conversation. One teacher talks about the exams used. NOTE: there are no guiding questions for taking the teachers through any actual grade analysis; Course Lead is just letting the conversation occur naturally, but there is no sharing of strategies or teachers reflecting on what they may or may not be doing to support student success. Much of the rationale include phrases like: "they don't do their homework", "this kid never shows to class." Conversation now turns to discussion over course materials, novels to read, college applications, and single-case issues with various students. Conversation returns to grades about 10 minutes later. Teachers mention that they notice grades are following a middle of the road pattern. They discuss how the grades may be a result of the transition from middle to high school, especially for 9th graders (But this is the $10^{th}/11^{th}$ grade group… what does that have to do with the present groups of students they're looking at?). Little

> questioning is presented that prompts teachers to reflect on their own practice and its correlation to student performance.

In this instance where the English department members are working to review student grades and the practice of looking at data in more detail is something that the school – as a whole – has been working on according to Principal B (personal communication, October 27, 2011). While the department members looking at the data, their level of reflection is still superficial in nature and does not yield evidence of changing the ways in which they reflect upon the data in an effort to improve their own practice. This, as a result, leads to a consequential *single-loop learning* where the department members only discuss what the students are doing that explain the grades observed versus engaging in more internal reflection of how their instructional practice relates to the grades and scores observed. Therefore, their lack of true reflection prohibits them from reaching the level of inquiry Principal B espoused she wanted her faculty to reach.

The lack of reflection and *double-loop learning* observed within the professional development meeting is not surprising to see. Other observational data demonstrated similar surface-level engagement in reflection at two other faculty meetings. It can be concluded that Principal B's surface level implementation of her own inquiry translates into surface level implementation of inquiry across the organization.

Furthermore, observational data revealed Principal B does not create conditions for engaging in reflective inquiry, but rather intends to leave such superficial levels of reflection up to her faculty. This was evident during an ILT planning meeting Principal B conducted with her administrative team. During the planning, Principal B screened a video clip of teacher teaching a lesson that the principal planned to use during the scheduled ILT meeting, which is further illustrated below:

> Principal starts to watch videotaped lesson of one of her teachers. Admin watches along with Principal. 2 of the 3 AP's in the room are working on laptops while video is playing; the third AP is out of the conference room. They aren't watching video; Principal is only one watching video. Principal starts fast forwarding video. She says she's trying to find clips to use for the ILT meeting. Principal does not address the point of the video or what activities she's thinking of having the ILT members do with this clip. There is no discussion between the Principal and the AP's about the teaching strategies observed in the clip. Principal switches to a different video clip. AP's do not appear interested in watching the video as they continue working on their laptops; one AP takes out a binder and sorts through documents. I can't tell if they're listening though, but they're not watching it. Principal says "we need to put this into context." She offers idea of redoing the videotaping of the lesson in the same teacher's classroom but in a different class period to see if there are differences in the types of strategies the teacher employs (AP versus non-AP course). In the video, teacher only lectured and engaged in Socratic Seminar questioning. One of the AP's asks, "What do we want the teachers to see?" The other AP responds, "Uh…. Lots of different instructional strategies?" Principal says that it would be good for teachers to see what or how other teachers teach and then when they conduct the peer observation later that day in the ILT meeting they can then do a "comparative observation looking at how certain instructional practices could be used cross-curricular." (Principal Shadow Day, personal communication, November 7, 2011)

In this example, Principal B plans to allow the faculty to construct their idea of what instructional practices they should be looking for as was demonstrated in her comment to her assistant principals that the ILT members would identify strategies on their own while screening the clip Principal B chose. The ILT members would then be asked to conduct a comparative reflection where they compare the live observation they would do later that day in the ILT meeting with the video taped lesson presented by Principal B and her administrative team. The consequential challenge with having the faculty construct their own definitions or ideas about practice is that if it is not in line with what Principal B wants, it has the potential to create dissonance between the faculty and the administration.

Evidence presented from the data collected demonstrates Principal B's engagement in surface level inquiry where she and her faculty are examining data and

outcomes from an external and superficial perspective. This surface level analysis will lead Principal B and her members to adopt externally driven solutions and inhibit them from engaging in true double-loop learning.

Leadership Practice: Building and Maintaining Organizational Relationships

As described in Case Study 1, organizational relationships are important and the principal must be aware that building and maintaining organizational relationships are necessary for working to achieve organizational change (Fullan, 2001). Human interaction, especially within a school, is one that occurs daily and, as a result, calls for the principal to ensure that she is cultivating and maintaining organizational relationships in order to work towards achieving her desires goals (Fullan, 2001; Northouse, 2007). *In-group* and *out-group* relationships can form as a result as discussed in the case of Case Study 1 with Principal A. In the case of Elysian Fields High School, the data set revealed Principal B's relationships illustrate *in-group* and *out-group* dynamics with the *in-group* consisting of her admin team. The course leads could also be considered a part of it, but are *in-group* members in a more superficial way in that they are a part of the leadership team, but are not delegated leadership responsibilities in the ways they are delegated to her administrative staff. *Out-group* members within the organization are identified to be those who are not part of the ILT/Administrative team and those who have demonstrated resistance with the implementation of the ILT model.

The nature of the *in-group* and *out-group* relationships was evident during several faculty meetings. During the meetings, Principal B usually sat with her administrative team separate from the faculty and ILT Course Leads. Principal B was frequently observed engaging in conversations with her administrative team, but little interaction

was observed with Principal B conversing her faculty members. Most of the interaction Principal B had with faculty consisted of her meetings with her Course Leads where the Course Leads would report back their plans and agendas for their upcoming department meetings.

During our final interview, I asked Principal B about the expectations she has for the meetings she conducts with her Course Leads. Principal B shared that the idea behind these types of meetings between her and her course leads is a means of sharing the leadership role with her “teacher leaders” (personal communication, December 12, 2011). She went to say that, in addition to sharing leadership, another goal from these meetings includes her desire to:

> Establish and re-establish trust. So that’s why the [course leads] set the agenda for our meeting. Normally in the back of my mind I’ll always have points that I want to bring up with them or questions that I might have, but I want to make sure there is scheduled time to discuss how the department is doing, what kind of progress is being made, challenges they are facing, budgetary concerns, what have you, because it’s – it hasn’t always worked to say “my door is always open” because people won’t come. But if you set up meeting time that’s regular and the course leads know they are in charge to bring concerns or questions from the department to the meeting, that’s really the only way this is going to happen. And also just kind of establish – the same way you would in the classroom, the ILT is a large class and you’re doing whole group instruction – this is much more differentiated. So when we’re talking about one particular course or one particular subject – one particular PLC and specific needs. Also… I want the meetings to be much more relaxed and informal so that we’re addressing concerns but we’re also establishing relationships. (Principal B, personal communication, December 12, 2011)

The example above illustrates Principal B’s desire to create positive relationships with her Course Leads and working with them to build trust in ensuring the implementation of the ILT model is successful. Supplemental data illustrating Principal B building and maintaining organization relationships is evident during observations of two meetings Principal B conducted with her Course Leads from two difference departments. During

these meetings, it was observed that Principal B usually checked in with the course leads and the progress they are making within their own department. Principal B usually asked questions about teacher progress, teacher feelings regarding the implementation of the ILT model, and addressing any questions that the course leads had. The course leads appeared to act as liaisons between the department members and the administration and in this manner, the leadership is shared with the course leads and the administration collaborating and the course leads taking that information back to their departments for further collaboration within their professional learning communities. However, little could be determined about the extent to which the Course Leads enacted their roles as leaders outside of the parameters of meeting with Principal B since the only time I was able to observe the Course Leads was when they met with the principal. The meetings, though a good forum for updating Principal B on departments' progress, appeared to be more of a "check in" than an opportunity to foster the kinds of relationships Principal B espoused she wanted to create.

Principal B espoused a desire to establish and re-establish trust (personal communication, December 12, 2011). Given the implementation of the new leadership structure, trust is a commodity the principal is working heavily to build within her faculty. What is interesting to note about Principal B's attempt at building and maintaining trust regarding the implementation of ILT is the frequent level of "behind the door" discussion Principal B engaged in with her administration surrounding teachers' feelings of a lack of trust and the lack of transfer into strategies and behaviors that would result in improving the level of trust among the faculty. One attempt that was partly observed involved Principal B starting the ILT meeting – a full day meeting or what

Principal B considered to be "professional development" for both administration and the Course Leads. At the beginning of this meeting, Principal B afforded members an opportunity to "vent" (personal communication, November 16, 2011) their frustrations about the ILT implementation. I was not asked to sit in on this part of the meeting as the faculty wanted to speak "freely" (personal communication, November 16, 2011). Therefore, it cannot be determined whether the open forum discussion resulted in an increase in trust, especially when two weeks later during my final shadow day principal observation both Principal B and her administrative staff were still discussing issues with the same teachers who were exhibiting concerns and dislike for the ILT implementation. Nevertheless, Principal B opening the forum to allow for teachers to voice their concerns and opinions was her idea of trying to establish trust within her Course Leads and ILT members.

Leadership Practices: Conclusion

Principal B's leadership practices as discussed above demonstrate that the practices she employs are influenced by the underlying constructs and beliefs she possesses. The extent to which Principal B employs the aforementioned leadership practices are surface level in nature, which is not surprising considering that one of her mental models focuses on structural change. Therefore, the behaviors demonstrated within Principal B's leadership practices demonstrate the mental models she possesses unbeknownst to her. Furthermore, the intersection between her mental models, her level of leader self-efficacy and the mediating factor of her immunities to change lead Principal B to believe that what she is doing in terms of her leadership practice is sufficient to promoting organizational change and, therefore, is not cognizant of areas in

which she could afford to improve. Though focus on the extent to which these practices are employed has been placed on Principal B's internal constraints in her leadership, it is also important to examine some of the external constraints that prevent Principal B from achieving her desired level of organizational and leadership performance.

External Constraints

An examination of the data revealed an external constraint that served as an impediment in Principal B's ability to engage in reflection about her progress in implementing the ILT model. The educational consultant, as discussed in a previous example, and the quality of advice presented to Principal B during a planning meeting, acts as an external constraint in Principal B's ability to improve her level of self-reflection. The goal of the consultant was to assist in the implementation of the ILT model. However, the advice that was offered to Principal B during the planning meeting was superficial at best and was not sufficient enough to engage the principal in a reflective process that would allow her to question the behaviors she implemented that may or may not be contributing to the increasing feelings of disapproval or distrust for the way the administrative team is implementing the ILT model. Moreover, when the consultant did offer some suggestions that Principal B and her administrative team dismissed, the consultant did not press on the ideas and suggestions that were believed to potentially help Principal B mitigate some of the issues and problems she was dealing with.

The idea that Principal B has a consultant to whom she can seek support and guidance presents a challenge in that if the consultant is unable to bring to light areas in which Principal B needs to improve within her own practice, one cannot expect Principal

B to recognize them on her own. Also, if Principal B is not receptive to the feedback the consultant offers, then it becomes even more difficult for Principal B to recognize her areas of weakness and then look for strategies to improve her own practice. Considering the level of social capital she possesses, it is unlikely that Principal B would come to such conclusions about improving her practice on her own and any improvements she would choose to make would be surface level or *first-order* changes at best. Therefore, if the consultant is not able to bring such information to Principal B's attention, it is unlikely that she will achieve *second-order change* for both herself and her faculty.

Conclusion: Organizational Outcome

In sum, Principal B's leadership practices are a byproduct of the intersection of her levels of high leader self-efficacy and mental models, both of which are mediated by her immunity to change. The interactions of these elements lead Principal B towards more traditional pathways in leadership practices while executing a low level of leader creativity. Though Principal B has enacted structural changes with respect to implementing the Instructional Leadership Team model, these improvements are superficial at best and, if Principal B is not cognizant of her own current limitations in her present level of leadership, the organization will continue in their current level of performance thereby delaying the progress towards reaching the desired organizational change or outcome Principal B is seeking.

Cross-Case Inductive Analysis and Conclusions

Cross-Case Inductive Analysis

Upon initially conducting this study, it was assumed that, because Crystal Castle Academy and Elysian Fields High School, contextually, were two different schools

(charter school versus non-charter school) with two very different principals, each principal would behave different from the another. I also anticipated to see different organizational outcomes resulting from the two different principal and school contexts. However, while Crystal Castle Academy and Elysian Fields High School, on the surface, appear to be quite different from another, both principals enacted leadership practices within a similar scope and, as a result, both principals and their actions landed them in similar places with respect to surface level or *first-order* changes within their respective organizations. A categorization of the findings across both case studies is illustrated in Table 2 on page 187.

Table 2 illustrates the differences and similarities between Principal A and Principal B as was determined from my examination of the data collected during a two-month period. One interesting finding that emerged from this data presented in Table 2 is that while Principal A and Principal B possess differing mental models, their high levels of leader self-efficacy coupled with their immunities to change – especially their inability to be self-reflective – lead the principals to enact low levels of leader creativity, therefore, leading them towards traditional and surface-level leadership practices associated with promoting inquiry and building organizational relationships. The principals' surface level enactments of these practices carry the potential to translate into first-order or externally driven organizational change. In addition, though, contextually, Principal A and B possess two differing pathways and professional developmental experiences, it is interesting to find that, in the end, both are ending in similar places within their own leadership practice.

Table 2

Inductive Cross-Case Catergorization Emerging From Case Studies for Principal A (Crystal Castle Academy) and Principal B (Elysian Fields High School)

	Principal A Crystal Castle Academy (Charter)	**Similarities Between Principal A and Principal B in Leadership**	**Principal B Elysian Fields High School (Non-Charter)**
Principal Background	Year 1 as Principal Enrolled/completed Administrative Credential program Former Math teacher	Both work in Morcheeba Unified School District	Year 4 as Principal Took SLLA for Administrative Credential Former ELA, Art, Drama teacher
Mental Models	1. The principal is an instructional leader 2. The Principal Uses Data with Teachers 3. The Principal models behaviors and practices she expects from her faculty		1. The Principal is not personally responsible for building capacity in others. 2. Structural organizational change yields improvement
Leader Self-Efficacy		High levels of leader self-efficacy (both espoused and implied)	
Immunities to Change	Level of self-efficacy is contrary to what she espouses	Lack ability to be self-reflective	Employs a deficit-mindset with her teachers
Leader Creativity		Exhibit low levels of leader creativity	
Leadership Practices Enacted		Surface-level enactment of promoting a culture of inquiry; espoused desire to build organizational relationships	
Potential Organizational Outcomes		First-order structural changes observed	

One difference that exists between Principal A and Principal B lies within their mental models and the behaviors they employ to demonstrate those unconscious

assumptions. In the case of Principal A, because her unconscious assumptions center on a belief of leading instructionally, using data with her teachers, and modeling the behaviors and practices she expects from her faculty, the behaviors and practices she employed (reviewing external data with her teachers, modeling the behavior of gathering data, and offering strategies and guidance to a teacher during a pre-observation lesson) demonstrated those beliefs and, in turn, lead Principal A towards adopting structural practices to achieve her goal of having her teachers use data to inform their practice. In the case of Principal B, because her unconscious assumptions center on a belief that she need not be responsible for building internal leadership capacity within her teacher leaders and her belief that changing the organizational structure will lead to organizational improvement, the behaviors and practices she employed (implementing an evolved Instructional Leadership Team model, distribution of tasks versus leadership responsibilities among her Course Leads, building time into the school day for common collaboration periods within departments) demonstrated her belief that changing the structure will lead to improving the organization.

Nevertheless, despite the differing mental models for both principals, both still managed to enact surface level leadership practices that lead to surface level changes within their organizations. The common thread that exists between these two principals involves their immunities to change – particularly their inability to be self-reflective. Though both principals possess an elevated belief in their capacity to lead and do well, their immunity to be self-reflective inhibits their ability to reflect and question their actions, beliefs, and results thereby preventing them from recognizing opportunities to learn from their own professional practice. These internal constraints, however, are not

solely responsible for the lack of leader development both principal are obtaining. Furthermore, their external constraints stemming from their lack of quality supports also feed their immunity to be self-reflective for if their external supports do not express areas where both principals can improve upon their practice, one cannot expect either Principal A or Principal B to become cognizant of those needed improvements out of their own volition, because their immunities to change prevents them from doing so.

The biggest takeaway in examining both case studies side by side is that when it comes to understanding leadership for principals, there lies a deep complexity in moving from a mental model to the demonstrated actions that are consistent with what an individual espouses they desire to achieve. Furthermore, a principal's mental models, or unconscious assumptions and beliefs, are what lead to the constrained leader behaviors that are a result of the intersection between her mental models, level of leader self-efficacy, and levels of leader creativity, mediated by her internal and external factors. Finally, the cross-case analysis also suggests that differing backgrounds and mental models did not necessarily lead to different outcomes with respect to where both principal land in their practice.

Conclusions

The findings across both case studies suggest a level of complexity when it comes to understanding the intersection of a principal's mental models and level of leader self-efficacy and how both are mediated by her own immunities to change. Furthermore, the findings suggest that the intersection between a principal's mental models, level of leader self-efficacy and the mediating factor of her immunities to change translate into lower levels of leader creativity, therefore, leading a principal to adopt traditional leadership

approaches with the intention of attempting to foster and achieve organizational change. However, examination of data sets from both case studies revealed that even though a principal may possess well-intentioned mental models and high levels of leader self-efficacy, her ability to foster and achieve real organizational and transformational change is constrained as a result of mediating factors such as her immunities to change as well as some external constraints. It is these internal and external constraints that inhibit the principal from breaking through the performance plateau and adopting practices associated with second-order change (Hallinger, 2003). In the next, and final, chapter of this dissertation I offer a discussion of the ideas that have emerged as a result of this multi-case study as well as address the implications for both principals, the practicing community, and the research field. I also offer recommendations for further research in this area of study.

Chapter 5:

Discussion, Implications, and Recommendations for Future Research

This study examined the relationship between leadership and organizational change focusing on the extent to which the intersection of a principal's mental models, level of leader self-efficacy, creative thinking, and immunities to change influenced the leadership practices enacted to foster organizational improvement. A qualitative study employing a multi-site case study methodology sought to answer the following research question:

- To what extent does a principal's own mental models, level of leader self-efficacy, her immunities to change, and her level of leader creativity influence the principal's ability to enact her style of leadership in fostering and achieving organizational improvement?

To answer this question, data was collected at two high schools and was comprised of observations, interviews and document collection (Yin, 2008; Merriam, 2009). Pseudonyms for the school sites, principals and faculty participants were created to ensure that all participants' identities were protected. All data collected was transcribed and entered into an Excel spreadsheet that was used for inductive analysis with attention focused on the proposed themes outlined within my Conceptual Framework utilized for this study. A cross-case analysis was also conducted to draw upon the similarities and differences between the two cases.

This final chapter will converge on the comprehensive lessons learned as a result of this study. The remaining sections of this chapter summarize the study's findings, address the implications for the study's participants, the educational field, and the

research community, as well as offer a discussion emerging from the findings. Recommendations for further study are also offered to conclude this chapter.

Summary of Findings

The findings from this multi-case study suggest that while a principal possesses well-intentioned beliefs and assumptions, these are not enough to enable her to enact the kind of transformational organizational change that she not only wants, but that is also demanded of her in this increasing era of school accountability. Furthermore, the findings also suggest the role of the principal is an increasingly complex one when it comes to understanding how the intersection of a principal's mental models, her level of leader self-efficacy, and her own immunities to change lead a principal to enact a level of leader creativity that influences the level of leadership practices she will employ to promote organizational change. In the case studies for Crystal Castle Academy (Principal A) and Elysian Fields High School (Principal B), the data revealed that while both well-intentioned principals possessed differing mental models and high levels of leader self-efficacy, the immunity to be self-reflective contributed to an inability to recognize areas where they could improve the quality of their practice in order to move from enacting structural organizational change to more transformative organizational change. This relationship between the principals' individual leader elements and their capacity for enacting real organizational change was complicated further by the external factors that constrained their leadership practice.

Implications for the Principal Participants

The findings for Principal A and Principal B in their respective case studies offer two implications for principals and their professional practice. First, principals are not

afforded quality supports that are likely to enable them to enact practices that lead to transformative organizational change. Second, principals are not afforded opportunities to reflect on their assumptions and belief systems that are enabling them to enact structural or surface level practices thereby limiting their capacity for deeper organizational change. Research offered by Darling-Hammond, Orphaos, LaPointe, and Weeks (2007) and Helsing, Howell, Kegan, and Lahey (2008) discuss a need for improving the quality of leader supports and offering opportunities for reflection of practice.

Darling-Hammond, Orphanos, LaPointe, and Weeks (2007) discussed issues in leader support and development in the advent of No Child Left Behind (2001). The authors asserted policymakers have focused a great deal on reform efforts surrounding a external outcomes connected to student learning, recruiting and training new teachers, credentialing and evaluation processes, and issues pertaining to the development of curriculum, content standards, testing, and accountability (Darling-Hammond et al., 2007). However, little attention has been paid to determining and offering quality supports that enable a principal to be able to fulfill the myriad of responsibilities expected of them at the elevated level of performance that is now required of them.

Helsing, Howell, Kegan, and Lahey (2008) suggest that a way to support leader development is to employ a professional development framework that addresses a principal's *immunities to change*. As discussed in Chapter 2 and my Conceptual Framework, *immunities to change* refer to "the underlying barriers that prevent an individual from making progress towards a desired professional goal" (Helsing, Howell, Kegan, & Lahey, 2008, p. 441). Helsing et al. (2008) argue professional development programs do not address an individual's underlying assumptions, beliefs, or mental

models. As a result, principals are not afforded an opportunity to challenge their own assumptions that would give rise to level of cognitive dissonance, or opposing thoughts and ideas, needed to contemplate on the personal and professional improvements needed to achieve a desired professional and organizational goal. Consequently, principals are expected to foster and achieve organizational change through improving instructional practice and support increased student learning, but do not have the appropriate support in order to effectively lead in this capacity.

In the cases of Crystal Castle Academy and Elysian Fields High School, both principals demonstrated a lack of quality external supports that encouraged a level of focused reflection that Helsing et al. (2008) suggest is needed to confront and overturn their immunities to change. The observation that both principals share an immunity to change involving an inability to be self-reflective – a required practice in being able to identify and mitigate one's immunities to change – further supports the ideas Helsing et al. (2008) address with respect to affording principals the time and environment to examine their assumptions and underlying beliefs and how those belief systems are contributing to their current level of professional practice. Both principals in this study would potentially benefit from a professional development framework where they are able to engage in focused reflection and action-oriented exercises where they can "experiment with behaviors that run counter to their own assumptions and then consider whether those assumptions need modification" (Helsing, Howell, Kegan, & LAhey, 2008, p. 442). Such focused and continuous reflective processes are what Helsing et al. (2008) believe will enable the principals in this study to modify their existing mindsets

and behaviors, which may allow for a deeper understanding in enacting their complex leadership roles.

Implications for the Educational Field

Within the larger practicing educational field, the study's findings offer two implications for practice. First, assumptions have been and are continually being made about principals' capacities for leadership and it is believed that those who are principals are well-positioned and well-equipped to lead. Second, the educational field asserts a belief that if the "right people" are placed into positions of leadership then transformational change will emerge.

As discussed in the previous section, educational reform efforts and educational policy such as No Child Left Behind (2001) and Race to the Top (2010) do not specifically outline appropriate support measures for fostering leader development in instructional improvement. Yet, principals still are expected and responsible for enacting change in an era of increased school accountability in the face of persisting absence of the adequate and necessary support that will enable them to effectively lead. The lack of defining quality supports at the policy level translates into a lack of quality supports offered at the state and local levels, thereby preventing principals from locating the appropriate supports necessary to help cultivate their own leadership and enact greater organizational change (Darling-Hammond et al., 2007).

The extensive and emerging role the principal must now play in creating the necessary conditions for improving student learning outcomes has been overlooked (Darling-Hammond et al., 2007). Furthermore, preparation programs for principals in the U.S. have traditionally consisted of:

> A collection of courses regarding general management principles, school laws, administrative requirements, and procedures, with little emphasis on knowledge about student learning, effective teaching, professional development, curriculum, and organizational change… Relatively few programs have had strong clinical training components that have allowed prospective leaders to learn the many facets of their complex jobs in close collaboration with highly skilled veteran leaders. And many professional development programs for principals have been criticized as fragmented, incoherent, not sustained, lacking in rigor, and not aligned with state standards for effective administrative practice. (Darling-Hammond et al., 2007, p. 4).

Much of what Darling-Hammond et al. (2007) describe occurs in leader preparation programs is largely focused on the operational and structural aspects of leadership. Because leader preparation programs focus little on cultivating the practices associated with transformative organizational change, principals entering schools post-NCLB are under-prepared to meet the challenges of organizational improvement through instructional and transformational leadership (ibid.).

In the cases of Principal A and Principal B, both traveled down two different roads on their paths towards entering administration and becoming school principals. Principal A enrolled and completed an administrative credential program focused on leadership for the charter school setting while Principal B started an administrative credential program but promptly left after taking the School Leadership Licensure Assessment (SLLA) and earned her administrative credential via examination. While neither pathway is considered to be superior to the other, the fact that there are multiple pathways to becoming a school administrator suggests that there are opportunities for emerging school leaders to miss out on developmental experiences that would enable them to increase their own capacity to effectively lead. Furthermore, the credential programs and exams that are offered to emerging school leaders are still not sufficient in ensuring proper preparation for principals to be able to meet the demands of such a

complex leadership role. The support systems at the district and school levels are not much more sophisticated that the preparation programs principals are exiting from (Darling-Hammond et al., 2007). As a result, it is not surprising that, given the lack of quality external supports afforded to principals, school leaders are not reaching the level of professional practice and leadership that we are expecting them to reach. Additionally, one cannot expect principals to behave differently or engage in practices that counter what they have been prepared to do, because they are, in fact, behaving in ways that are consistent with what their preparation programs have taught them.

The professional community needs rethink current levels of leadership expectations and be realistic in what principals are able to accomplish without the appropriate levels of support. They must also reflect on the sophisticated levels of supports that are needed to facilitate the level of professional development for our leaders to ensure that emerging and current leaders are prepared to meet the demands we expect of them. A recognition that the supports offered must stem from psychological versus procedural supports is the first step in conducting further examination and evaluation of leader preparation programs and professional development for principals to ensure they are provided with the quality skills and education needed to lead for transformative change.

Implications for the Research Community

Finally, the study's findings point to one implication for the research community that involves an opportunity to explore what is believed to be a new area of inquiry. While the field of research has focused on various components of leadership and the relationships between leadership and organizational change, the research community has

yet to deeply study the emerging complexities that exist within the interactions between leadership and faculty and how those interactions lead to the possibility of organizational change. This is now an area, as evidenced from the case studies presented for this dissertation, in which the research community can afford to engage in closer examination.

Cohen, Raudenbush, and Lowenberg Ball (2003) assert a majority of research in education focuses on causal models indicating relationships between variables such as school resources and student achievement outcomes. The authors propose a new model of conducting research where the interactions between the variables are examined versus examining only the outcomes and then determining the variables contributing to those outcomes (Cohen et al., 2003). What Cohen et al. (2003) suggest presents an opportunity for the research community to study the causal agents surrounding leadership and organizational change, as they exist within the triadic interactions involving faculty, the organizational climate, mediated by other contextual factors that include environmental supports. While the relationship between leadership and organizational change is one that has been studied at great length, the complexities of the interactions between the individual principal as she is directly engaged in the process of organizational change is one that bears the potential for further study. Such research has further implications for impacting the ways in which principals are supported in developing their professional practice.

Discussion

Many more questions emerged as a result of this study. Having had the opportunity to spend two months conducting interviews, observations and shadowing the principals as they enacted their leadership practice, I have also begun to ponder the role

of sociocultural theory and its place in the professional development and learning opportunities for both the principal and her faculty as they work to promote and achieve organizational change.

As discussed in Chapter 1 of this dissertation, reform efforts such as No Child Left Behind (2001) and Race to the Top (2010) are failing to account for building leadership capacity in order to implement the desired level of transformative change demanded of principals and their schools. Yet, the pathways offered to emerging school leaders preparing to enter administration are superficially driven to provide leaders with the tools to solve external problems and engage in procedural levels of practice. When it comes to leadership, assumptions are being made that school leaders automatically possess the capacity for not just leadership, but the kind of transformative leadership that results in the school achievement outcomes desired from reform efforts (Darling-Hammond, Orphanos, LaPointe, & Weeks, 2007; Helsing, Howell, Kegan, & Lahey, 2008). The underlying roots of how, why, and where those assumptions were derived remains an unanswered question, but one that, perhaps, can be contemplated with the help of examining Vygotskian approaches to understanding learning as it occurs in a social context.

A learner-centered focus is at the hub of sociocultural learning theory whereby an examination of the learner within the context of social interactions, community, and culture leads to an understanding of learning and cognition (Vygotsky, 1978; Lave, 1991; Hansman, 2001). Vygotsky (1978) argued learning is embedded within social events, and social interactions, which play a fundamental role in the improvement of learning. Social context and its role in learning have also gained increasing attention in the discussions

surrounding adult learning (Hansman, 2001). From a sociocultural approach, learning occurs within the "interactions and intersections among people, tools, and contexts within a learning situation" (Hansman, 2001, p. 43). When designing opportunities for adult learning, attention must be placed on the developmental needs of the adult learner and the context in which the learning is situated (ibid).

An argument can be made, from a sociocultural perspective, that the conditions and social contexts in which developing leaders engage in professional development programs may offer an explanation into understanding how principals are socialized or even conditioned into employing the surface-level enactment of leadership practices, as was observed within the two cases for this study. Therefore, it becomes necessary to acknowledge that leaders who are enacting structural and operational leadership practices cannot and must not be faulted for doing so because, consequently, these are the types of behaviors and practices that they have learned within their own social and educational contexts. Moreover, what could be examined further includes the interactions between leaders, their developmental environments, and the content they are instructed to perform within the scope of their leadership responsibilities that lead to the likelihood of transformative organizational change.

Conclusion: Recommendations for Further Study

This dissertation served as a pilot study that tested a set of ideas drawn from the existing literature grounded in organizational learning theory, leadership theory, and social and psychological constructs demonstrating leader behavior and capacity. While the study's findings are constrained by the conditions surrounding time spent in the field collecting data and the amount of data gathered within that limited time frame, the

findings provide a door of opportunity to conduct more longitudinal examinations using larger data sets in order to study and confirm the integrity of the Conceptual Framework I proposed for this dissertation study. Furthermore, much of the focus of this study was placed upon the individual principal operating within the context of the organization. Future studies would further benefit from exploring the sociocultural context of leadership as the principal seeks to foster and achieve transformational organizational improvement. Additional studies in this area of inquiry will help to confirm the ideas presented here in order to substantiate conclusive or more generalizable findings.

Considering that literature involving the triadic interactions between the principal, faculty, and organizational climate is limited, the research community can now be charged with the task of conducting further inquiries in this area and test the set of ideas examined in this pilot study for the possibility of a grounded theory model. As the culture and climate of public education increases its focus on multiple levels of accountability and transformational change, responsibility rests within the research community to shine a guiding light for practitioners on the ways principals' leadership and professional development is cultivated and supported. Doing so will enable principals, and the school communities in which they lead and serve, to enact the level of change we so desperately need and want them to enact for the sake of improving the quality of learning for all.

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Appendix A

ACHIEVING INFORMED CONSENT

The researcher will review the Informed Consent Form with the participant to ensure that a lucid understanding exists involving the purpose the study, the study's design, how participant privacy will be protected, and the participant's rights in this study. Each of the following items below will be disclosed to the participant.

a. The purpose of this study is to examine and explain the ways in which a principal and the school organization's self-efficacy, mental models, and creative thinking influence practices that lead to the possibility of organizational change.

b. This study will consist of two in-depth interviews with the principal, observations of the principal during faculty meetings, and collecting various documents selected by the principal. Additionally, shadowing the principal during the course of workdays on a weekly basis and interviewing faculty participants at the principal's school will also be included in this study. Interviews will be recorded on digital audio and transcribed for analysis.

c. The privacy of all participants will be protected at all times. Pseudonyms will be selected for the school, school district and for all participants involved in this study. All audio recordings and transcripts will be maintained for a maximum of one year following the publication of any and all data collected during this study. Audio and transcripts will be maintained in a password-protected computer file until destroyed.

d. Interview questions asked and observations conducted during this study will be related to the professional roles of each of the participants. No harm or injury is anticipated to result from any of the data collection procedures during this study.

e. Participants may decline consent to participate at any time preceding this study's publication of findings. Revoking consent can apply to one item, a group of items or comprehensive revoking of consent in the study as a whole. As an example: if a participant discloses information during an interview and has second thoughts about what was said during the interview, the participant may request to not have that information used in the study. The researcher will then comply with the participant's request. If, during an observation, an unexpected event occurs and the participant does not wish for that event to be included in the reporting of the study's findings, the researcher will not include it.

Prior to commencing data collection, the researcher will secure any and all signatures of the participant(s) on the Informed Consent Form. Signatures obtained will acknowledge that the participant(s) have/has been informed and has granted permission to participate in this study.

Appendix B

PRINCIPAL INTERVIEW PROTOCOL: INTRODUCTORY INTERVIEW

The researcher will thank the Principal for the opportunity to sit down and discuss the influences surrounding the Principal's leadership practice. Briefly discuss the study's objective surrounding examining factors that influence leadership practice in supporting instructional improvement. Ensure that permission is granted to record the interview.

Questions:

A. Biographic Information:

1. Could you tell me a little bit about your background in education and how you became affiliated with this school district?
2. Please describe your educational experiences including university experience.
3. How long have you been the principal of Fake Name High School?
    a. Before your tenure as principal, in what capacity did you serve the school or district?
    b. Why did you become a principal?
4. Tell me a little about your professional aspirations in the next five years. What are your aspirations in the next 10 years?

B. Espoused Views in Instructional Leadership (Mental Models)

1. What does it mean to you to be a leader of a school?
2. How has your definition of leadership changed? In what ways has it stayed the same?
3. Can you give me an example of how you have been able to enact your vision of leadership?
4. How do you work with the faculty to address issues related to teaching and learning at your school?
5. Do you see yourself as a source of support for teachers in relation to improving their practice? If so, how does that role get enacted?

C. Leader Self-Efficacy

1. What helps you be successful in enacting your definition in leadership?
2. To what extent do you feel you are enable to enact your definition of leadership?
3. Who do you look to as a means of support in helping you develop your capacity to lead?

D. Leader Creativity

1. When experienced with an issue or problem, what are some things you do to solve it?

2. In your opinion, what does it mean to be creative in leadership?
3. Tell me about how you work with the leadership team.
4. If I were observing a faculty meeting where the conversation was focused on improving instruction, what might I expect to see with respect to the type of dialogue between yourself and the faculty?

E. Promoting a Culture of Inquiry:

1. In your opinion, what does it mean to engage in a process of inquiry?
2. Can you describe your expectations of faculty to engage in inquiry or reflective practice?
3. How do you convey those expectations of reflection?
4. How often do you feel the organization should reflect on their practice?
5. Can you describe the types of conversations you might have with your faculty members where reflection exercises take place? What does that look like?

F. Building Organizational Relationships:

1. How important is relationship building for you and your faculty?
2. Can you tell me about what you do to build and maintain organizational relationships with the faculty at your school?
3. Are there some faculty members you speak to more than others? If so, can you tell me a little about the types of conversations you have with them?

Thank the principal for her time.

Appendix C

OBSERVATION PROTOCOL

The following outlines the approach for conducting observations at the selected school sites:

1. Observations will be conducted at scheduled faculty meetings.
2. The researcher (me) will take down narrative notes in shorthand form during the observation.
3. A key will be developed prior to the observation highlight key terms or behaviors the researcher is looking for with respect to conversation surrounding inquiry and instructional improvement.
4. Observation notes will be coded according to the key.

Appendix D

IN-DEPTH INTERVIEW PROTOCOL FOR FACULTY PARTICIPANTS

The researcher will explain the purpose of the study and will inform the participants of their rights as voluntary participants. The researcher will also ensure that the participants understand these rights prior to signing the informed consent form. This will be done before asking any questions.

The researcher will also ask permission to audiotape the interview prior to commencing.

Questions:

1. Briefly describe your involvement at this school site and the length of time you have been a member of the faculty here.
2. It is my understanding that last year the faculty experienced a great deal of change with the leadership. How did the faculty work to solve problems of practice during these changes?
3. What do you believe are the strengths of the faculty at this school?
4. To what extent do you find and take advantage of opportunities to lead at this school? Can you give me an example of a time where you "stepped up" in a leadership capacity?
5. In your opinion, how is teaching and learning supported at this school?
6. To your knowledge, what are the expectations at this school surrounding improvement? How are these expectations communicated?
7. In your opinion, what has your principal done in these past 12 weeks that you believe is impacting your professional practice the most?
8. How do you engage and advance your professional development?

Appendix E

TIMELINE FOR STUDY

Completion of the Qualifying Exam and successful completion of IRB will be done prior to entering the field and collecting data. The timeline for data collection and analysis is presented below:

Event	**Date**	**Research Methods**
Complete and Pass Qualifying Exam	August 25, 2011	
Complete IRB Process	September 2011	
Establish contact with a school for the case study, coordinate with principal the dates for observations and interviews	September 2011	
Attend faculty meeting to seek faculty participants for study	Late September 2011	Observation
Conduct In-depth interview #1 with principal Conduct In-depth interview #1 with faculty participants	Beginning October 2011	Interview Document Collection
Attend scheduled faculty meetings as scheduled	October – Beginning December 2011	Observation Document collection
Conduct Focused Interviews with Principal after faculty meetings		Interview Observation
Conduct informal observations shadowing principal during workday		Observation Document collection
Conduct interview #2 with faculty participants Conduct interview #2 with principal		Interview
Write Chapters 4 – 5	Mid December to Mid January 2012	
Dissertation Defense	March 2012	